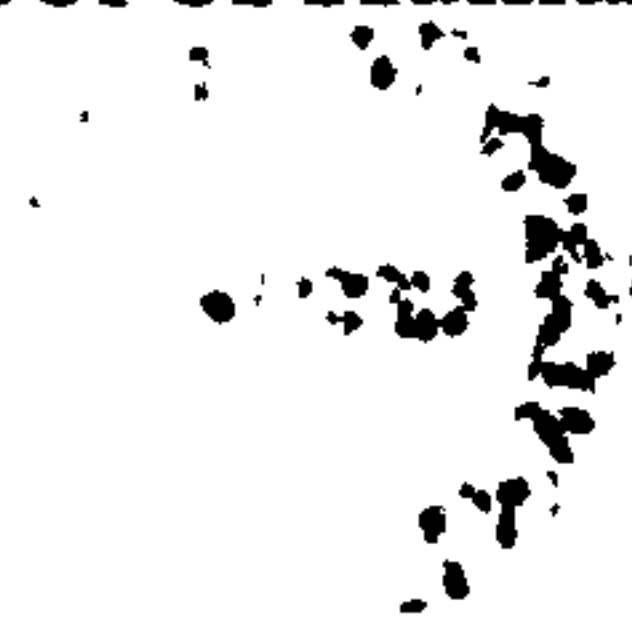


UNIVERSITY OF SOUTHAMPTON

FACULTY OF LAW, ARTS AND SOCIAL SCIENCES

School of Humanities



Music and Dance in the Twentieth Century: Issues and Analyses

by

Robert Coleridge

Thesis for the degree of Doctor of Philosophy

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ABSTRACT

FACULTY OF LAW, ARTS AND SOCIAL SCIENCES

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ANALYSES

by Robert James Nicholas Coleridge

The thesis considers ways of analysing music-dance relationships, with a particular emphasis upon contemporary dance. The first chapter considers the underlying issues from an historical perspective and examines the ideas of several innovative choreographers and composers, including Isadora Duncan, Ruth St Denis, Mary Wigman, Louis Horst and Henry Cowell. The second chapter is largely devoted to an account of the work of John Cage and Merce Cunningham, whose quest for the independence of music and dance raises important issues relating not only to the intrinsic natures of the two art forms, but also to the ways in which relationships are perceived by the spectator. The third chapter argues that it is possible to consider music-dance relationships from a range of different and contrasting perspectives, including those of the composer and choreographer, performers, and audience. Most existing approaches to analysis tend to focus on matters of structure and the ways in which choreographers have used music as a point of departure for their own inventions. The relevance of these methods in more experimental work in which relationships tend to be rather looser is, however, questionable, and the chapter goes on to consider how methods drawn from film music studies might be used to deepen an understanding of how music and dance work together to create meaning. The last two chapters are case studies of two contrasting dance works, DV8's *Never Again* and Merce Cunningham's *Points in Space*. Both are approached largely from the viewpoint of the spectator and explore the ways in which the perception of the dance is influenced by the music, and vice versa.

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DECLARATION OF AUTHORSHIP

I, ROBERT COLERIDGE declare that the thesis entitled Music and Dance in the Twentieth Century: Issues and Analyses and the work presented in it are my own.

I confirm that:

- this work was done wholly or mainly while in candidature for a research degree at this University;
- where any part of this thesis has previously been submitted for a degree or any other qualification at this University or any other institution, this has been clearly stated;
- where I have consulted the published work of others, this is always clearly attributed;
- where I have quoted from the work of others, the source is always given. With the exception of such quotations, this thesis is entirely my own work;
- I have acknowledged all main sources of help;
- where the thesis is based on work done by myself jointly with others, I have made clear exactly what was done by others and what I have contributed myself;
- none of this work has been published before submission.

Signed: R Coleridge

Date:..... 30th September 2005

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INTRODUCTION

Although music is found in a diverse range of social and cultural settings, often fulfilling a role or function that is subservient to - or subsumed within - some other art form or social activity, its ability also to function as a self-sufficient form of expression is not seriously in question. Dance, however, enjoys a quite special relationship with music, and there are many people who consider the two activities to be inseparable: indeed, dance is rarely performed without any form of sound accompaniment whatsoever.

The universal nature of this partnership derives from the many similarities and parallels that may be observed between them: for example, both are performing arts that unfold in time and space, and both involve human physical movement. Hanna (1982: 57) defined both activities as purposeful, intentionally rhythmical, culturally patterned sequences of non-verbal body movements. From this perspective, music and dance differ only in that sound is the 'primary value and product of music', and movement the principle aim of dance. Arguably, many of the music-dance correspondences considered here can only be fully understood if the physical experience of music making and of dancing is taken into account. Several of the new dance pioneers were fascinated by the possibility that music and dance shared common origins, sometimes drawing upon such speculations when arguing for the pre-eminence of either art within the collaborative process. Doris Humphrey (1959: 105) claimed that certain aspects of music, particularly rhythm, metre and tempo, derived ultimately from bodily functions such as walking, running, and the heart beat. John Martin (1933: 102) pointed to the physical roots of music, noting the difficulty of making 'a sound of any sort that is not preceded and produced by movement ... the muscular impulse translates itself into sound, and the quality of the sound is controlled to a great extent – almost entirely as far as emotional colour is concerned – by the feeling, the state of mind, the extra-intellectual intention, which prompts the muscular impulse'. Margaret H'Doubler (1957: 153) wrote that 'music is said to have come from dance, from

the rhythmic impulses of man, and to have taken from dance its rhythmic form and structure'. Rudolf Laban (1966: 117) maintained that music originated from rhythmical movement of the body, while Curt Sachs (1937: 182) wrote that 'dance and song...spring from the same force – the impulse to motion'. Henry Cowell (2002: 218-9), however, mocked such thinking when he wrote that 'almost every primitive tribe in the world performs ceremonials which utilize sound and dance together. It would be impossible to say which came first and I find it a numbskull angling after intellectual swank to try to opine which did come first. It seems apparent that they grew up together.'

The range of potential relationships that exist between music and dance is very broad: it includes at one end of the spectrum the simple use of rhythm as a timekeeper and at the other extreme the sophisticated and complex engagements observed in the work of many choreographers for whom music is an essential point of departure. According to Balanchine, 'I am not a creator of time. I like to be submitted to it. Only a musician is a creator of time.... The music is first. I couldn't move without the music. I couldn't move without a reason and the reason is music. My muscles only move when time comes in.' (quoted in Cage 1968b: 91) He also once made the deeply radical claim that 'a choreographer can't invent rhythms, he only reflects them in movement'. Balanchine expanded on this statement by saying that 'the body is his medium and, unaided, the body will improvise for a short breath. But the organizing of rhythm on a grand scale is a sustained process. It is a function of the musical mind. Planning rhythm is like planning a house, it needs a structural operation.' (Balanchine, 1980: 149) Balanchine clearly needed the stimulus of music, which gave him a kind of scaffold upon which to construct and develop his choreography. The dialogues with music that are an important aspect of his art are sometimes of great sophistication and complexity: Stravinsky (1972: 34) said that Balanchine's 'visualization' of *Movements* had made him aware of relationships within the music of which he had been previously unaware, and described the experience of

watching the choreography as being akin to ‘touring a building for which I had drawn the plans but never completely explored the results’.

There are many witnesses to the importance of music for dance. Margot Fonteyn (1959) said that dancing was not an independent art and that music was its ‘raison d’être’, while Doris Humphrey (1959: 133), borrowing an analogy from human relationships, described dance as ‘truly female, needing a sympathetic mate, but not a master, in music’. Speaking from different perspective, the ethnomusicologist Charles Keil (cited in Hanna: 1982: 69) dismissed the absence of music as a ‘bourgeois aberration’, and many people have noted the conceptual inseparability of music and dance in those cultures in which separate terms for distinguishing music from dance are absent.¹

In the field of contemporary theatre dance however, this profound and apparently indissoluble relationship appears to have come under attack. The questioning of the proper place of music in relation to dance dates back to the early years of the twentieth century, and resulted in a state of affairs which led Accocella (1993: 177) to remark how ‘of all known forms of dance, there is only one that has mixed feelings about music: European-American modern dance’.

Yet music continues to play an important role in contemporary dance, even in its most radical and extreme manifestations. The role and function of music has, nevertheless, shifted, altered and expanded in many directions, and it is the nature of these changes that it is at the heart of this thesis.

¹ According to Robert Kauffman (1980: 684) ‘the close relationship between dancing and drumming [in Zimbabwe] is illustrated by the word *ngoma* for both activities’. André Grau has written that the word ‘dance’ is ethnocentric and culture specific; Grau conducted field work with the Tiwi people of the Melville and Bathurst islands and found that the word used there which most closely approximates to the English word dance (‘yoi’) referred to the whole event at which dance took place, including the songs, rhythms and movements (there was no term equivalent either to ‘music’ or to ‘dance’). Hanna (1982: 60) mentions that ‘among Nigeria’s Ubakala, the word for dance is also the word for drum and play’. There seem only to be a handful of documented examples of folk dance performed without music: for example, Larry Weiner has noted the Bosnian *licko*, *glamoc*, and *vrlicko*. (Hanna 1982: 61)

Many of the issues explored can be traced back to the attempts of dancers in the twentieth century to raise the status of dance to that of an independent art form, able to stand alongside but in no way be dependent upon music for its form and content. Chapter 1 explores a number of relevant historical and aesthetic issues, taking as its point of departure the philosophy and practice of a handful of influential and innovative figures in Europe and the USA. Although it might be argued that the work of these pioneers has dated and has lost much of its immediate appeal and relevance for modern audiences, the clarity and conviction with which these artists argued their respective positions enables their practice to be used as a starting point for the development of a series of models of collaboration. Each raises important issues which are of continuing relevance in any discussion of the relationships that exist between music and dances, but it should nevertheless be made clear that it is primarily the *attitude* of such figures as Isadora Duncan, Ruth St Denis, Louis Horst, and Mary Wigman that is of primary importance here and not so much the details of their finished compositions, though a few works have been briefly commented upon when they have been accessible for viewing. Arguably, there are in essence only a limited number of ways for musicians and dancers to collaborate, or for music and dance to be combined, and most (if not all) were tested out during those exploratory years. Despite the advances and developments in musical and choreographic resources that have occurred in the intervening years, these models can be related to almost any kind of work made today. Nowadays they may rarely be applied with any great rigour or dogmatism, but in practice they are still encountered, intersecting and overlapping in very varying degrees.

At the heart of the second chapter – and of the thesis as a whole – is the work of Merce Cunningham and John Cage. Their philosophy of collaboration poses the central problems of music-dance analysis in a stark and uncompromising way, and raises some profound questions regarding the very nature of these two art forms. For this reason an extended and detailed account of

the development of their work together has been included; their position was hard-won over many years and their journey of discovery is fascinating in its own right.

Chapter Three examines approaches to the analysis of music and dance. The majority of existing methods were devised for use in the areas of folk dance, historical dance and classical ballet, and focus primarily on matters of structure, in particular similarities and dissimilarities in phrasing, rhythmic patterning and larger forms. They are perhaps of less value when dealing with contemporary and experimental work in which relationships between sound and movement are looser and favour greater degrees of independence. The possibility of finding models and inspiration in film music studies is considered, as well as ways in which perceptual issues may be addressed, such as the power of music and dance together to make a new meaning that is different in kind to the mere sum of parts.

The fourth and fifth chapters are case studies; the first relates to a dance film by Lloyd Newson and his company DV8, the second to Merce Cunningham's dance *Points in Space*. These chapters are in part an imaginative attempt to enter into the minds of the composers of these works and to examine the decisions taken, consciously or not, in creating their musical scores. To this end, both chapters contain elements of musical and choreographic description and analysis, as well as attempts to discuss the impact upon the perception of the dance made by the music, and vice-versa. The choice of these works was deliberate since they contrast with each other on so many levels, not least in their approaches to expression and to musical language.

Much of the debate concerning the relationship of music and dance discussed in Chapter One is concerned with working relationships: how a composer and choreographer can work together, whether the composition of the music need precede that of the dance, what aspects of the music (or choreography) a choreographer (or composer) should address in her/his work. As

a consequence of this way of thinking, it is common for people to think in terms of how the perception of one art form is modified by the addition of another. In choreographic workshops, it is not unusual for dancers to experiment with different accompaniments for their work and to consider the effect that these different musical choices have upon the way the dance is perceived by the spectator. In some respects, this way of thinking is clearly relevant in situations where the music has been composed specially for a dance, or selected after it has been completed, because the decisions made by the composer, or person selecting the music, can have a considerable effect on the original identity and character of the dance, as indeed can lighting, décor, costume and the nature of the space within which the dance is performed. Nevertheless an audience is rarely party to such discussions and more often than not is presented with a *fait accompli* in which all these decisions have been made in advance. For the spectator the theatrical performance is an indivisible whole, its different strands entwined together in a truly dynamic relationship, one of ‘mutual implication’, to quote Claudia Gorbman’s memorable phrase. (Gorbman 1987: 15) It is the underlying aim of this thesis to consider music and dance together, and to try to identify and better understand those areas where the two arts intersect in meaningful and illuminating ways.

CHAPTER ONE

HISTORICAL PERSPECTIVES: EARLY PIONEERS

General considerations

In order to provide a broader context for this discussion of the new dance pioneers in the twentieth century, it is useful first to consider some of the most common and fundamental relationships that exist between music and dance, including those found in social dancing, classical ballet and some non-Western forms and styles. There are points of both continuity and difference in twentieth-century contemporary dance, and an awareness of more traditional practices is helpful to a deeper understanding of the more radical and innovative developments to be considered later.

Music can operate in relation to dance on many levels. Most immediately, it can serve as a means for generating energy, not least through the stimulating effect of rhythm and pulse upon the human organism, a phenomenon that may be observed in the use of music in many social and work-related activities in which it is called upon to provoke, enable or encourage a physical response. The most fundamental level at which music and dance connect is that of rhythm: indeed, in many forms of dance it is only rhythm that is essential, whatever incidental pleasures the melodies and harmonies of accompaniments might offer the dancers. Hornbostel (1975:205) noted how in ‘ballet and ballroom dancing, the individual steps coincide with the "beat" of the music, while the melodic element is irrelevant to the movement. We dance the same waltz step to every melody, provided that the rhythm is right; the melody could in fact be left out altogether: the waltz can be danced when the ballroom orchestra confines itself solely to the beat of the drums and the growls of the double bass.’ (p. 205)

The power and versatility of rhythm is also clear if one considers that the simplest rhythmic ostinato can actually allow the dancer a great deal of freedom. Much as a drone can imbue and enliven a melodic line through the variety of harmonic tensions to which it gives rise, so too there are many movement possibilities in relation to the simplest and most repetitive of rhythmic patterns. The dancer can move on each beat, create longer and more varied phrases, syncopate against the pulse, or even use the rhythm primarily as an energizing background to the performance of mundane actions or freely rhythmic activity.

Music has the power not only to inspire a physical response from the dancer, but also to contain and direct that energy within clearly defined structures. In dance this is of most value as a tool for keeping the dancers in order, indicating entries and exits as well as clearly delineating the structure of a dance; for example, cadences can function as aural markers, indicating to the dancers where the phrases and sections of a dance are begun and completed. In such instances, however, there is no sense in which the dancers are interpreting the music. This was could be seen particularly clearly at a recent presentation of some renaissance dances by an amateur group in Devon. The movement consisted largely of simple stepping patterns whose carefully choreographed floor patterns created different formations and changing relationships between the dancers; the costumes and music located the dances firmly in a particular historical period, but beyond that the music served only to mark the pulse, the beginnings and ends of phrases and prevented the dance from descending into chaos.

These two essential functions for music are found today in many dance contexts, not least the dance class. In aerobic classes and some jazz classes, it can seem that the music exists only to galvanize the participants into action and to provide a degree of rhythmic discipline and structure for the movement; any notion of an attempt to respond to the music in a more sophisticated manner is rapidly disabused by observing the ways in which an exercise may seemingly begin or end at almost any point within the flow of sound. This is not however to

deny that other factors may contribute to the impact of music upon dancers: for example, the sounds and textures of a piece of music can influence the dancer's attitude and posture. In ballet classes dancers are often encouraged to listen more closely to the music and to use the accompaniment effectively as a source of information - particularly with regard to the rhythms and dynamic phrasing of the steps; however the possibility of using any one of a vast range of similar pieces for a given exercise, as long as rhythm and tempo are correct, points again to a fundamental basis in rhythm, but the sounds used – whether a piano or an orchestra – and the style of music, whether classical or popular, ancient or modern, not to mention the dynamic and expressive qualities of its melodies, all contain information which the dancers can utilize or ignore as they please. The use of a single drum, or even just a metronome, also has an intrinsic expressive aspect, and indeed it is hard to imagine many kinds of dancing divorced from the special ambience of their associated musics, be it a Viennese waltz, Irish step dancing, or disco dancing. Related to this is the fact that certain genres of music can also suggest particular ways of moving and using the body. It is for this reason that some styles, such as jazz with its particular idiomatic rhythmic qualities, are sometimes discouraged in dance classes where there is a need to cultivate a correct sense of style.¹

These attempts to explore and define the role of music in dance derive almost entirely from the perspective of the dancer. In theatre dance, however, a spectacle is created for an audience: the function of music becomes more various and less straightforward, and the range of possible relationships between sound and movement of considerably greater richness and complexity.

¹ McClary (1995) discusses the special interrelationship between bodily movement and the backbeat, a particular kind of rhythmic inflection seen in both music and dance, a well-known example being Wilson Pickett's *In the midnight hour* which inspired a vast quantity of popular dance music with a similar rhythmic identity.

Music in classical ballet

Between the eighteenth and twentieth centuries there was a growing awareness of the ways in which music could contribute to the experience of a ballet as a dramatic whole. Nevertheless, although it is possible to point to a handful of scores by Gluck, Mozart (*Les petits-riens*, written in 1778 for the choreographer and theorist Noverre) and Beethoven, it is for the most part striking how few historically significant composers of the eighteenth and nineteenth centuries expressed an interest in writing for ballet (with the notable exception of Tchaikovsky). The poverty of ballet music seems all the more marked when the situation is contrasted with the early years of the twentieth century when Diaghilev commissioned scores from many of the leading composers of the day, including Debussy, Satie, Ravel, Prokofiev and Stravinsky.

In the nineteenth century, however, it was believed that there was no place for first-rate or serious music for ballet. John Warrack (1979: 5) has noted the low esteem in which the music of Pugni, Gerber and Minkus was held by serious composers, describing the official ballet music of the time as ‘feeble’ and its composers as having ‘negligible talent’.

Their vulgar ‘concoctions’, as Tchaikovsky described them in a letter, were expected to do no more than furnish unobtrusive aural décor and rhythmic support as a background against which the dancers could be put through their paces. It was, moreover, décor that was infinitely disposable and replaceable: no fewer than eighteen composers were finally represented in the music of *The Little Humpbacked Horse*, a score nominally by the unfortunate Pugni whom Mussorgsky described to Balakirev as ‘a musical Scythian’. The situation was not unusual, for few composers had the talent or resolve to stand up to the ballet masters whose interest was primarily in the decorative. (p.6)

In the world of nineteenth-century classical ballet, decisions made by the choreographer always overruled the composer, and according to Wiley (1985) it was even written into the contracts of some composers that they must always make any changes needed without protest. That contract also specified that the music must be suitable for the story and the setting, that the composer be present all at rehearsals, and that the composer never complain if other composers were invited to compose interpolations. Many composers were temperamentally unable to work under these conditions and stayed clear of the theatre: composing music for dance was in fact a highly specialized skill, best served by expert craftsmen possessed of the ability to work quickly, with an understanding of movement and the ways in which it could be best supported and enhanced by music.

Petipa's instructions to Tchaikovsky, when he came to compose the music for *The Sleeping Beauty* and *The Nutcracker*, are well-known and often cited as an example of the lack of freedom allowed to the composer.² Nevertheless, although many composers found the lack of independence and autonomy implied by this way of working unacceptable, others have found working within such limitations stimulating: Stravinsky, when composing his music for *Agon*, spoke of his need and desire for clear and precise timings.³

The criteria by which ballet music was judged were clear-cut, and it was expected that 'the music should support the dance in specific ways: by providing, first of all, a clear rhythmic basis for the dancer's timing, and second, a "dancerly" (*dansante*) melody for modulating the flow of energy and expression.' It was the dance that came first and, as with the social dances in which ballet had its roots, the dance structured the music. (Banes 1992:4)

² Searle (1958: 84) has pointed out that Petipa was a very musical choreographer with a clear understanding of his own musical and dramatic needs; his detailed instructions to Tchaikovsky in advance were actually a means of minimizing the amount of rewriting that might otherwise have been required of the composer.

³ According to Joseph (2002: 241), when planning of *Agon*, 'as always Stravinsky's first order of business was to establish the ballet's precompositional temporal boundaries', and the durations of the individual sections were decided upon 'as specifically as possible'. This information was an essential stimulus for Stravinsky to compose.

According to Wiley (p. 5), the ballet masters were strongly aware too of the overriding importance of the visual in ballet ('the music was accompany something watched, it had to complement the movements of the dance'), and of its need and ability 'to speak, supplement [and] clarify for the audience all the mental movements which the dancer or mime artist cannot convey in gestures and the play of physiognomy'. (Carlo Blasis, quoted in Wiley, p.5)

Music alone can give the dancer or mime that fire of expression which words inspire in the singer or actor. Music in ballet must complete in the imagination of the audience everything that is beyond the means of dance and its poses to express. Although pantomime is very expressive in itself, without the melodious sounds of music it too sometimes fails to move the soul.
(Konstantin Skalkovsky, quoted in Wiley, p. 5)

Wiley suggests that it was an aim of the composer and ballet master 'to achieve a unity of sound and gesture' (p.5); in a good ballet score there would be no competition between eye and ear, and the inherent interest of the music would never overwhelm that of the dance.

In nineteenth-century ballet music, according to Wiley, melody was considered supreme, with qualities of clarity, vivacity and memorability all being highly valued. The importance of melody is related also to the fact that phrase structures tended to be highly predictable and formulaic, almost invariably based upon regular and even eight bar periods.⁴ Rhythm and metre were also important,

⁴Henry Cowell took a perceptive if somewhat jaundiced view of this aspect of the ballet in an essay first published in 1934: 'The Russian formal ballet solved the problem by taking very obvious dance music built in eight measure cadences and constructing the dance on the same stereotyped forms. As long as one is satisfied with the trivial conventionality of this scheme, it works well; and from the dancer's standpoint it is perfect, since the music never distracts the audience from interest in the dance. The music is so uninteresting that one can never be distracted by it!' (Cowell 2002a: 220 – 221)

and the accompanying patterns commonly employed (broken chords and arpeggios of various kinds, harmonic vamps), if hackneyed and of no particular interest in themselves, did nevertheless provide an effective rhythmic support, in function perhaps not so dissimilar to the rhythm section of a jazz band.

Wiley's account of nineteenth-century ballet music, upon which these remarks have drawn extensively, is of special interest here because of the number of topics addressed in the nineteenth century that remain relevant. In many respects the attitude of the ballet masters and specialist dance composers was not so far removed from that of many contemporary dancers and composers of the last century.

Twentieth-century developments

In the twentieth century dancers began to explore new ways of moving and new worlds of expression, and alternative forms of dance began to be developed in both Europe and the U.S.A. Dancers began to question many of the assumptions and traditions of classical ballet and to explore radically new ways of using of the body. As a consequence, many choreographers began to re-examine their attitudes towards the use of music: while some chose to embrace it with a new level of intensity and fascination, others held it at a distance or even dispensed with it altogether. Composers and choreographers developed a range of sometimes quite contradictory theories about how musicians and dancers could - or indeed should - work together, as well as about the nature of the contribution made by music to a dance work considered as an artistic whole. In the debates that took place between musicians and dancers, certain key issues and preoccupations recur. Composers and choreographers argued over such questions as whether the composition (or choice) of music should precede the making of the dance or vice-versa, and whether some kinds of music were more appropriate for the dance than others. Other issues that arose related to such topics as: (i) the different ways that a

choreographer or dancer might respond to a musical stimulus; (ii) the nature of the processes available to composers and choreographers who wished to collaborate; (iii) the relative importance of each art form within the music-dance work as a whole.

This chapter outlines four principal models of collaboration between musicians and dancers, or between music and dance. The first two models derive from the work of choreographers for whom music was a primary stimulus; the third relates to choreographers for whom the dance itself was the point of departure, its structures being evolved without reference to any pre-existing musical composition; the fourth model derives from the work of composers and choreographers, principally John Cage and Merce Cunningham, who wished to find ways to work independently of one another, with neither partner constrained by the need to follow or relate to the other on either a structural or an expressive level.

Isadora Duncan

The first of these models relates to the example of Isadora Duncan (1877 – 1927), for whom music was more often than not an essential point of departure in the creation of new work. In Duncan's view, music and dance were intimately related, and she quoted approvingly Plutarch's view of music as audible dance and dance as silent music. (Duncan 1969: 33) The main emphasis of this discussion is on her use of music, though this is not to deny that on occasions she dispensed with it altogether and danced in silence or to the accompaniment of poetry; according to John Martin (1936: 135), on one occasion she danced the whole of Fitzgerald's translation of the *Rubaiyat*.

If the ballet masters of the nineteenth century had consciously rejected the use of emotionally complex and highly developed symphonic music, Duncan turned defiantly to the great works of the classical and romantic repertory: she

danced to symphonies by Tchaikovsky and Beethoven, excerpts from Wagner operas, piano music by Scriabin and Chopin, as well as pieces by Gluck, César Franck and many others. She had clear ideas about which kinds of music were appropriate for her kind of dance, and she rejected much modern music as 'in complete disaccord' with 'the natural rhythm of the human body' (Duncan 1969: 96), having only the ability to make the nerves dance. Debussy's music she dismissed as 'of the senses, not of the spirit' (p. 107), and she particularly disliked jazz, characterizing it as 'rhythm from the waist down'. (p. 48)

Her use of substantial and self-sufficient works of classical music divided opinion strongly. It is clear that for Duncan music provided a means of access to new expressive worlds that might otherwise have been denied to dance. She wanted her dancing to embody profound human emotions such as she found in the great works of classical and romantic music, and she hoped though the use of such music to elevate her dance above the level of mere entertainment. She also wished to discover certain profound qualities that she felt were deeply embedded in the fundamental human impulse to movement but which had somehow become lost.

To discover this rhythm, we must listen to the pulsations of the earth. The great composers - Bach, Beethoven, Wagner - have in their works combined with absolute perfection terrestrial and human rhythm. And that is why I have taken as a guide the rhythms of the great Masters; not because I thought I could express the beauty of their works, but because, in surrendering my body unresistingly to their rhythms I have hoped to recover the natural cadences of human movements which have been lost for centuries. (p. 90)

For some viewers, to dance to such music was sacrilegious, because to do so could only reduce those works to the level of background music. The notion that it was almost morally wrong to dance to music regarded as complete in itself was widespread, seen in Rachmaninov's angry refusal of a choreographer who

wished to use his music. (Hanna 1982: 60) Some members of her audience, including the conductor Koussevitsky, felt that through her dancing Duncan was able to illuminate aspects of the music that had previously gone unnoticed, whereas others criticized Duncan on the grounds that her choreographic response failed to match the power of the music; one reviewer described her dance to *Siegfried's Funeral March* as risible.⁵

By all accounts she had little interest in matters of musical structure. According to Jowitt (1988: 74), 'it would not have occurred to Duncan to consider a symphony in terms of tonal variety or harmonic richness and thus hesitate to tackle it; she thought she heard Beethoven speaking and wished to respond'. Nevertheless she did find in music a means for breaking away from the regularity and symmetry of the rhythms that characterized classical ballet; like Cunningham and many others, she sought inspiration from nature – from the action of the wind, the movements of water, of tides and wave motions, and from the observation of animals. Such an approach to rhythm prefigures many of the explorations undertaken since by contemporary dancers and parallels developments in contemporary music. If choreographers have sought out the natural rhythms of human movement, governed by the forces of gravity and the inescapable nature of the human organism rather than some externally imposed musical clock, so too have composers have found inspiration in the rhythms of nature. This has led to numerous attempts to reduce the importance played audibly by metre and regular pulsation, achieved either by the use of multiple or frequently varying tempi and/or time signatures (superimposed or juxtaposed) or by creating rhythms in which an easily perceptible sense of pulse is obscured or even obliterated. Michael Finnissy, citing the example of Ives, spoke of 'simply looking out of the window, trying to perceive the phenomena around me. Things don't move in regular 4/4 or 3/4: they move at all manner of paces – speeding up, slowing down independently'. (quoted in Toop 1988: 9)

⁵ Koussevitsky claimed that 'Duncan incarnated music in her dance'. (quoted in Terry 1963: 113) See also Terry (pp. 110 - 111) for an extract from the review of Duncan's dance to Wagner's *Funeral March* referred to above.

Duncan described her method of working with music in poetic and subjective terms. Deep and attentive listening would produce an emotional response that in turn would prompt a physical response, and out of that her dance began to take shape. In *The Philosopher's Stone of Dancing* she implored her students:

Listen to the music with your soul. Now, while you are listening, do you not feel an inner self awakening deep within you – that it is by its strength that your arms are raised, that you are walking slowly towards the light. (Duncan 1969: 52)

The importance of close and attentive listening was made clear at a practical demonstration given by some Swedish students of Duncan's work in 1998 when the presenter encouraged her dancers to move and breathe within the musical phrasing, embodying in their timing and phrasing even quite subtle details in pianist's interpretation of a slow movement by Beethoven. The notion of a dancer's attempting somehow to become 'one with the music' in a relationship that transcends the use of music merely as a source of information or counts is an ideal still encountered in some quarters today.

Duncan's choreographic approach is sometimes spoken of as interpretive dancing, though this label begs more questions than it answers. Henry Cowell (2002a) noted the common objection to interpretive dance by the modern dancers, namely that 'the dance was assumed to have no meaning in itself', going on to observe that in practice 'in almost no instance, was the music really interpreted. The interpretive dances in the schools now so much laughed at were usually just about alike, no matter what the music. All that was taken from the music was the beat. The interpretation usually consisted in bouncing about the floor in a wide circle, flapping the arms and occasionally kicking up a foot while doing so. The form, melodic line, and harmonic structure of the music were not considered. The

dances usually had no outline.’ For Cowell, Isadora Duncan caught the ‘general outline and dynamic sweep’ of the music she danced, ‘but not in particulars’.
(Cowell 2002a: 220)

There were several difficulties. The music was so interesting that it tended to distract the auditor from the dance. One missed the primitive relationship of the movements to the actual beat of the music. Not that this should always be identical, but one feels that there should be some relationship, either with or against. A total lack of such relationship leads to vagueness. (Cowell 2002a: 220)

Contemporary reconstructions of her work by disciples and pupils suggest that even if Duncan did not consciously address matters of musical structure, she often ended up by visualizing aspects of the structure of her music in rather obvious and occasionally naïve ways. This can be observed in Julia Levien’s performance of Duncan’s choreography for the opening bars of the second movement of Tchaikovsky’s Sixth Symphony. (Duncan 1988)

Example 1: opening theme of the second movement of Tchaikovsky’s Symphony no. 6



In bars 1 – 2 she travels forward, her arms rising and falling in a gesture that parallels the contour of the melody; in bars 3 –4 she repeats this motif, but comes

further forward into the stage space, reflecting the feeling of growth and development implied by transposed repeat of the melody; in bar 6 the dotted note figure is visualized with some skips, and for the descending scale at the end of the phrase (bar 8), she returns to back of the stage ready to begin again. This choreography is repeated whenever Tchaikovsky's theme is heard. Her approach to the slow movement is somewhat different, and she stands centre stage for the most part, exploring gestures of grief and melancholy. These may well reflect her understanding of the meaning of the music, but the impression given is not so much that she is interpreting the music as that the music is commenting upon and supporting her poses and gestures, much as music might underscore a similar scene in a film. It may well have been that a century ago Duncan's choreographic vocabulary was new and fresh, but today it seems very limited and rather quaint in a way that is not the case with the music, which remains genuinely moving.

Duncan found her place among these models not so much because of the reality of her practice, but rather because her example raises a number of important issues that are of continuing relevance: (i) the advantages and disadvantages of using self-sufficient concert music for dance; (ii) the advisability of rooting choreography primarily in a personal and subjective response to music; (iii) the use of models from nature; (iv) the idea of music as a kind of spiritual or intellectual food for the dancer; (v) the desirability of attempting to interpret music in movement. Although Duncan is now a historical figure and her work largely the preserve of schools run by enthusiasts, one might argue that she opened up some possibilities that are still with us. After all, choreographers still sometimes seek inspiration of one kind or another in music, and it would be absurd to deny the place of an emotional response to music on the part of many dancers and choreographers.

Ruth St Denis and the concept of Music Visualization

Ruth St Denis (1877 – 1968) is normally credited as the originator of music visualization, which constitutes the basis of the second model of collaboration: music as a source of choreographic structure. Whereas there was nothing new in the idea of music and dance being rooted in common structures, St Denis' approach was novel in that she consciously set out to make visible the whole structure of a musical composition, adopting a way of working which in theory at least was rigorous and methodical.

Music visualization was developed around 1918 by St Denis with the assistance of her husband Ted Shawn (1891 – 1972) and Louis Horst (1884 – 1964), then her musical director.⁶ The idea was partly inspired by the example of Duncan, though in certain respects it also represented a critique of Duncan: in her

⁶ Music Visualization can be seen as part of a wider trend, in as much as there was a general interest in the early years of the twentieth-century in making music visible, albeit taking a variety of different forms. *Eurhythmics*, devised by the Swiss educationalist Jean-Jacques Dalcroze, was a system for teaching music through the direct translation of its various parameters, including rhythmic elements, such as metre, pulse and its divisions, into movement exercises with the intention of enabling the physical embodiment of concepts that might otherwise remain overly intellectual and abstract. Similarly named but quite distinct in its aims and methodology was Rudolf Steiner's system of *Eurythmy* in which the elements of both speech (vowels, consonants) and music (melody, rhythm, major and minor chords) are made visible through a highly developed vocabulary of coded gestures, capable of being read by an audience of initiates.

Fyodor Lopukhov was another choreographer who believed that the shape and form of the choreography must correspond to the chosen music, seeking to develop movement materials in ways that paralleled the developmental processes of a symphony. Lopukhov sought a total identification of dance with the music on both emotional and structural levels. 'The line of the dance should match that of the melody; the movements should take their colour from the instrumentation. Changes in key or tonality, or the development of the musical theme, demanded an equivalence from the choreography' (major tonalities corresponded to outward movements, minor tonalities to inward movements). (quoted in Perceval 1971: 30; and Perceval 2005: 46)

manifesto she wrote of a dancer, almost certainly Duncan, whom she saw give a performance which she describes as having great power and beauty, but which nevertheless appeared to have almost no connection to the music.

In her autobiography, St Denis said that she also had embraced music visualization in an attempt to raise the musical standards of Denishawn, the dance company she ran with her husband Ted Shawn, whose musical accompaniments had been dismissed by one critic as ‘an absurd mishmash of clashing styles’. (St Denis 1939: 183) At a difficult time in her personal life, she also found herself attracted to music visualization for its ‘impersonal emphasis on form’ and its ability to lead her ‘away from my personal art into the non-racial, abstract fields of expression’. (p. 213)

She did not adopt the principles of music visualization in all her work and later abandoned this approach to making dances: she herself admitted that music could be both liberating and confining, ‘a help and a hindrance’, and that her ‘instrumentation dances’ and ‘synchoric’ orchestra had been a means ‘to discover what forms of composition were sympathetic to the best interests of the dance, and what were the limitations imposed by music’. Music visualization was not, then, intended as a permanent solution to the problems of working with music; and St Denis, like many of the modern dancers who came after, believed that dance was essentially an independent art form which needed eventually to discover for itself new structures and new forms of music. (St Denis 1939: 216)

Her manifesto of 1925 (reprinted in Cohen 1977) sets out clearly the rationale underlying music visualization:

Music Visualization in its purest form is the scientific translation into bodily action of the rhythmic, melodic and harmonic structure of a musical composition, without intention to in any way “interpret” or reveal any hidden meaning apprehended by the dancer. (St Denis 1977: 130)

She claimed to have no interest in what she described as a secondary form of music visualization ‘wherein we definitely superimpose dramatic ideas or arbitrary dance forms which seem to relate themselves closely to the composition in emotional coloring, structural outline, rhythmic pattern and general meaning’. (p.130)

Among the aspects of music which she attempted to translate into movement were rhythm (‘an eighth note has a definite length, and its visualization must be movement exactly as long’); counterpoint (in a visualization of a two-part invention one dancer, or group or dancers, would be associated with each musical line, so that ‘the two groups imprint upon the eye a correlative image to the one given to the ear’); articulation (e.g. staccato and legato qualities); dynamics (‘a softly struck note should be moved softly and with economy of force, while a crashing chord must be visualized with more physical energy’); melodic contour (‘the rise and fall of the music should have some answer in the rise and fall of the body’). When she came to visualize the first movement of Schubert’s Symphony No. 8 in B minor, the *Unfinished Symphony*, she also experimented with a form of colour coding in the costumes, the dancers visualizing the brass being dressed in yellow, the cellos in blue, the flutes in green, etc. (St Denis 1939: 215 – 216)

Her first visualization was of Beethoven’s *Sonata Pathétique*, and she insisted that each girl dancer understand that ‘her personality counted for nothing’; rather it was her business to focus upon ‘two definite things: to reflect in as faithful a manner as possible the tempo, rhythms, and the structure of the music, and to see that the patterns, space coverings, and groupings were as beautiful as possible’. (St Denis 1939: 213 - 214)

Although St Denis stressed the artistry and imagination required to work in this way (‘Visualization is not the mere putting into gesture form the mechanical elements of a musical composition’), most choreographers, including

Doris Humphrey, who greatly helped St Denis with her music visualizations, came to abandon the form in its purest and strictest manifestation, on the grounds that dances made in such a way were essentially redundant and could add little to the music to which they were set.

Music visualization also embodies a particular set of attitudes towards musicality, which assumes that the ability to reflect the detail of a musical composition in movement is a desirable attribute. Constant Lambert offered a particularly acerbic critique of choreography that attempts to base itself on musical structures.

There seems to be a growing theory that dancing which represents visually the formal devices and textures of the music must of necessity be pleasing to the musical mind. Nothing could be further from the truth. I am sure there must be innumerable musicians beside myself who experience the same feeling of exasperation when the choreographer turns the stage into a vast lecturer's blackboard and, by associating certain dancers with certain musical themes, proceeds to underline obvious formal devices in the music which anyone of average intelligence can appreciate with half an ear. Literal translations from one language into another are always unsatisfactory and usually ridiculous. (in Copeland and Cohen 1983: 208 -209)

Nowadays music visualization is usually linked with the idea of Mickey-Mousing the music, a cardinal sin for modern choreographers. In fact, though, moments of music visualization are extremely common in all kinds of work, present by design or accident, and for that reason the concept is a useful one; indeed, many existing techniques for analysing music-dance relationships are deeply rooted in its basic premises.

There are reasons too why the concept of music visualization is problematic in some respects. One common criticism levelled against music visualization is that its techniques are too much bound up with the ways in which music is notated on the page, and less with how it is heard, and that the use of spatial language to describe pitch relates only to the ways in which 'higher' notes are written higher on the stave.⁷ There are, however, strong reasons why it is logical for people to make this equation and these are in part rooted in the physical experience of music making, particularly if one considers either the different parts of the human body in which high or low notes resonate or the spatial aspects involved in playing many musical instruments. Similarly, the links made between size and volume also derive a rationale from bodily action, in that greater physical effort and larger gestures are normally required for loud music, whereas softer playing usually requires smaller and less forceful movements.

Dancers tend to work with music as they hear it, and only rarely as it is notated. For example, dancers' counts can be puzzling to musicians whose concept of time is completely bound up with the conventions of musical notation: sometimes dancers will count the underlying pulse, at other times the bars in a phrase, indeed anything else that might be practical and helpful to the task in hand. If there is logic present, it will be found in the way that the steps and music relate. When considering the different ways in which people hear music, it is well to remember that people for whom notation is a closed book may well conceive of what they hear very differently to those for whom the understanding and perception of music is more profoundly linked to and influenced by the way in which it is rationalized on the page. It is constructive to consider other forms of musical representation, such as the graphic displays of music made possible by such devices as Charles Seeger's melograph, or the kinds of waveform display common to much recording software today. All these show the continuity of

⁷ According to Hugh Tracey (1954: 417), the Bantu of South Africa had 'no mental association of altitude, but rather one of magnitude with the pitch of notes (treble notes being called 'small' and bass notes 'great', [consequently] they feel no necessity to set out their notes in sequence from left to right as with the keyboard instruments, although this is usually the case with xylophones'.

sound and its dynamic rise and fall more far vividly than traditional staff notation, and in some respects may relate more closely to the way that music is actually heard.

The question of rhythm is in fact more complex. St Denis says that every eighth note should find a movement of the same duration, but rhythm in movement does not equate exactly to rhythm in music. Musical notation conceives of music as being made up of discrete pitches, each with its own duration measured in relation to an underlying pulse. Impulses and accents in the dance may well coincide with notes in the music, but however movement is articulated it is a much more continuous unbroken phenomenon than musical rhythm. It is possible to sound successively two pitches an octave apart without having to sound all the intervening tones; it is not possible to move a limb from one position to another without passing through the intervening space, whether adopting a direct or indirect pathway. Music too is made up from sound and silence, but whether stillness in movement equates to silence is very doubtful, since bodily stillness involves a physical presence of a very different order to the absence of sound. In music, a sound can be dropped into a moment of silence without any warning or preparation, other than that required by the player for its execution. An accent in bodily movement is impossible without some kind of preparatory gesture, and an impulse or accent in movement can only be produced by means of a brief but marked acceleration in its continuity and flow. This can be illustrated very simply if one considers mundane actions such as walking, marching or stamping. If asked to notate the rhythm of these actions, a musician would most probably focus upon the rhythm expressed by those moments when the foot actually meets the ground. However, the moment that the foot makes contact with the ground is just one point in a larger flow of movement that also involves the raising and lowering the foot. The rhythm of the movement is characterized not only by those moments when the feet actually strike the ground, but also by the degree of energy used in raising and lowering the legs, the height to which they are lifted and the speed at which they are then brought down. If the

rhythm of movement is defined only in terms of those moments when its impulses coincide with those of the music, then the rhythms of movement might often appear to be rather dull; however, the real interest and vitality of rhythm in human movement is located in a range of different factors, including the dancer's attitude, the parts of the body used, and the different kinds of energy and flow employed, or 'effort', if one is to use Laban's terminology. This state of affairs is not so very different to music, where rhythm is far more than the sum of a series of note values on the page, but is rather a dynamic conjunction of harmony, melody and other factors. Laban went so far as to say that 'musical rhythm is foreign to the human body...the division of time in the natural movements of the human body has nothing to do with metric rhythmic systems. They follow another law'. (Laban quoted in Preston Dunlop 1998: 24)

Paul Hodgins voiced another common criticism of music visualization when he remarked on the 'fundamental incompatibility of music's and dance's gestural tempi', quoting John Cage who remarked that he had 'never been satisfied with the Balanchine-Stravinsky collaborations which have been dependent on making ten fingers seem to be like two feet, which is impossible.' Instrumentalists can execute extraordinarily rapid gestures with the fingers and wrists, whereas 'even relatively small gestures in dance involve feet, arms, lower legs, and the head - larger body parts, hence larger and more time-consuming gestures. Or as Cage put it: "Fingers don't use the same time-lengths as legs do. It's the difference between two and ten".' (Hodgins 1992: 13)

This brings one back to the question of how pieces like Bach's *Inventions* could actually have been visualized, particularly given that the rigour of Shawn's visualizations was said to be of such detail that it was once even claimed that if Bach's music were to be lost, it could be reconstructed with the aid of Ted

Shawn's dances.⁸ The busy semi-quaver motion that characterizes so many of these piece clearly does not translate easily into bodily movement, though the general rise and fall of the melody expressed through the continuous flow of sound/notes may well lend itself more easily to translation into movement.⁹

Nowadays it is extremely rare for choreographers to work in the same spirit as St Denis and Shawn, but *moments of music visualization* are often to be found, and therein is located the usefulness of this concept for the analysis and description of music-dance relationships. The ways in which many people choose to make sense of music-dance relationships are even now profoundly influenced by the kind of thinking that St Denis took to be universal and scientific, consequently the idea of music visualization remains a valuable point of reference.

Wigman, Laban, Graham and Horst

The third model derives from the work of a group of modern dancers in Europe, notably Rudolf Laban (1879 – 1958) and Mary Wigman (1886 - 1973), who rejected the notion that dance should model its structures on those of music and began to explore movement rhythms and dynamics which were rooted in the intrinsic properties of the human body. Their attempts to liberate dance from its traditional dependence on music led them either to dispense with sound accompaniment altogether, or to use percussion scores in which melody and harmony and indeed anything else that might be associated with the lyricism and romanticism of the ballet were stripped away. Music became secondary to the dance; it was not important that the music had a structural integrity of its own, or even that it made sense apart from the dance that it was intended to accompany. In the words of John Martin, 'music is entirely secondary in any self-respecting form

⁸ Jordan (1984:41) quotes the music critic Louis Biancolli who wrote of Shawn's visualization of Bach's *Toccata and Fugue in D minor* that 'if the Bach music were lost and only Mr Shawn's choreography remained, another Bach could – well, might – translate it back to the original'.

⁹ Jordan (1984) includes an illuminating discussion of her attempt to match the music of the Bach *Inventions* to silent film of Shawn's choreography.

of dancing; it is an accompaniment, a background, not intended to be listened for itself any more than a stage setting is to be concentrated upon after the actors come on to the scene'. (Martin 1936)

A significant example of this approach is Mary Wigman's *Hextanz*, or *Witch Dance*, choreographed in the 1920s, though having origins in a study she made some years earlier when she was a student of Laban, and subsequently filmed in a performance given by its creator. The music is performed on percussion instruments, including drums and cymbals, and followed Wigman's preferred method of allowing the music to evolve alongside and in response to the choreography rather than preceding it. Every sound relates directly to a gesture in the dance, to the point that it is almost as if the dancer is creating those sounds herself through her very movements. There is no rhythmic counterpoint between sound and movement whatsoever, and the score could justifiably be said have little if any intrinsic musical coherence when considered apart from the dance it accompanies and from which its continuity is entirely derived. There is no reason here why the dance should not be performed without its accompaniment, but the addition of the music, which is naïve and unsophisticated in itself, adds much to the power of the choreography, in effect amplifying the gestures of the dancer and giving them an added strength, perhaps even a whiff of the supernatural.

The use of percussion instruments by contemporary dancers was widespread in the 1920s and 1930s, and dance studios such as that of Dorothea Gunther were equipped with sizeable collections of drums, gongs, cymbals and other instruments. According to Wigman:

It is the rhythm of the dance which releases and engenders the musical rhythm. Of course any music thus created can never claim to be an independent work of art. The profound union formed in this way between dance and music leads for both to a total entity. Since the dance - according to its very being - lives in an absolute world of rhythm, the rhythm most clearly

related to it is that of the percussion instruments. The drum, the gong, the cymbals, and all their different variations are suited as hardly any other instrument to capture and underline the rhythm of the dancing body.

But that is not all! The sounds of these instruments can become one with the atmosphere of the dance, or rather with the mental condition of the dancer to such a degree that he forgets where the sound comes from and may often believe that his own gesture creates the music. (Wigman 1969: 122-124)

The approach adopted in *Hextanz* represents an extreme point in its unrelieved rhythmic unison. In other works, Wigman used either existing compositions or especially composed music by her accompanists. The music for *Pastorale* consists of a simple and repetitive melody played on two wooden flutes, largely composed from two short phrases in 6/8 which alternate and repeat; reminiscent of the Pastoral Symphony from Handel's *Messiah*, it is in fact a tune that she had heard on a shepherd's pipe in the Pyrenees. Even with music as simple as this, it is possible to note relationships that go beyond the obvious ones of creating mood and providing an underlying pulse. The interest of the movement is largely to be found in the undulating motion of the arms. The music is sufficiently open so as not to distract from an appreciation of the rhythmic subtlety of the movement, but from time to time movement impulses will come together with musical accents, gently colouring and giving emphasis to those moments. Later, the dancer, who began to move while lying outstretched on the ground as if relaxing on a beach (Wigman's analogy) gets to her feet and begins to move rather faster and with larger gestures of the arms and body; the music follows her closely here, and its accents and stresses relate more clearly and deliberately to those of the dance.

The ideas of Wigman and Laban were subsequently introduced to the U.S.A. by Louis Horst, who exerted a considerable influence on many choreographers from the 1930s to the 1960s, not least through his teaching and his

role as mentor to numerous young dancers. He had begun his work in dance with Denishawn, where to his dismay he found that dance music 'consisted of pieces selected from records – a bit of this, a bit of that. The dancer heard some music that made him feel like moving, and he interpreted what he heard. The idea back of it was that dance was considered the handmaid of music. The dancer caught the mood of the music and made a dance to it.' (Horst 1980: 138) Despite the apparent primacy of music implied by the widely encountered notion of dance as music's handmaid, dancers were nevertheless quite happy to mutilate their chosen scores, cutting the music wherever it suited them with complete lack of respect for its structural integrity. In an attempt to raise musical standards, Horst first became involved in the development of the concept of music visualization, though he later came to reject the approach believing that the proper inspiration for the dance must come from within the dancer.

Inspired by the example of Wigman, Horst encouraged Martha Graham and others to create dances in silence after which he would compose carefully tailored scores to the counts he was given. Although adjustments might sometimes be made, 'the fact of starting with the dance is important, because the dance should be the centre of interest, the point of tension'. He was concerned always that a choreographer should not become a slave to the music; although he believed that a choreographer should observe the form and character of a piece of music, he also insisted that it was not necessary for them to become caught up in the detail of the score.

It is not necessary for the music to fit the dance like a glove; in fact, it should not fit too tightly. There are times when a unison is desirable for strength and dramatic effect...However, this exact mirroring should be used sparingly, or its effectiveness is destroyed. (Horst 1980: 139)

After discussing the powerful effects which may be derived from exploring contrapuntal relationships between choreography and music, and the

virtues of contemporary atonal music whose rhythmic complexity makes it hard for the choreographer to do anything other than follow its overall phrasing, he writes that ‘ideally, dance uses no music at all. But in practical terms this is trying on the audience, who hear only the feet and breathing of the dancers. Besides, music helps the dance by confining it, as a frame confines a painting, and it deepens the meaning of the dance for the spectator’. (p.140) He concludes these remarks about the status and function of music for dance by quoting Gertrude Stein: ‘If one really looks can one listen, and if one really listens can one look?’ (p.140)

Fragments (1928), choreographed by Martha Graham, has been claimed as the first original score to be written for dance after the choreography was completed. Horst wrote his music to the metrical structure given him by Graham, occasionally asking for adjustments where required by the musical continuity. He maintained that composition was ‘not an inspirational exercise’, adopting a utilitarian and craftsman-like attitude. (Stodelle 1984: 93) For Horst, the only true function of the music was to serve and enhance the dance, and its ability also to succeed as concert music, as is most obviously the case with Stravinsky’s ballet music, was irrelevant; it was Horst’s belief that music for dance should never be judged apart from the choreography for which it was written. Like the ballet masters of the nineteenth century, Horst also rejected the use of complex, sophisticated music for the dance: ‘the music should be transparent, open and spacious, so the audience can see the dance through it. If the music is thick and overloaded, as it is apt to be if it was written to be heard alone, it obscures the dance’. (Horst 1980: 138 – 139) The balance between music and dance in Horst’s work was well described by Norman Lloyd, who wrote in praise of Horst’s music for Martha Graham’s *Celebration* (1934), one of her more intricate and contrapuntal dances. Horst’s music was scored for trumpet, clarinet and drum, often consisting of just ‘a single melodic line with a drumbeat to hold the dancers together. There was enough music to provide a mood background of celebration – but not so much music that there would be interference.’ (Lloyd 1966:146)

This way of working suited some composers, though others complained that music which followed the structures of the dance often led to works that were formless and incoherent. Solutions to some of the problems that arose were sought by encouraging dancers to approach their work with a clearer and surer sense of choreographic form. Horst was a pioneering teacher of choreography, leading workshops at a time when the usual way to learn to make dances was simply through practical experience and observing the methods of others. The courses Horst taught reflected his obsession with clarity of form, and in his search for suitable models he turned first to the structures, tempi and rhythmic qualities of pre-classic dance forms; subsequently he also sought inspiration in concepts ideas drawn from the art forms (e.g. the notion of asymmetry as found in music and in visual art). (Horst 1968; Horst and Russell 1961; Madden 1996) The idea was not that the dancers choreographed to the pieces chosen on a bar-by-bar basis, but rather that the lessons of their structure would be carried over into the way a dance found form and character. The influence of this teaching can surely be observed in the formal structures of dances such as *Frontier* (1935) and *Heretic* (1929), even though Graham choreographed both pieces before Horst set to work composing the music. The musical structure of *Heretic* is based on the alternation of two short phrases, and was apparently derived from a Breton folk song. The seven-fold repetition of these phrases has something of the formality of a ritual or religious ceremony. At the start of the sections that open with the repeated bass octaves, the musician has to lock on to the pulse that is initiated by the steps of the solo dancer, and throughout the pianist needs to be skilled at following choreographic cues. The idea of *Heretic* is that over the course of the piece the soloist's individuality is gradually crushed by the prejudices and pressures of society, here symbolised by the line of women who surround her and who always move in unison between each of the phrases of the soloist. Only those phrases in which the soloist moves have musical accompaniment; the remainder of the action is conducted in silence. If the first phrase of the music was clearly designed to accompany strong, striding movements, the second phrase, with its melting and

pleading qualities, accompanies each of the soloist's gestures of gradual submission till ultimately she falls to the ground.

Example 2: 'Heretic' by Louis Horst, transcribed Robert Coleridge

Frontier is structured like a rondo, characterized by episodes in which the solo female dancer moves away from and then returns to the rear of the stage where a fence has been erected so as to provide a vantage point from which she surveys the landscape. The piece was inspired by the original settlers who went to America: march-like episodes, with military drum rhythms that accompany the dancer's travelling out into the stage space, evoke the American civil wars, and solemn chorale-like episodes relate to the puritan religious impulses of those people. The music itself is dissonant and often bi-tonal; its opening phrase is a rising three-note whole-tone figure, which forms the musical rondo theme.

Norman Lloyd's comments on *Frontier* are worth quoting in full and reflect something of the impression made by this piece when new; incidentally, it was also a work whose formal clarity was much admired by John Cage.

Dance music and dance movement co-exist, but they do not have identical functions. If the dance is going to tell the audience exactly what the music is saying, then there is no need for the dance. The same is true of music; sound must add something to the visual event. At the beginning of Martha Graham's solo *Frontier*, she slowly raised her arm to a position above her head. The obvious musical solution was to write music that also rose slowly. But Louis Horst caught the emotion behind the movement and wrote music which opened a vista of the American plains that the dancer was viewing. The dancer's arm moved slowly; the music was active, quivering with excitement. Such is the ideal counterpoint of music and motion. (Lloyd 1966: 150)

In some pieces Horst's concern seems largely to have been to clarify the structure of the dance, marking out sections and transitions whose definition and content might not otherwise have been so clear. Sometimes he relates musical rhythms very closely to those of the dance, for instance in the opening of *Primitive Mysteries* where the even sequence of unvarying crotchets played in the bass register of the piano coincides with the very stylised and formal walking steps of the dancers as they enter the stage. In the opening section of *El Penitente* many of the musical motifs embody exactly the physical motions of the male solo dancer, including rapid travelling motion on his knees and the actions of flagellation. In later sections of the piece this approach, which at times come very close to Mickey-Mousing the movement, is abandoned for a more consistent and pulse-based approach. In their time these scores were widely praised as perfectly integrated accompaniments and completely in tune with the spirit of Graham's dances, though no-one pretended that they were great music. It is nevertheless surely significant that from the early 1940s onwards Graham abandoned this way of working, preferring instead to prepare a detailed scenario from which her composers worked. The music was clearly structured with the needs of the drama in mind, but Graham did not start to create the actual steps until she had heard the

music and drawn inspiration from its stimulus. The quality of music that emerged from this process was far higher: Copland's music for *Appalachian Spring* is one of the few scores written for Graham to have achieved a separate and satisfying life in the concert hall, but it was actually composed in complete ignorance of the moves and steps of the choreography, which he did not see until the dance reached production. (Robertson 2002)

Other choreographers enjoyed the support of music as a part of the choreographic process, but later attempted to conceal the origins of the movement in music. On occasions Doris Humphrey would choreograph to one piece of music, but later perform the dance to another score. In this way she was able to enjoy the stimulus of musical inspiration, but avoided the pitfall of the dance appearing to be overly dependent on its accompanying score; instead, new and less predictable relationships were allowed to emerge out of this process.

Silent dance

The rebellion against the banal rhythms and melodies of much traditional ballet music led some dancers to dispense with music altogether so as to allow the dance to develop with a greater degree of freedom and independence. Arvey (1941) includes an account of the work of a number of dancers of the 1920s and 1930s who made work without music, the best known example being Doris Humphrey's *Water Study*, which is still occasionally performed today. *Water Study* (1927) was inspired by the rhythms of flowing water, and the only sounds heard throughout the piece are the breathing and movements of the dancers, as well as the rustling of costumes. The absence of a musical pulse allows the dancers to take their tempos from each other and from the intrinsic needs of the movement. Laban too created works without music, but in these pieces the sounds produced by breathing of the dancers and even by the movement of costumes can add a potent and expressive dimension to the dance as a whole.

Nowadays, dance in silence occasions no controversy, but it is still relatively little practised. People have come to realize that however liberating it may be in certain respects to dispense with sound accompaniment, dance without music is nevertheless characterized not so much by the absence of sound as by the almost tangible presence of silence itself, a powerful quality in its own right that can create a degree of concentration and stillness in an audience that can sometimes even be quite uncomfortable to experience. There are few - if any - choreographers who regularly dispense with music, though many have occasionally worked in this way; Richard Alston's *Soda Lake* (1981) is a well-known example. There are many pieces too that either use sound very sparsely so as to approach the condition of silence, or contain substantial sections which, by chance or design, are danced in silence. Other pieces have deliberately exploited the sounds generated by the movement of the dancers: Twyla Tharp's piece *The Fugue* (1970) has no music as such, but the floor of the stage is amplified so that the rhythmic sounds created by the feet in effect form the music. Yolanda Smith's dance film *Step in time girls* also has no musical score other than the carefully recorded sounds occurring within the various environments in which the dance was filmed.

Lou Harrison and Henry Cowell

Two composers who worked a good deal with dancers were Henry Cowell (1897 – 1965) and Lou Harrison (1917 – 2003). Harrison said that his main aim was to create 'a musical counterpart to the visual elements' (Miller and Liebman 1998: 81); he did not intend that the music would mirror the choreography: rather attempted to construct 'an independent composition that interacts contrapuntally with the dance'. Like many other composers and choreographers, he drew an analogy with the accompaniment of a song, thinking of the choreography as 'a form of melody which could complement his own' (p. 81): a song accompaniment is not complete in itself, but often provides an essential element of harmonic and rhythmic support for to the singer. Among the choreographers he worked with

successfully was Jean Erdman, a friend and colleague of John Cage, who believed that dance and music should be 'two independent forms which create a third'; the music should not copy the rhythmic patterns of the dance, but create 'a sound partner to the visual form'. (Miller and Lieberman 1998: 81)

Henry Cowell taught Cage and knew and worked with both Lou Harrison and Bonnie Bird. Some of his ideas about music and dance look forward to Cage's theory and practice, and it seems likely that he exerted some influence on the younger man's approach to collaboration. Cowell wrote three articles on music and dance, all of which were published in Horst's magazine *Dance Observer* between 1934 and 1941. He was an enthusiast for and knowledgeable about non-Western forms of music: this is reflected in certain of the attitudes he expresses, and he often finds justification for his views in precedents observed in tribal music and dance. He speaks of the drums of primitive dance as occupying a position analogous to that of a conductor, a role still to be found in the art music of the orient, and he sees 'no reason why a dancer should be afraid that he or she will be accused of being "interpretive" (this now being in great disrepute) if he bases the dance on some definite rhythmic flow, and this flow is given forth through the sound of instruments or other sonal means. If he does so he is in step with the practice of primitives whose art of the dance is the most strongly ingrained of any which exists in the world.' (Cowell 2002a: 219)

Cowell was preoccupied with finding a suitable balance between the differing demands made by music and by dance. Like the ballet masters of the nineteenth century he was aware of the dangers of music becoming overly complex, yet he also wished that there could be moments when music could give itself fuller expression. He describes an experiment that he and Martha Graham had conducted 'in establishing a contrapuntal relationship between the high points of interest' of the music and dance; this represented one approach to the problem (the piece was called *Synchrony* and is dated 1930). Once they had negotiated the whole structure of the work, they then organised the music and dance so that

when the centre of interest was to be located in the dance the music held back, and vice-versa.¹⁰

Cowell's most interesting comments, however, relate to the marked contrast between the creative processes commonly adopted by dancers and by musicians. These differences can still be a source of friction and tension in collaborations between composers and choreographers even today.

On the one hand, dancers tend to adopt an intuitive and improvisational approach; tasks in improvisation often form an essential element in the process through which many choreographers originate and develop movement material. Dance is a more collaborative art form than is music, for the most part at least. It is common for the dancers themselves individually to contribute to the making of a work, which then reflects and embodies to a degree their particular movement skills, personalities and artistic strengths. The notion that a choreographer works out a piece of choreography in advance and then spends the rehearsals teaching the steps to the dancers is in fact very rarely accurate. Some choreographers even claim to turn up at the first rehearsal with few if any preformed ideas whatsoever about what will happen in a new dance: instead, they begin to work with their chosen cast, exploring different concepts and stimuli through a process of guided improvisation until ready to mould and structure the materials produced into the new work. Dancers can also generate large amounts of material very quickly, but then spend weeks allowing it to slowly evolve, change and develop. Since notation is not involved in the process, it is much easier to make changes or restructure material as there is no need for scores and parts to be rewritten; also, given that there is nothing in dance corresponding to tonal relationships or absolute pitch, cutting a sequence in a piece of choreography is much less likely

¹⁰ It is not clear that this piece was ever completed or performed. Lists of Graham's work in Stodelle (1984) and in other biographical studies make no mention of *Synchrony*, identifying only three dances with music by Cowell: *Four Casual Developments* (1934), *Immediate Tragedy* (1937) and *Deep Song* (1937).

to create serious problems of continuity than might be the case with a musical composition.

Choosing the right dancers is clearly an important step in a choreographer's plans, and dancers may be selected on the basis of personality, physique or movement style. In this it is possible to make comparisons with the work of the jazz arranger and composer. Duke Ellington, who knew the musical personalities and characteristic sound of all the players in his band, was able to create musical contexts within which they might be shown to best advantage. Although many classical composers are similarly inspired by the skills of particular players or singers, it is rare that the performer is expected to contribute to a performance in the same manner or degree as an improvising jazz musician. In recent years there have been examples of composers, including Heiner Goebbels and Peter Wiegold, who have worked with orchestral musicians in a workshop setting to devise performances with a collaborative dimension, but this way of working is still alien to most forms of classical music, as opposed to rock, jazz, folk and popular styles in which notation is not an important consideration.

Choreographers work directly in the medium of the dancing body; until quite recently, with the advent of electronic music, composers have always needed to communicate with their performers through notated scores. Assuming that the music is clearly and practically set out, this can considerably reduce the amount of time that needs to be devoted to rehearsing with the players, whereas a choreographer may need to spend many hours or weeks in the studio with the dancers in attendance. Electronic composers, however, are able to work directly in the medium of sound, without the need to find suitable players who may well be expensive to hire and difficult to organize. Editing music too is a comparatively simple procedure using computer software; work in progress can be demonstrated as it will eventually be heard, and the need to provide mock-ups of music in progress by means of a piano reduction, the sounds of which may be very different in quality and effect to those that will be heard in the actual

performance, is avoided. These reasons account in part for the ubiquity of music for dance made using computers, synthesizers and samplers; when live music is used, however, it is often advertised as being a particular feature of a performance and its use is still much valued and enjoyed by dancers.

Cowell wrote also of the practical difficulties of attempting to create music and dance alongside one another, as was favoured by some composers and choreographers at that time. Although offering the chance to experiment empirically with sound-movement relationships, in Cowell's view both music and dance tended to end up being improvised rather than composed, and as a consequence often lacked logic in the development of material. For Cowell, one of the dangers of the dance-first approach was that 'the dancer rarely presents the composer with a genuine form. The common factor in the form is found in rhythm and dynamic line (or climax content).' He says that he has seen many examples of this kind of work, 'but I have never yet observed a really perfectly worked out rhythmical form which was presented by the dancer to the composer.' (Cowell 2002b: 225) Cowell thought that if a composer watched too many rehearsals and became thoroughly acquainted with the choreography, there was a real danger that 'he will inevitably "interpret" the dance, thus reversing the old mis-relation when the dance "interpreted" the music'. Cowell's solution lay in addressing the question of form, noting that 'either artist may create a composition based on a certain agreed-upon form, and it matters little which has composed the form'. (Cowell 2002b: 226) A dancer who works in this way will not be interpreting the music, indeed may not even know it, and vice-versa for the composer; this attitude clearly anticipates the Cage-Cunningham approach developed in the 1940s. It is perhaps significant that all these composers - Horst, Cowell and later Cage - became obsessed with finding satisfactory form for their music-dance collaborations, not least with a view to minimizing the amount of rewriting necessitated by endless changes in the dance. Cowell proposed that one thing that dance can learn from music is the difference between improvisation and composition, a view doubtless also shared by Horst: 'the dance would be

improved if its creators worked toward so perfected an architecture that its balance would be destroyed by any changes that would not serve to enhance the structure'. (Cowell 2002b: 227)

However, there was another aspect to the problem, and Cowell thought that there was also much that musicians could learn from dance. He offers the opinion that if dance structures were too vague, music structures were often too rigid and academic, and that it might be constructive for musicians to seek a compromise in which it was possible to compose music in which there was a built-in flexibility to make changes without at the same time destroying its inherent integrity. His solution was the idea of elastic form, in which blocks of material were composed that were capable of repetition, omission, reordering and being varied in a mosaic-like manner in accordance with the needs of the dance; elastic music too was also often capable of being played using whatever instrumental resources were available, as with Percy Grainger's contemporaneous concept of 'elastic scoring'. This flexibility was sometimes made possible by the sheer simplicity of the materials provided, assuming that the score of *Sound Form No. 1* (1937), reproduced in an essay by Leta Miller, is in any way typical. (Miller 2003) Long held pedal tones underpin obsessive modal melodies and repetitive percussion rhythms, and the music seems to share the neo-medieval qualities of some of Lou Harrison's scores. Cowell claimed that whatever occurred, musical coherence would be maintained as 'the larger sections follow the same plan of accents and dynamics as [are] found within smaller divisions'; in this he once again anticipates Cage's work with rhythmic structures. Miller shows how an AABC pattern is found on many levels of the composition, including phrase structure and individual bars in the percussion part.

Sarabande was written for Graham's dance *Immediate Tragedy* in 1937 when the composer was an inmate of San Quentin prison, and consisted of two phrases for oboe and clarinet, each in versions lasting two, three and eight bars. Cowell effectively provided a sort of composition kit that allowed the players to

fit the music to the phrase structure of the choreography, a process that we are told took about an hour's work. Yet according to Norman Lloyd, 'the total effect was complete unity', and Graham enthusiastically described the music to its composer as 'impassioned'. (Miller 2003: 10)

It is not inevitable, however, that elastic music be simple and repetitive. Miller reproduces pages from the score of Cowell's *Ritual of Wonder* (1939), whose musical language is highly dissonant and irregular in its metrical variety; superficially the music owes something to those sections in the *The Rite of Spring* in which musical motifs are expanded and contracted and reordered in different ways, as in the final sacrificial dance. In this instance, Lou Harrison created a final score in consultation with composer and choreographer, making this a truly collaborative project. In recent years, the advent of minimal and repetitive music, as well as electronic music made using sequencers capable of infinite and effortless reduplication of rhythmic patterns has enabled the composition of dance scores with a degree of flexibility in the duration of their sections, and these works could perhaps be seen as the descendants of Cowell's elastic form.

Conclusion

The models of collaboration considered thus far are intended to focus attention upon some of the ways in which music and dance may be brought together and interrelate, together with some consideration of the problems that each of these approaches raises. This account of the work of these pioneering figures is clearly selective and far from comprehensive, and draws upon only certain aspects of their practice; however, the example of each of these artists raises useful and relevant questions that might be addressed when exploring relationships in any music-dance work. The critic or analyst may choose to investigate the degree to which an emotional response to the music plays an active role in the responses of the dancers and choreographer, or the extent to which aspects of the structure of the music are reflected and embodied within the dance. Other issues include the

matter of whether the dance can be said to be interpreting the mood or content of music in any way, or indeed for the music to be interpreting the dance. The answers to these questions will rarely be clear-cut, as few practitioners are as absolute in the adherence to one or another way of working as was implied by the manifestos of St Denis and others: most dances will reflect in varying degrees aspects of both the affective aspects of the music and its formal and structural qualities. Rather than conceiving of these approaches as in any way absolute or mutually exclusive, one might better be advised to approach the sheer complexity of information involved in a music-dance performance bearing in mind the constantly shifting nature of the moment-by-moment relationships. In this respect, thinking in terms of G-S lines, described by ethnomusicologist Mantle Hood (1982), can be a useful exercise. The G-S line is essentially a continuum upon which different phenomena can be graphed, setting out varying degrees of specificity from the most general to the most specific. In most of the examples of dance works cited here, the music-dance relationships move constantly between moments that are highly specific (e.g. moments of unison, or shared motifs in which movement and sound embody exactly a melodic contour or rhythmic pattern) and more general relationships in which music and dance may connect only on the level of an underlying pulse or parallels in their dynamic qualities.

The period during which classic music visualization flourished was short-lived, and such rigid and theoretical approaches to music have since largely been abandoned. There are nevertheless today still many choreographers who continue to engage in varying ways with the structure of their selected music. The extent to which this is a conscious activity on the part of the choreographer varies considerably, as too does the degree of musical detail which might find embodiment in the movement. Mark Morris is a well-known example of a choreographer who uses many of the techniques of music visualization (Accocella 1993), and there are many examples of work by Richard Alston and others that consciously visualize aspects of the structure of the chosen music. Other choreographers, such as Lucinda Childs, after years of working without music,

eventually began to re-engage with musical structure. She has explained that her works from the early to mid 1970s were ‘performed without musical accompaniment, as I found that the sounds made by the footwork of the dancers had a musical quality of their own. The effort involved in keeping a consistent steady tempo among the dancers took tremendous concentration. Each dancer’s part was meticulously recorded on a score which illustrated in time frame intervals the overhead view of each dancer’s path in space.’ (Kreemer 1987: 100) However in her collaborations with Philip Glass, notably *Einstein on the Beach* (1976), she began to work within the structure of the music, ‘rather than treat the combination of his music and my movement as some sort of collage’. The success of the collaboration derived in part from the aesthetic compatibility of their work, and by her own account ‘the choreography was developed in strict relationship to the musical score, sometimes matching the metric intervals in Glass’s music, and sometimes overlapping those intervals with different counts. A score for each of the five parts indicated the exact relationship of each dancer’s movements to the music. The punctuated exits and entrances of dancers to and from the wings of the proscenium stage made for a kind of visual counterpoint, as they plunged in and out of sight on a given downbeat in the music. This was particularly apparent in the opening *Dance No.1* from *Dance*, when the dancers swept across the space in pairs on horizontal paths with increasingly complex combinations of 12-count, 24-count, and 48-count phrases.’ (Kreemer 1987)

Childs’ example reflects a newly emergent interest in integrating sound and movement, and this urge has taken many different forms. Several composers have attempted to integrate movement and gesture into their work, and Stockhausen has made attempts to use what are essentially musical procedures to organize both sounds and actions. *Inori* (1973-4), subtitled *Adorations for a soloist and orchestra*, includes a part for mime or dancer who presents ‘a series of 13 attitudes of prayer taken from various religions and cultures throughout the world’ in accordance with a form of organization that employs serial-derived processes similar to those used to organize his musical materials: ‘each attitude is

assigned a pitch, a vowel sound, a tempo and dynamic level, and the soloist's part in the score is notated simply as a melodic line'. (Maconie 1976; 310) According to Maconie, the 60 dynamic levels indicated in the score are 'modulated according to the amplitude of the soloist's gesture, arms outstretched for loud, folded inward for soft sounds', a sound-movement equivalence rooted in the same assumptions that inform music visualization techniques.

Other forms of integration have been attempted through computer technology, and the composer Alistair Bannerman has used a system whereby the digital information gathered by a camera that has been focussed upon the movements of the dancer provides coded information that is in turn used to control the computer that is the source of the sounds that accompany the dance. The sound-movement relationships that emerge are sometimes direct and sometimes more obscure, but there is a clear and shared basis in the structuring of both music and dance in these experiments. Similar if less sophisticated experiments have also been made using a sound beam, a device which enables sounds programmed into a computer to be triggered in different ways through the use of movement. Once again, this can result in one-to-one relationships between sound and movement that are very easy to see, or the technology can be programmed to respond in less predictable ways.

Other composers have attempted to rethink the relationship between musicians and dancers on stage. In some works the dancers have also been responsible for making the music. Meredith Monk's dancers are sometimes required to move and vocalize simultaneously, and a brief video extract from *Turtle dreams* showed the performers visualizing the music in very direct and straightforward ways. A waltz-like stepping pattern established the underlying pulse and was supported by a repeated motif played on electric organ; supported by this underlying ground, the dancers sang and vocalized a series of melodies and motifs whose contour and dynamics were also embodied within simultaneous hand gestures.

Harrison Birtwistle's *Pulse Field (Frames, Pulses and Interruptions)* was composed in 1977 for Ballet Rambert in collaboration with the choreographer Jaap Flier. The composer's idea was that the dancers should share the stage with the musicians, making possible a system of cues out of which the structure of the work might emerge in a game-like process. Birtwistle clearly had a vision of how music and dance might work together, speaking in terms of 'relating music to dance – not in relation to structure, but to content and form'. (quoted in Hall 1984: 111) There were clearly arguments between composer and choreographer in the early stages of the collaboration, and Cross (2000: 193) attributed this to the fact that composers tend to have little experience of dance, and so are less well prepared than when working with librettists. Flier complained that Birtwistle 'felt that he must discover how dancers think before he could start writing his score. As he is very mathematical and methodical he kept asking questions. But dancers are very intuitive, and think with their bodies, so they felt his questions were very stupid. They resented being asked to do simple movements over and over so he could analyse the mechanics. I would wait for him to compose some music, and he would wait for me to give him some steps.' (quoted in Hall, p. 110-111) The work has never been revived, but its example is instructive not only in showing how composers and choreographers continue to rethink the relationship of their separate arts, but also in showing how very different the mentalities of musicians and dancers can sometimes appear to be.

All the figures considered in this chapter were concerned to find ways to make music and dance work together in comparatively conventional ways, in as much as direct relationships of one kind or another between sound and movement occur and are perceptible by an audience. The next chapter focuses mainly on Merce Cunningham and John Cage, who radically challenged many of the assumptions informing the work of the artists discussed thus far, and whose practice and thinking is able to bring new and surprising perspectives to bear on many of the issues that underlie the central topic of this thesis.

CHAPTER TWO

HISTORICAL PERSPECTIVES: CAGE/CUNNINGHAM AND BEYOND

John Cage (1912 – 1992) and Merce Cunningham (b. 1919) developed the most radical solutions to the problem of how composers and choreographers might work together with the fewest constraints and maximum freedom from compromise. During the 1940s and 1950s they moved gradually towards a practice in which it was their custom to work completely independently of another. This account of their collaboration is concerned with the evolution of their working methods and philosophy, as well as the similarities and differences in their aesthetic outlook and practice.

Early work

Cage collaborated with dancers throughout his composing life and produced a very considerable quantity of music for dance. After completing his studies with Schoenberg, Cowell and others, his first full-time employment was as composer/accompanist for Bonnie Bird at the Cornish School in Seattle where he remained from 1938 to 1940. Bird had been a dancer with Martha Graham, and was introduced to Cage by Lou Harrison, known then as an accomplished musician for dance. Cage was attracted to the position in Seattle in part because of the availability of a large collection of percussion instruments and a radio studio, both of which he exploited to the full. During his time there he ran a percussion ensemble, whose members included the young Merce Cunningham, and on occasion he taught dance composition when Bird was absent. He also composed for dance and from the very outset was interested to find ‘ways of working in which music and dance were made at the same time, rather than one being fitted to the other.’ (Vaughan 1998: 17)

Despite his clear commitment to working with dancers, he found aspects of the work at Seattle tedious, particularly his duties accompanying technique classes. The role of the class accompanist is to support the learning of the dancers, working within the

phrase structures of the exercises and attempting to match their rhythmic and dynamic qualities: class accompaniment is always subservient to the needs of the dancers, and requires particular musical skills as well as a degree of kinaesthetic empathy. Cage admitted that he found the work drudgery, and it seems unlikely that he was well suited to it either musically or temperamentally. (Miller 2003: 1) Whereas Harrison – like Horst and many other composer-accompanists of the time - was a skilled improviser who readily enjoyed responding to the stimulus provided by movement (Harrison even learned to dance), Cage does not even seem to have been a particularly adept instrumentalist. (Miller and Liebman 1998: 83) According to Remy Charlip, he found it hard to keep the beat and follow the dance phrasing of Cunningham's technique classes.¹ In a diary entry from 1955, Charlip wrote:

John Cage is an odd sight at an old player piano, chopping out bits of Chopin and simple one-two-three-four rhythms for two solid hours! He did it with great humour and suggested I come again, because 'sometimes the music is even worse'.

(Kostelanetz 1992: 52)

Lou Harrison went as far as to describe Cage as 'antikinetic', explaining that when he conducted he would become so immersed in the score, 'analysing, aiming to hear every detail', that the beat became slower and slower.

He lacked a kinetic response. I suppose that's also why he was so fascinated by Merce's highly kinetic persona. They arrived at a kind of *modus operandi* through chance so that they could both do what they did best and the relationship didn't matter. I, on the other hand, am very kinetic. If I see someone moving on stage, I respond in kind. (Miller & Lieberman 1998: 101)

¹ Paul Taylor (1988: 47) recalled that Cage deliberately played wrong tempi and rhythms on prepared piano in class so that the dancers would not become overly reliant on the music.

Despite what might then have seemed a handicap, from the very outset of his career commissions to write music for dance provided Cage with opportunities to experiment musically, as well as providing a source of income. In later life Cage professed his gratitude to the dancers who had found uses for his music at a time when the musical establishment denied that he was a composer at all. (Cage 1968a: 86)

Even before his move to Seattle, Cage had been working with dancers in Los Angeles; according to Paul van Emmerik, his score for *Quest* (1935), choreographed by Martha Dean, had included ‘an improvisation with a microphone, amplifier and loudspeaker set up on a table and approached with different sound-producing objects such as a watch, mechanical toys etc’. (quoted in Chaudron 2002-) *Music for an Aquatic Ballet* (1938), for an unnamed choreographer and its score now lost, called for water gongs, which not only produced some striking quasi-electronic glissandi but also provided an ingenious and practical solution to the problems caused by the music’s being inaudible to the dancers when they were under water. (Revill 1992: 55)

While at Seattle Cage was involved in several dance productions, the best documented of which are *The Marriage at the Eiffel Tower* (1938/39), *Imaginary Landscape* (1939), and *Bacchanale* (1940). The last of these pieces has an important place within Cage’s oeuvre as it was his first piece for prepared piano. It was written for the choreographer Syvilla Fort, and according to Cage the dance had a ‘rather primitive, almost barbaric’ quality for which the twelve-tone language of his solo piano compositions of the time seemed both inadequate and inappropriate. (Revill 1992: 69) Cage claimed to have invented the prepared piano when struggling with the practical problems of composing a piano score for this dance. He felt that the dance really demanded percussion music, but there was not sufficient space in the theatre where the dance was to be performed to accommodate his ensemble.²

² Bonnie Bird (Miller 2002: 65; personal conversations) maintained that Cage made this breakthrough while accompanying one of her technique classes. When an object accidentally fell onto the strings of the piano, he was immediately fascinated by the sounds created. He became so engrossed in his experiments that Bird was compelled to finish the class without musical support. Cage’s own account however speaks of his first experiments being made in his living room, using a plate taken from the kitchen and placed upon the piano’s strings. (Cage 1993: 118)

To prepare a piano, a selection of notes are transformed by inserting objects between the strings; the different kinds of material used (wood, weather stripping, rubber, metal) alter the timbral qualities of the note in different ways (for example, bolts can create gong-like sounds), and their position on the string can affect the sounding pitch through emphasizing or muting particular harmonics. The numbers of notes prepared can vary considerably from piece to piece; whereas the *Prelude for Meditation* (1944) uses only four pitches prepared with bolts and wood screws to create a very restricted gamut of bell-like sounds, the *Sonatas and Interludes* (1946-48) require the preparation of 45 different notes (several being prepared with two or three different objects placed at different points along and between the strings).

For *Bacchanale* the piano is prepared almost entirely with pieces of weather stripping, though one of its twelve notes (the F above middle C, and the highest note in the piece) is prepared with a small bolt, and the B flat a perfect fifth below is prepared with weather stripping as well as a screw with nuts loosely attached to create a buzzing effect. The music divides into a series of short sections, the structure being derived from choreography that was already complete by the time that Cage was invited to compose the music. Each section is characterized by different ostinato figures, and the musical phrases can be grouped into three main parts, the outer two predominantly fast and loud and providing a frame for a slower, quieter central section. Much of the energy of the music derives from the furious low trills that are a feature of the piece, and there are also many cross accents and syncopations. The propulsive rhythmic qualities of *Bacchanale* and other early pieces by Cage generate considerable energy and make them well suited for dance; in these aspects, the music is very different from his pieces using chance techniques in that those works normally go to great lengths to obliterate any feeling of regular pulsation.

The Marriage at the Eiffel Tower, based on a play by Cocteau, was scored for two pianos and toy instruments, some sections of the music being contributed by Henry Cowell, who was in San Quentin prison at the time, and George Frederick McKay. The music consisted mostly of parodies: a section written by Cage entitled *Rubbish Music* included pastiches of Mendelssohn's and Wagner's well-known wedding marches and other nineteenth century salon pieces.³ (Miller 2002: 64; Chaudron 2002-)

Imaginary Landscape (1939) was innovative in its instrumentation, calling for a large Chinese cymbal, string piano (the pianist either mutes or plays directly on the strings), and two variable speed turntables on which were played recordings of sustained tones, test recordings borrowed from the radio studio, from which sliding tones were produced by altering the speed at which they were played. This piece, often described as one of the first pieces of live electronic music, was also unusual in that Cage intended the music to be played not in the theatre, but broadcast over loudspeakers from a radio studio. Though this was in part a response to the lack of space in the theatre, it also reflected a general interest in radio that persisted throughout Cage's life. (Key 2002)

Bird was clearly a thoughtful and sympathetic collaborator, and Arvey (1941: 410) praised her enlightened approach to working with musicians on the grounds that she allowed her collaborators maximum freedom within agreed limits once the musical themes and structure had been decided upon. When both Fetterman (1996: 5) and Bell-Kanner (1998) interviewed Bird about the collaborative processes she adopted with Cage, she described an essentially pragmatic approach based on discussion and practical experiment. Any difficulties that might have been encountered through the lack of a clear pulse in *Imaginary Landscape* were resolved by the dancers taking cues from the music

³ Miller (2002) mentions a number of other works for dance composed during the Seattle years, several of which are now either lost or remain obscure and unpublished. They include *America was promises* (1940) for speaking voice and piano duet (choreographed and performed by Bonnie Bird and sixteen of her students); *Four songs of the moment* (1940) for solo piano (choreography by Dorothy Herrmann); and *Spiritual* (1940), composed like *Bacchanale* for Syvilla Fort. Also dating from 1940 are *Dance Music: for Elfrid Ide*, scored for 6 percussionists and piano, and *Fads and fancies in the academy* (1940), choreographed by Marian van Tuyl and scored for 5 percussionists (including parts for washtub, metal waste paper basket and metronome).

while allowing a measure of independence between those moments, anticipating Cage's approach with Cunningham in the 1940s.

From 1942 onwards, after Cage moved to New York, he began to write far more prolifically for dance. Although he worked with many different choreographers, the great majority of his dance scores were written for Merce Cunningham, whom Cage had met in Seattle.⁴ *Credo in US* (1942), composed for a dance that Cunningham had made with the help of Jean Erdman, was their first collaboration, and Cage wrote to the counts, tempi and phrase lengths given him by Erdman (Vaughan 1998: 27); it was also Cage's last substantial percussion score for dance. The music includes references to jazz (a rather Copland-like Blues), and a part for radio or gramophone playing classical works (Cage suggested music by Dvorak, Beethoven, Sibelius, or Shostakovich); the percussion ensemble included tin cans, muted gongs, tom-toms and an electric buzzer.

From the mid-1940s onwards Cage and Cunningham gave many concerts of works they had made together, including a large number pieces which took for titles phrases found in James Joyce's *Finnegans Wake*, a book then recently published and which preoccupied Cage throughout his life. Cunningham also choreographed to several Cage compositions not originally intended for dancing. Cage said that at that time he 'wrote so much music for Merce that there was always a hankering on his part to have some music written by somebody else'. (Vaughan: 1997: 37) Consequently Cunningham also worked with Alan Hovhaness, Lou Harrison, and the jazz drummer Baby Dodds; he also made a number of dances to music by Satie, a composer Cage was championing at that time and one for whose music Cunningham has maintained a life-long affection as well as evidencing a fascination for its structures. For *The Princess Zonilda and her entourage* (1946) Cunningham used music by Alexei Haieff, composed in a Stravinskyan

⁴ Other dancers with whom Cage worked included Jean Erdman, for whom he wrote *Forever and Sunsmell* (1942), *Daughters of the Lonesome Isle* (1945), *Ophelia* (1946), and *Imaginary Landscape 5* (1951); Valerie Bettis, for whom he wrote *And the earth shall bear again* (1942), and Wilson Williams, for whom he wrote *Primitive* (1942). He also created scores for Marie Marchowsky's *Lidice* (1943), Hanya Holm's *Four Dances (What so proudly we hail)* (1943), and Pearl Primus's *Our Spring will come* (1944); *In a landscape* (1948) was composed for Louise Lippold.

neo-classical style in what was, according to Cage, a deliberate attempt to remove feelings of aesthetic bias and get as far away as possible from the kind of music that he was writing at the time. (Vaughan 1998: 37-38)⁵

Most of the pieces Cage and Cunningham created together in the 1940s were quite short (between two and nine minutes). *Four Walls*, a dance-play lasting an hour, is the major exception. Cage's music for this work used only the white keys of the piano, and was kept deliberately simple; the score also made extensive use of silence, which made counting hard for the dancers. Brief extracts filmed at the time suggest that Cunningham's choreography for this piece was close in style and approach to the mainstream modern dance of the time by figures such as Graham and Humphrey. (Caplan 1991) The dynamics and structure of the music tend to parallel those of the dance: the music for the first section is spacious and open, its uncluttered textures leaving space for the dance and never competing for attention; the second section, a lively solo danced by Cunningham, is accompanied by energetic ostinati in the bass register.

A number of these early collaborations differ markedly from later work in that they appear to have been consciously concerned with the expression of emotions, including neurosis and fear. The evidence for this is to be found in the texts Cunningham wrote for *Four Walls* and *Credo in US* and in certain of Cage's pieces: *The Perilous Night* (1944) and *Amores* (1943) were said to be concerned with the 'loneliness and terror that comes to one when love becomes unhappy', while *A Valentine Out of Season* (1944) was dedicated to his wife Xenia at the time their marriage was breaking up. In recent interviews Cunningham has tended to play down the emotional and expressive aspects of his early pieces, preferring instead to talk about structure and maintaining that any emotional connotations that might appear to be present in a dance are really nothing other

⁵ Cunningham also choreographed Stravinsky's *Les Noces* in 1952, closely following the changing metres and phrase structures of the music in his choreography. According to Remy Charlip, the dancers became so familiar with the rhythmic structures of the music that when the conductor, Leonard Bernstein, became lost during the performance and stopped beating time, the dancers kept moving and even shouted out cues to the musicians. (Charlip in Kostelanetz 1992: 56)

than a by-product of the materials selected and the ways in which they are ordered.

New methods of collaboration

Cage was important at this time in changing the direction of Cunningham's work, encouraging him to leave the Martha Graham Company and break away from the more literary and narrative-based forms of modern dance which then prevailed. Although Cage admired certain pieces by Graham, both he and Cunningham objected that at the time it was almost impossible to find a modern dance that did not contain literary elements. Cunningham rejected as nonsense Graham's notion that a particular movement could mean something specific. (Greskovic 1999: 72) Cage was also unhappy with the approaches to collaboration then most commonly used, and his and Cunningham's development of new methods has its roots partly in their reaction against the prevailing orthodoxies and assumptions regarding music and dance of the period. In an interview given in 1985, Cage described the situation he found himself in when he first began to work with dancers.

The first thing I noticed in the thirties was that the modern dancers wanted to be first with respect to the music. They wanted the musician to be in subservient position as far as the collaboration was concerned. They always finished the dance before inviting him to see it. This was the opposite to the way a musician worked with ballet; there the music had to be finished before the ballet was begun. Neither way of working was to my liking, though I was willing to accept either. It would be better, I thought, if two people working together could work without either following the other. The best procedure, I thought, would be working independently, that is, in different places at about the same time and then later enjoying seeing/hearing the two works coming together, paying attention to them both as they happened rather than expecting something preconceived, or an approximation of it, to happen. (Kostelanetz 1988, p. 192)

Although Cage had dreamed of musical independence at least since his time in Seattle, he had continued to work according to the demands of each individual choreographer. Many of his early dance scores, including several for Cunningham, are described as being written in the phraseology of the dance, and were composed after the dance had been completed. By all accounts, Cage was skilled at working in this way and Jean Erdman claimed that Cage, Horst and Lou Harrison were the only composers she knew who had this ability (Miller and Liebman 1998: 81); early reviews of the recitals Cage gave with Cunningham often commented on the perfectly integrated nature of his accompaniments. (Kostelanetz 1992: 28/29) Many composers found the discipline of working within the structure of a dance stimulating, but Cage found the experience unsatisfactory. His objections were as much as social and political as artistic: in his view, too often either the music was subordinate to the dance, or the dance subordinate to the music.

Cage did welcome certain aspects of the music for dance prevalent at the time, not least the use of percussion instruments, but he complained that modern dancers used these sounds in a very limited and unimaginative way. In his view they 'followed the rhythm of their own dance movement, accentuated and punctuated it ... but they have not given the sound its own and special part in the whole composition. They have made the music identical with the dance, not cooperative with it.' (Cage, 1968a: 88)

The solution that Cage and Cunningham developed for collaboration was rooted in Cage's own compositional practice at the time, which used a system of rhythmic structures. Schoenberg had famously told Cage that his lack of feeling for harmony would always be an obstacle in his development as a composer; Cage's reaction was to resolve to devote his life to making a new kind of music that was open to any conceivable sound and in which traditional tonal structures need play no part. This seems to have involved no hardship or sacrifice as Cage seems actively to have disliked harmony, coming eventually to see it as 'a device to make music impressive, loud and big, in order to enlarge audiences and increase box-office returns', and a 'tool of Western commercialism'. (Cage 1993: 40, 25)

The use of rhythmic structures was adopted because duration was the only musical parameter that encompassed both sound and silence. Cage extended this logic to argue that time was also the only denominator common to both music and dance, thereby rejecting entirely all those varieties of dance-music correspondence which were the basis of music visualization techniques. Through the use of time structures, Cage also claimed to have freed the dancer from having to interpret music on the level of feeling.⁶

Cage wished to find ways of structuring music-dance works that had a deeper level of formal integration than was usually the case in modern dances of the time. In *A Composer's Confessions* (1948), he wrote that when he composed for the dance he found that musically speaking the counts he was given lacked coherence or any kind of logical structural organization, and that it was his dissatisfaction with this that led to his devising his method of rhythmic structures. Elsewhere Cage identified two principal factors which led him to the concept of structural rhythm: firstly 'the physical nature of the materials' with which he was dealing (i.e. sounds that could not be accommodated within tonal methods of composition), and secondly his experience 'in writing within the lengths of time prescribed for me by modern dancers' (Cage, 1993: 34).⁷

⁶ Curiously, given his antipathy to the work, clear parallels can be observed with the way in which a class accompanist is given a time structure (e.g. 16 bars of 4/4 repeated 4 times, or 7 bars of 5/4, to be repeated until all the dancers to have practiced the sequence in turn), and finds or creates music that works within that structure. It does not seem unlikely that Cage's method of composing with rhythmic structures may have been suggested at least by his work as a class accompanist.

⁷ In practice, the strictness with which these rhythmic structures were applied in Cage's work seems to have varied considerably. Paul Van Emmerik (2002) has made a distinction between 'divisive' structures, based on a square root principle, and additive structures which were less symmetrical and strict in their construction and more commonly used in music for theatre, film, dance or radio where the structure tended to be defined by the medium for which the music was written. With the square root structures, there is a clear architectural relationship between the proportions of the large and small sections of a piece; with the additive structures the proportions are modified where necessary to meet external needs. These structures were not intended to be perceived or followed by an audience on a conscious level, but they were clearly invaluable to Cage in that they provided a scaffold within which to contain his musical invention, as well as a structural rigor and logic which might otherwise have been lacking.

Cage's obsession with structure and rhythm at that time is clearly reflected in his essay *Grace and Clarity*, written in 1944. (Cage 1968a: 89 – 93) This preoccupation with structure was shared by several other composers for dance at that time, notably Horst and Cowell, and is in part symptomatic of the differences between the ways that musicians and dancers tend to plan and develop new works. Cage located one of the principal weaknesses of modern dance in its lack of clear rhythmic structures; he maintained that its strengths were too often located primarily in the power and charisma of individual performers, and in his view 'personality is a flimsy thing on which to build an art'. These problems were partly a consequence of the new dance's youth and insecurity, which had in turn led modern dancers sometimes, in Cage's view erroneously, to seek models in other more established art forms. Cage praised classical ballet for the clarity of its rhythmic structures, which he believed gave it a strength and rigour that could transcend the shortcomings found in individual movements, costumes, music or performers. The more frivolous aspects of ballet such as 'the prettiness and fanciness' of its movements may have had little to offer modern dance, but there were lessons to be drawn from its rhythmic structures which had enabled ballet to flourish at a time that was 'almost devoid of interesting personalities'. Cage was not for a moment suggesting that modern dancers should uncritically appropriate the rhythmic structures of ballet or oriental dance; rather, he argued that these forms might function as models towards which the modern dance might aspire. His critique once again focuses attention on the marked differences between the more intuitive and improvisatory approaches of dancers and the quest for structural rigour so often pursued by composers.

For Cage, the way in which a dance, or indeed a piece of music or a poem, was divided up into sections and phrases, and the way in which it occupied a length of time, was its 'very life structure'. Grace and clarity formed a duality, like body and soul: clarity referred to the coldly mathematical aspects of a music-dance structure, while grace embodied the warmly human attributes of a performance. The play between the two was at the heart of all the time arts, 'endlessly, and life-givingly, opposed to each other'.

The “perpetual conflict” between clarity and grace is what makes hot jazz hot. The best performers constantly anticipate or delay the phrase beginnings and endings. They also, in their performances, treat the beat or pulse, and indeed the measure, with grace: putting more or fewer icti within the measure’s limits than are expected ... contracting or extending the duration of the unit. This, not syncopation, is what pleases the hep cats.

Hindu music and dancing are replete with grace...every Hindu who enjoys listening to music or looking at the dance is familiar with the laws of tala. Players, dancers, audience, enjoy seeing and hearing the laws of the rhythmic structure now observed and now ignored. (Cage, 1968a: 91-93)

In other words, against a background of clear expectations, play and contradiction become meaningful. It is easy to dismiss the phrase structures and rhythmic devices of classical ballet for their lack of variety and their general predictability, as did Cowell, but there is also a sense in which they might offer a greater degree of freedom and flexibility to the creator than the more complex and asymmetrical structures sometimes found in modern dance. This can be seen if one contrasts exercises in a classical ballet class, which are always structured into regular, even periods and use only a limited range of common time signatures, with the techniques developed by Graham and Cunningham, who had no compunction in shortening or extending the eight-count phrase norms of ballet when the movement demanded more or less time in which to be completed. For someone like Horst, asymmetry was an important aspect of contemporary life and art and therefore to be cultivated; but for a musician to have to structure their playing around phrase lengths that have a primary logic that derives from movement rather than music can as easily be a stimulating as a frustrating experience. On the other hand, there are many forms of music, including much jazz and certain Indian *talas*, whose underlying rhythmic structures are even, balanced and regular, based on sixteen or thirty-two beat periods, but which nevertheless offer the improvising musician enormous scope and freedom for invention.

The ideas expressed by Cage in this essay remain challenging and stimulating for some choreographers even today, and Richard Alston has often recommended his students to read it. But that way of thinking was later abandoned by Cage, and it reflects a very different set of aesthetic values to those embodied in later work with dance in which structure is replaced by process. Paradoxically, the rhythmic structures of Cage's compositions of the 1940s are not at all easy to perceive in performance, and neither he nor Cunningham expected an audience to be able to follow them.

The macro-microcosmic rhythmic structures which Cage and Cunningham used were essentially sets of proportions applied to the lengths of sections, phrases, sometimes even the actual rhythmic patterns utilized in a given work.⁸ Music and dance would come

⁸ Cage normally set out the rhythmic structure of these pieces in the score itself or in his accompanying notes, and the choice of rhythmic structure was clearly important and never arbitrary. Nevertheless Cage wrote little about the reasons for a particular set of proportions being used for a given score. Sometimes the proportions might relate to a programmatic element in a dance. *The Seasons*, a ballet score composed for Cunningham in 1947, contains an element of narrative in that its four main movements are related in their moods to the four seasons. Its rhythmic structure was derived from certain observations about the ways in which Cunningham intended to divide the ballet into large sections. The resultant set of proportions was then used to deduce the details of how each individual section was to be structured.

The scenario given me by Mr Cunningham was the basis for a study of numbers with which I find it congenial to begin a music composition. His remark, "the fullness and stillness of a summer day," suggested that Summer would be the longest section; that, together with his desire that each season should be developed by continuous invention and preceded by a short formal prelude (formal by means of exact repetitions), and that the entire work would be cyclical and concise, brought about the following numerical situation: 2,2; 1,3; 2,4; 1,3; 1. The number, 4, represents Summer, since it is the largest number (it is also the smallest number which could be the largest number in this situation); the first three is Spring, the second, Fall; 3's are, like these seasons, asymmetrical, unstatic: they suggest both the approach to and away from 4. The second 2 is Winter, for 2 suggests the place between two 3's, opposite a four. The other numbers are the Preludes. Summer (4) has a prelude of 2 (fittingly, the longest). Spring and Fall have Preludes of 1. Winter has a Prelude of 2 which is actually 1 repeated.

This was done to provide an instrumental description of atmosphere before the actual dancing begins (the ballet begins with Winter), and to provide an end-piece which was the same, but suitably proportioned to the other preludes as dance accompaniment. This made 2 to begin with and 1 to end with. The entire series of numbers appears throughout the ballet, not only with respect to the length of sections, but, as is my custom in works for percussion and "prepared" piano, also with respect to phraseology. Thus within 1, the series given above occurs as the determinant of breathing. Within the 4 of Summer, it occurs 4 times, etc. The tempo changes the actual number of measures as it changes, actual time length being the basis of this plan. Naturally, a plan like this is made not only to be followed, but also that it may be broken. Yet the pleasure of breaking a law can only exist if the law is existent. The question arises whether one can know this rhythmic structure from a first hearing. The answer clearly is: No. (Cage 1993: 11-12)

Cage's essay *A Few Ideas about Music and Film* (1951) offers a few more clues as to how the rhythmic

together at major structural landmarks, but could proceed independently of one another between these points. There was no necessity for the music to support the dance in any way, or for the dance to have to interpret or respond to the music in any way. Between the structural points agreed upon in advance, Cunningham was free to vary the speed and accents of the movement without reference to the musical pulse but only in accordance with the intrinsic needs of the choreography.⁹

The element that underlies both music and dance is time, which, when present in component parts, is rhythm. As an element coordinating the two arts, it is more useful when the phrase and parts longer than the phrase are considered, rather than the small particularities of accent and even of individual quantity. The concentration on the minutiae of rhythm in the music-dance relationship leads to the “boom-with boom” devices, giving nothing to either and robbing both of freedom. Working however from the phrase leads to a related independence, or to an interdependence of the two time arts. Accents, even and uneven beats, then appear, if they do, where the music continuity or the dance continuity allows them to (that is, an accent in the music is an incident in the music continuity which does not necessarily occur in the dance and

structures were derived, and again suggests a starting point in the structural properties of a completed work in another medium, either a film or a dance.

Not working, I know that music loses virtue when it accompanies. Nothing in life or art needs accompaniment, because each has its own center (which is no center). To bring about the state of no-accompaniment, there must underlie everything (whether words, pictures, or what have you) a rhythmic structure. In my case, this is micro-macrocosmic. If a film or play or dance is x minutes long, I take a pulse and then know how many measures of 2/2 there are in the work to be done. I let the major structural points in the film give me a particular structural articulation which is small in phraseology and is large in section-delimiting. (The numbers of measures must be capable of having a square root). E.g. if there are 1600 measures in the film, these will be divided into 40 x 40 measures, and each 40 measures will be phrased in the same proportions that divide the 40 parts into large sections (e.g. 6, 7, 10, 5, 4, 9). [p. 63]

⁹ To illustrate this way of working, Cunningham has described an occasion on which he and Cage gave a lecture demonstration together and decided to create a short piece in public. The principle of the rhythmic structure (in this particular instance 8 x 8, subdivided 2-2-1-3) was explained; Cage and Cunningham then began to work in full view of the audience, Cage at a piano to the side of the stage and Cunningham in the stage space itself, the two men never referring back to one another or discussing their progress. When each section had been completed they tried out together what they had made, always delighted at how the music and dance always seemed to work together satisfactorily. (Cunningham 1982: 109)

vice-versa). In coordinating dance and music, the one should not be submerged into the other. [...] The dance and the music can be brought together by time, by a particular rhythmic structure of time involving phrases which indicate the meeting points convenient for use, thereby giving to each a freedom to expressively play with and against a common structural idea. (Cunningham 1951: 254-255)

Cunningham initially found working with rhythmic structures hard, but when he realized that he could adhere to them or not as he pleased, it gave him 'a marvellous freedom. It was both fixed and free, or definite and free at the same time. This whole way of working seemed like something that fitted my spirit'. The new approach to form also suited Cunningham in that he had never liked closed forms (e.g. ABA, which played an important part in the composition courses taught by Horst), because they 'didn't seem to fit at all to the time in which we live'. (Kuhn 1998: 82)

The first dance to use a shared rhythmic structure, music and dance being created independently of one another, was *Root of an unfocus* (1944). According to Cage, 'we were getting free of this business of fitting one thing to another. I had long had that idea of letting the two arts collaborate without following one another, but it was with *Root of an unfocus* that we really made some kind of progress'. (Cage in Vaughan 1998: 30-31)

Root of an Unfocus is also one of the best documented of these early collaborations. It was constructed in three sections, each in a different tempo. According to Cunningham, it was 'in a way, about expression. It was about fear – one of the predominant things in my life ... The dance, the expression was basically about somebody who was frightened, so he looks outside. I don't remember exactly the movements, but it is as though there is something attacking him in some way. The second part is confronting this, so to speak. And the third part is really the realization that the fear is in yourself ... And the dance ends with this poor figure falling and crawling and rising and falling and rising, but all within this structure.'¹⁰ (Kuhn 1998: 81-82)

¹⁰ It is noteworthy that Cunningham specifically singled out the time structure as an enabling factor in creating the perceived emotional content of the piece. Later in life, however, he complained that people liked the piece 'because it seemed to be tied to an emotional meaning'. (Kuhn 1998)

Central to Cunningham's aesthetic is his acceptance and embrace of the intrinsically expressive nature of human movement, regardless of a choreographer's intentions. A contemporary account of the choreography of *Root of an Unfocus* by Jean Erdman not only paints a vivid picture of the dance, but also illustrates clearly how the use of the body and its relation to the stage space might support an interpretation relating to the idea of fear. She describes how at its start the dancer covers the whole of the stage space, but by the end he has become almost immobile and rooted to a spot.

A sense of fear is conveyed, not by facial expression so much as by the uneven, spasmodic rhythm, the strange ambiguous "walk", and the intensity with which the dancer rushes futilely to each new destination. The fear is conveyed through the space pattern too. The first part of the dance covers the stage vigorously; through the middle section the dancer seems to be turning in on himself in smaller areas and more frequently. Finally, he cannot move around at all, but only down to the floor in a circular back fall with a quick roll over to the knees and up; this is repeated many times in rapid succession. The end finds the dancer going off stage on one knee, his body bent down over it, and nearly limp. (Vaughan 1998: 30)

Remy Charlip described his experience of coming to an understanding of how the music worked in this piece as follows:

In the first half of the dance, the music was just banging away. It was John's piece. Merce was crawling all over the floor and carrying on, totally disassociated. But about three quarters of the way through, suddenly they came together. That is, the music and dance came together. Suddenly a joining happened . . . So already there was for me a beginning, an understanding of what structure could be in relation to music and dance. (Kostelanetz 1992: 53)

Paul van Emmerik (2002: 221) classifies the structure of the first of the three sections as 'divisive', and the remaining sections as 'additive', with a four-bar coda appended. The first section of the published score subdivides into 7 phrases, each 7 bars in length; the other two sections of the piece are differently constructed, so that the structural integrity of a pure 'divisive' work in which the same sets of proportions would be applied throughout is denied. In *Root of an unfocus*, the middle section of the piece consists of 3 phrases, 35 + 35 + 42 crotchet beats in length (5.5.6.), played twice, followed by another phrase also of 35 beats; the last section of the piece is built from a phrase lasting 46 crotchet beats repeated 4 times, which is followed by a 16 beat coda.

On the basis of surviving descriptions of the choreography it is possible to make certain assumptions about how the music and dance might have worked together and the kinds of considerations that might have influenced Cage, assuming an awareness of Cunningham's overall scheme. It is not hard to see how the music might relate to the idea of fear: the syncopated rhythms and obsessive ostinati of the first two sections of the piece evoke qualities of nervousness, unease and obsession; the use of metallic preparations (all screws and bolts) create a powerfully jangling sound world, characterized by a high three-note cluster set in opposition to an insistent minor third chord (d-f below middle C) that persists throughout the whole piece, at first rhythmically erratic and with unpredictably varied rests between iterations, finally as an uninterrupted tremolando. Cunningham's use of space, as described by Erdman, is reflected in Cage's approach to musical space and in the way that the scattered sounds of the opening section and the more varied patterns of the middle section give way to the very restricted gamut of sounds used in the last section (four pitches only: the tremolando referred to above is sustained throughout the 200 crotchet beats of this section against a rhythmically irregular melody alternating just two pitches a minor 9th apart and using mostly longer note values). The sparse and minimal qualities of the music again ensured that it was never likely to overpower the dance, and the essential simplicity of the music's gestural content allows for a degree of space and a transparency within which the dance could

unfold.¹¹ This score would surely have met the approval of Horst and Humphrey, both of whom warned against the dangers of using overly complex or overpoweringly dramatic music. Indeed, some years later Norman Lloyd, a well-known composer-accompanist and colleague of Horst, was to praise Cage's music for *Antic Meet* (1958) – the indeterminate *Concert for piano and orchestra* – on the grounds that the spaces left by Cage's noises allowed the dance to make its points in purely dance terms, the music never getting in its way. (Lloyd 1966: 145)

The introduction of chance elements

Cage continued using rhythmic structures up until the early 1950s; however, with the introduction of chance procedures, he began to move away from the notion of creating discrete musical objects with clearly defined structures. Although some of his scores use chance only in a compositional process that resulted in the production of fully notated scores, other pieces were capable of being realized in many different ways. Different performances of the same piece might sound very different, even though they shared a common origin in Cage's notations. For example, the score of *Radio Music* (1956) includes detailed instructions as to how the radios must be continuously retuned through sequences of precisely indicated short-wave frequencies. The precise sounds that might emerge from this process are however completely unpredictable, except in the most general terms: performances can usually be identified by their mix of atmospheric sounds and interference interrupted by flashes of speech and music. Importantly too, the piece contains no opportunities for improvisation or calculated effects on the part of the radio operators; the performers must perform the actions required in a disinterested and objective manner, accepting without question whatever sounds are produced as the result of following Cage's instructions. More radically still, the series of graphic scores entitled *Variations* include no indications of instrumentation, and unlike *Radio Music* can also be played for any length of time required.

¹¹ These are qualities were also noted by critics at the time. Elliott Carter described the music for *Mysterious Adventure* as 'a play of sound with neutral content and mood which allowed the dancer great latitude'. (Vaughan 1998: 36)

These developments had major implications for Cunningham, as it became increasingly impossible for dancers to rely on cues for co-ordinating sound and movement. Cage abandoned the use of regular pulse and metre, and time was more often than not measured with a stopwatch rather than a metronome, a practice also much used by Cunningham. This of course removed entirely the possibility of their continuing to work with rhythmic structures based on shared numbers of bars or beats.

The reasons for Cage's change of direction have been written about extensively, both by Cage himself and many commentators on his life and work, and they need not to be explored here except in as much as they inform an understanding of his work with Cunningham.¹² Nevertheless, a number of general observations can be made, relating both to Cage's new thinking regarding the purpose of art and to the similarities and differences between his work and that of Cunningham.

From the mid-1940s, and partly related to his attempts to deal with various personal traumas in his life and work, Cage had begun to ask questions about the true purpose of art, finding answers in his studies of oriental religion and philosophy. The new attitude can be best encapsulated by two aphorisms that he first encountered at that time, and to which he remained devoted for the rest his life: (i) that the purpose of art was 'to sober and quiet the mind, thus rendering it susceptible to divine influences'¹³; and (ii) that 'art should imitate nature in her manner of operation', a phrase that he found in the writings of A.K. Coomaraswamy. (Cage 1993: 239) His studies of Hindu thought and subsequently of Zen Buddhism inspired his attempt to create a music in which ego, personal emotions, musical memory and taste played no part; all tendencies towards self-expression were systematically eliminated by means of the use of chance operations in his compositional process. His initial response to his discovery of Hindu philosophy had been to attempt to express in his music the ideas he had encountered there: the *Sonatas*

¹² For example, see Revill (1992), Kostelanetz (1993: 27 – 44), Patterson (2002).

¹³ Cage has credited his first encounter with this quotation to both Gita Sarabhai and to Lou Harrison, the latter having found the line in some writings of the seventeenth-century English writer Thomas Mace. (Cage 1993: 41)

and Interludes (1946-48) for prepared piano set out to express the eight 'permanent emotions and their common tendency towards a ninth, tranquillity', while *The Seasons* (1947) attempted to express the traditional Indian view of the seasons (a similar programme underlies the *String Quartet*). Soon however, he rejected this kind of programmatic and expressive approach to form entirely, and instead began to conceive of art as a form of spiritual discipline, and composition as a matter of asking questions rather than expressing thoughts and feelings. 'Music is about changing the mind – not to understand, but to be aware. The understanding mind is what you get when you go to school, which is boring and of no use whatsoever. The experiencing mind is what we need because it stands us in good stead whether things are going smoothly or not; it finds tranquillity in the least tranquil situation.' (Kostelanetz 2003: 227) Cage concurred with Robert Rauschenberg that 'a work of art can be deemed good when it changes you', and maintained that the purpose of art is to change your attitude to living so that 'wherever you look - implying that wherever you look you can look aesthetically - you can see life as art ... in other words you start going out of yourself and looking at the world around you, and then your mind changes'. (Gillmor 1976: 20-21)

Discussing the nature of expressivity in music in 1948, Cage had identified two main sources for producing emotion: the personality of the composer and the nature of the materials used. By this time he had come to believe that it would better if expression were allowed to occur naturally from the sounds rather than worked for consciously by the composer.¹⁴ Dance too seems to have played a part in helping him reach this way of thinking, as Cage was already accustomed to making music in which his own creative ego was subordinated to the needs of the choreography.

Any latent longing that I might naturally have had to master expressivity in music was dissolved for me by my connection with the modern dance. For them I had continually to make suitable and expressive accompaniments. (Cage 1993: 34)

¹⁴ If one substitutes the words 'human movement' for sounds, and choreographer for composer, these words might equally apply to Cunningham.

From this time onwards, personal emotion played no part in his work. When, in 1983, he was asked if his music reflected his emotional life, he replied that 'my feelings belong, as it were, to me, and I should not impose them on others'. (Kostelanetz 2003: 227-8) For Cage, personal emotion had no place in his work: 'It exists in each person, in his own way; but I'm not involved with that . . . I have emotions, but I don't try to put them into my work.' (Cage 2003: 228)

Cunningham came to share this way of thinking, and there are many parallels in regard both to structural thinking and philosophy to be observed between his work and that of Cage. Paul Taylor has even suggested that a period of personal crisis was also in part responsible for Cunningham's discovery of chance. Taylor was sceptical about Cunningham's reasons for embracing chance since he considered him an instinctive rather than an intellectual artist, and he claimed that Cunningham had told him that before he used chance he had been through a reclusive period when he had found it hard to work or go out much, and 'that John had come to his rescue by encouraging him to use chance methods, thereby relieving him of the strain of decision making and enabling him to return to his creative work.' (Taylor 1988: 47)

For a while after Cage had embraced chance, Cunningham seems to have continued attempting to work with musical structure when it was present. The initial impetus for loosening the bonds of music and dance seems originally to have arisen as a practical solution to the problem of dancing to music without a regular pulse, notably in choreography which Cunningham was invited to make in 1952 for Pierre Schaeffer's pioneering piece of musique concrète entitled *Symphonie pour un homme seule*. Cunningham choreographed the music twice; once as a solo for himself, and once as a collage of mundane actions that were ordered using chance procedures and performed by a mixed-ability group of dancers. Because the music could not be counted, this way of proceeding 'freed immature performers from any dependence on it. Thus time became a mutual field in which both the sound and movement progressed'. (Cunningham 1968, pages unnumbered)

Sixteen Dances (1951), with music by Cage, was the work in which Cunningham first made use of chance procedures, in this instance to determine the order of the sections and, in one section - the interlude following the dance entitled Fear – also to determine the continuity of a gamut of separate movements which had been set out on a chart analogous to those which Cage was using in his own compositions at around that time. Cunningham's choreography was still 'expressive' at this time, and according to Cage he wanted expressive music for this work (like Cage's *Sonatas and Interludes*, the *Sixteen Dances* were intended to express the nine permanent emotions of Indian classical art). (Revill 1992: 126-128) Cage tried to satisfy Cunningham's desire for expressive music while at the same time using chance operations: according to Remy Charlip, he started with 'a specific set of sixty-four sounds for the first dance, and for each pair of dances replaced eight sounds with eight others, until at the end there was a completely new set of sounds. The first piece started with harsh and sharp sounds, and in the last piece there were long and resounding sounds'. (Vaughan 1998: 62) Listening to the music in concert it is hard to identify which emotion any given section is intended to embody, and even the choreography divided opinion as to its emotional programme. Remy Charlip initially interpreted the ninth dance, a solo in which Cunningham wore a huge, colourful coat and made much use of vocal sounds, as seeming to have 'an emphasis on the Heroic, with the Mirthful and the Odious also present'. Later he discovered that Cunningham's sole starting point had been the Odious, while noting that others saw the dance either as portraying 'a hunter frightened by his hunt', or as 'an exuberant drunk on a binge'. (Charlip in Kostelanetz 1992: 41)

Elements of chance played a much larger role in the notorious *Black Mountain Theatre Piece* of 1952, which involved the participation of Cage, Cunningham, Robert Rauschenberg, M.C. Richards, Charles Olsson and David Tudor. Sometimes referred to as the first happening, within its forty-five minute duration each participant had two segments of time in which to perform. According to Cunningham, 'nothing was intended to be other than what it was, a complexity of events that the spectators could deal with as they chose'. (Cunningham 1982: 111)

In the use of charts one can observe a cross-pollination of ideas between Cage and Cunningham's methods, and in subsequent works many similarities can be observed in the chance techniques used by Cage and Cunningham. *Suite for Five in Time and Space* (1956), which used Cage's *Music for Piano*, is a case in point. Both music and dance use chance techniques deriving from the observation of the imperfections on a sheet of paper. Just as the pitches of Cage's scores were discovered by noting the imperfections on a sheet of paper and using chance techniques to decide how many sounds should appear on each page, whether they should be sharp, flat or natural, and how they should be played (e.g. on the keyboard, plucked or muted, inside or outside the piano), Cunningham decided to use the imperfections in a piece of paper to provide a grid map of the stage space.

The spacial plan for each dance was the starting point. Using transparent paper as a grid, a bird's eye view of the playing space, I marked and numbered the imperfections, a page for each dancer in each of the dances. In the *Duet*, the *Trio*, and the *Quintet* I superimposed the pages for each dancer to find if there were points where they came together and would allow for partnering or for held poses, some form of liaison between them. The time was found by taking the lined paper, each line representing five-second intervals. Imperfections were again noted on the paper and the time lengths of phrases obtained from chance numbering of the imperfections in relation to the number of seconds.

This was one of the first dances where meter was completely abandoned, and we, the dancers, had to rely on our own dance timing to guard the length of any phrase, and the timing of a complete dance.

Cage's *Music for piano*, which was played with the dance, is variable in time. Although the dancers came to know the sequence of sounds, the sounds do not necessarily happen at the same points from performance to performance. And, as sometimes occurred, with the addition of pianists and pianos, the sound was augmented and the original piece had other layers with it.

The total length of the dance, however, remained identical each time. (Cunningham 1982: 111-112)

Cunningham has also pointed out that each of the movements was in a different tempo, but that by that time he was 'beginning to lose that thing about tempo more and more, because I couldn't see why I couldn't do a fast movement and then a slow movement'; he was also abandoning the use of metre ('it simply had to do with how you proportioned things within different lengths of time'). (quoted in Kuhn 1998: 84)

In 1953 Cunningham choreographed *Septet* to Satie's *Trois Morceaux en forme de poire*, his last piece (other than *Second Hand*) to follow the phraseology of a musical score, and in the same year he created *Untitled Solo*, the first of three solos dating from the mid-1950s which use piano scores by Christian Wolff, the other solos in the trilogy being *Lavish Escapade* (1956) and *Changeling* (1958). Although Cunningham's dances were abstract, he has nevertheless given some clues as to the impetus behind these dances, observing that 'all were concerned with the possibility of containment and explosion being instantaneous. The trilogy used chance procedures in the choreography, sometimes in the smallest of fragments, sometimes in large ways only.' (quoted in Vaughan 1998: 78) The use of chance techniques clearly extended the choreographic possibilities of Cunningham's own body far beyond the steps and patterns that might have resulted from a more intuitive process. According to Carolyn Brown, 'by dividing the body into parts, listing the possibilities of those parts, and then superimposing one action on to the other by tossing coins to determine the final movement, he discovered that the execution of the resulting choreography was nearly impossible, and it took months of rehearsal to accomplish it'. (Brown in Vaughan 1998: 102-103) The problems were compounded by the fact that he was still attempting to work fairly closely with the music, not on a note-by-note basis, but sufficiently to need to rehearse with David Tudor and timing the dance with a number of cue points in the score. This too proved nearly impossible, and the experience was another factor leading to a greater loosening of the bonds between music and dance. Cunningham has said of these rehearsals, 'when he played it, I could hear it – but then while you're doing it, doing two or three rhythms at

once, and then the music is doing something totally different – you felt as if you were going to sail right off into space at any moment’. (Vaughan 1998: 78)

Cunningham did not use only music by Cage and composers from his circle, and on rare occasions he even employed nineteenth century compositions: *Banjo* (1953) and *Picnic Polka* (1953) both used music by Gottschalk, and *Dime-a-dance* (1953) used a selection of mostly rare piano music drawn from David Tudor’s repertoire.¹⁵ For *Dime-a-dance*, each night a sequence of seven dances from a possible thirteen was selected by picking a card from a deck of cards. Tudor knew only the tempo and metre of each dance, not its quality or dynamics, and he would choose music on this basis only. He would begin each piece with the dance, and stop playing when the dance ended, regardless of whether the music was finished or not. In this way the familiar sounds of tonal romantic music were heard in a completely new context and doubtless experienced in a very different light.

If Cunningham’s early chance-derived works were comparatively fixed in performance, as Cage became more extreme and radical in his embrace of indeterminacy in performance Cunningham too became bolder and began to allow his dancers elements of freedom and choice, including the ability to play with the timing and ordering of dance phrases. *Antic Meet* (1958) used Cage’s *Concert for piano and orchestra*, an indeterminate score consisting of only a collection of graphic materials to be realized by the pianist in any order or combination, and a set of instrumental parts, any number of which may be played and all of which explore extended playing techniques. The piece can be played for any length of time determined by the performance situation and, according to Cunningham, this was the first occasion upon which he gave Cage only a total length for the piece (26 minutes).

From this time onwards, all that was agreed in advance between Cunningham and

¹⁵ The pool of possible music for *Dime-a-dance* included pieces by Beethoven, Alkan, Moskowski, Haba, Gottschalk, Debussy, even the Arabian National Anthem, along with many other far more obscure composers (Skabo, Kosa, Stasny, Breton, Kargonov), all selected by David Tudor simply because he happened to like the music.

his collaborators was the duration of a work. Often the dancers did not even hear the music until the first performance. Gordon Mumma (1975: 65) has written with regard to his first commissioned score that the only information that he was given by Cunningham was that the music should be for David Tudor and last twenty to thirty minutes, that the dance would have eight dancers, and the date and place of the first performance. He was particularly impressed by the sense of trust he felt from Cunningham, whom he suspected did not know any of his music and by the combination of a sense of freedom and responsibility such a way of working encouraged.

There never seems to have been any element of secrecy towards his composers on Cunningham's part, however, and there are many examples of his willingness to discuss the work he was engaged upon with his collaborators. Cunningham responded to a question from Gavin Bryars while they were working together on *Biped* by saying that in fact he always 'spoke with Cage in advance about the work's structure and form (how many sections, whether dancers formed duos, trios, quartets, ensembles, and so on)', but that 'Cage always ignored the information'. (Bryars 2001)

Other composers nevertheless have admitted to being inspired or influenced by varying aspects of Cunningham's work. Christian Wolff, who composed *Moving Spaces* for Cunningham's *Loose Change* (2002) said that he had talked with Cunningham about the choreography and found some of Cunningham's comments about the polyrhythmic nature of the dance suggestive and helpful, though the final score is nevertheless quite independent of the dance and indeterminate in many respects.¹⁶

Most of Cunningham's dances are fixed in form and duration, but since the early 1950s he always chose to employ chance processes as a part of his creative process. The use of chance in performance except in comparatively limited and structured ways has clearly left him uneasy, not least because of his interest in high levels of energy: as Cage has often pointed out when discussing the difference between his work and

¹⁶ Personal conversation, September 2002

Cunningham's, no harm results if two sounds happen at once, but if two dancers collide in space serious injury may result. Cunningham has explored many approaches, each intended to open up new problems to solve and to escape forms of continuity rooted in habit and memory. Cage objected to improvisation because he felt that it only involved reproducing things that were already familiar and known; chance operations were a means of allowing him to hear things that he didn't already know. Similarly, for Cunningham, chance methods allowed him a way to escape the danger of falling back on what was familiar and comfortable to his body.

There are other reasons why despite the many parallels in their methods, there are always going to be certain differences in their application. Cage has commented upon another of the fundamental differences between music and dance: 'this two-legged business, which is dependent, for instance, on periodic rhythms - the mere action of walking or running is an old-fashioned notion which cannot in any way simulate the aperiodic rhythms of modern music'. (Cage 1989, p. 192)

No matter how electronic our culture becomes, we will still have the question of two feet on the earth, and that very fact is going to produce dancers. There is nothing about scales and periodic rhythm in the art of music that makes them so eternally necessary... in the very nature of the dance are such questions as balance, muscle-control, left-right, left-right etc. (Cage, 1989: 198)

Cunningham's chance methods are as carefully thought out in relation to the properties of the dance as are Cage's to sound. The choreography of *Summerspace* (1958) was structured using a gamut of movements subjected to chance procedures to determine direction, speed, whether movement was in the air or on the ground, length of phrases (in seconds, with 5" minimum), the shapes traced by the body in space (i.e. straight, circular, or diagonal lines), the number of dancers in a particular action, whether or not they performed together or separately, and whether the action ended on or off stage. (Vaughan 1998: 109-111) *Rune* (1959) marked the first occasion on which Cunningham created a dance in which the order of the sections could be varied, allowing the continuity to differ

from performance to performance. (Vaughan 1998: 117-118) Cunningham's use of chance, with its clearly defined boundaries, seems closer to that found in piano pieces by Boulez (the *Third Sonata*) and Stockhausen (*Klavierstück XI*), also composed in the 1950s, in which the performer is permitted to choose different pathways through a number of composed fragments, usually allowing some degree of flexibility in matters of dynamics and tempi but within quite strict limits, than to anything composed by Cage.

In the early 1960s Cunningham made two of his most radical experiments with indeterminacy in performance. *Field dances* (1963) and *Story* (1963) both contain variable factors in performance, with fragments, sections, and short dances which can be ordered in different ways.¹⁷ The movements in both works in themselves appear to have been comparatively simple, but they could be varied by the dancers in their speed, order, continuity, duration, and space; the number of dancers on stage at any one time was also variable. *Story* is said to be the nearest Cunningham ever came to improvisation, but - like Cage - he seems to have distrusted improvisation, fearing that a dancer was too likely to fall back on ingrained physical habits. He was also unhappy with *Story* for purely practical reasons, and struggled to cope with difficulties caused by the lack of rehearsal time on different stages when on tour and by the possible danger to the dancers if they bumped into one another.¹⁸ The title was ironic, given Cunningham's attitude towards narrative, and refers to 'the fact that every spectator may see or hear the events in his own way'. (Cunningham in Banes 1994: 104) The duration of the dance could vary quite considerably (anything from fifteen to forty minutes), and Cunningham only decided

¹⁷ The music for *Story* was by Toshi Ichihyanagi and calls mostly for sustained sounds, continuous and without attack, though 'into this atmosphere may come sharp, vibrant sounds'; the choice of sound sources is left to the players. In a film of the dance made in 1965 the music was played by Cage and Tudor, and its long drawn-out sounds, rich in noise, some breath-like, others reminiscent of guero or bowed cymbal, preclude the presence of many synch points. At one point a man crosses the back of the stage with a crutch pressed to the floor so as to produce friction noises. The sounds bear no obvious relationship to the multiplicity of stage actions, which include both mundane actions and complex dance sequences, but they cast a distinct and unusual atmosphere over the proceedings.

¹⁸ Sally Banes (1994: 103-109) has explored the creation of *Story* and its attendant problems.

which sections would be included, together with their order and duration, shortly before each performance began. (Vaughan 1998: 129-134)

Both Cage and Cunningham have also made extensive use of the *I Ching*, using its sixty-four hexagrams in much the same way that someone might toss a coin to make a decision. Cage's system was, however, richer and more complex than a coin-toss which enables one to choose only from one of two options; with the aid of tables that he devised, the *I Ching* permitted him to choose from any number of possibilities, though the number sixty-four conveniently often features in both his and Cunningham's work. In *Torse* Cunningham used the *I Ching* to determine space (treating the stage as 8 x 8 square), as well as the continuity of the movement phrases, the number of things happening at any one moment, and the number of dancers in a given phrase. *Roadrunners* (1979) derived its movement material from sixty-four stick figures depicting poses on Greek vases seen in a German museum; the continuity of the dance and the movement from one pose to another were again determined by the use of the *I Ching*, whose sixty-four hexagrams conveniently correlate to the sixty-four body positions selected by Cunningham. (Vaughan 1998: 208) *Inventions* (1989) also has 64 phrases, the continuity of which is arranged by chance, with further chance possibilities of inventions or additions added to any single phrase'. (Vaughan 1998: 249)

Performances by Cunningham's company have also provided many rare and valuable opportunities for the performance of new and experimental music. Apart from a few pieces made on tape by composers including Boulez, Wolff and Cage, all the music used by Cunningham in the 1950s was acoustic, much of it for piano(s) and performed either by David Tudor and/or by Cage himself. This practice began to change in the late 1950s, first with the amplification of the piano by means of contact microphones in performances of Bo Nilsson's music for *Night Wandering* (1958). From this time on, Cunningham's musicians used amplification extensively, the high decibel levels favoured causing frequent controversy. There was also an increasing shift towards the use of live electronic music. Tudor abandoned the piano for composition and the development of new forms of electronic circuitry, and many significant composers of electronic music

began to work with the company including David Behrman, Takehisa Kosugi and Gordon Mumma.

In *Variations V* (1965) Cage explored the means by which the movements of the dancers themselves could trigger sounds; more than any of Cage's scores, this piece was dependent on the presence of the dancers for its full realization. Two means were employed to allow movements to trigger sound:

The first was a series of poles, twelve in all, like antennae, placed all over the stage - each to have a sound radius, sphere-shaped of four feet. When a dancer came into this radius, sound could be triggered. Each of the twelve antennae had different sound possibilities...The second sound source was a series of photo-electric cells which were to be positioned on the floor [at the base of the poles]...The stage lights would be focussed in such a way as to hit them, and when a dancer passed between the cell and the light, more sound possibilities were triggered. (Cunningham, 1982: 114-115)

Typically, no attempt was made by Cunningham to choreograph with reference to the kinds of sounds likely to emerge, and he did not even know where the poles would be positioned until shortly before the first performance. There was no immediately perceptible relationship between the sounds and movements, and often sounds were recorded for later use rather than triggered immediately. The sound sources included taped sounds, synthesized sounds, short-wave radios, and sounds made by the dancers themselves through moving in relation to a number of props placed on the stage and to which contact microphones had been attached; all these sounds were manipulated by the musicians using chance procedures. The work also included film and TV projections, contributing to the richness and complexity of its materials. The score for this piece, described in Cage's catalogue as '37 remarks re: an audio-visual performance', consists only of a description of the first performance and was made after the event.¹⁹

¹⁹ Another work in which the dancers' movements influenced the music was *TV Rerun* (1972), set to Gordon Mumma's *Telepos*.

For this composition...I designed lightweight elastic belts for the dancers. The belts contained

A film of *Variations V* was made in 1966, and it illustrates how the complex musical means employed resulted ultimately in a dense collage of electronic sound. In effect the music created a sonic landscape within which the dance unfolded, evocative perhaps of some non-specific weather condition or some other noisy environment; despite the wealth of internal detail, the effect produced is actually quite static and the music evolves very slowly. The movement is by contrast very varied, encompassing both mundane actions (such as potting a plant or riding a bicycle) and highly virtuosic dance phrases. At one point a classically choreographed duet momentarily collides with a fragment of romantic piano music, so that the world of the ballet is briefly evoked and one's attention is drawn particularly towards the couple.

Alongside the electronic collages that came to dominate the musical repertoire of the Cunningham Company, there were still some pieces in the company's repertory that used acoustic music. Cunningham's *Idyllic Song* (1945) had been danced to the first movement of *Socrate*. When Cunningham choreographed the remainder of Satie's score in 1969, the last occasion on which he created his choreography within the phrase structure of an existing musical composition, Cage made a two-piano arrangement of the music. Permission to use this was, however, refused by Satie's publisher, and this led to the creation of *Cheap Imitation* (1969) for solo piano, which consists of a single melodic line that follows the rhythmic structure of Satie's melody exactly but changes the pitches, using the *I Ching* to determine which notes of which of the seven "white note" modes should be used and at what transposition. That the music should embody Satie's rhythmic structure was necessary because Cunningham had already set his dance to Satie's score. The austere monodic music is unusual in Cage's output of the 1960s, and this piece was the last occasion on which he and Cunningham worked to a rhythmic structure of this

acceleration sensors and radio transmitters. The dancers' movements were translated into audible pitches, transmitted to special electronic equipment in the orchestra pit, and heard from loudspeakers around the audience. This process of telemetry was like that used in space travel. Thus the dancers were collaboratively responsible for the nature and continuity of the sound, though the implications of this technological extension of human activity suggested more collaborative potential than we (the dancers and I) actually felt in the making of this piece. (Mumma, 1976: 68-69)

kind. Cunningham's dance was called *Second-Hand*, and was believed by many to relate in many of its details to the scenario of Satie's cantata. Cunningham denied that the piece was descriptive, but said only that it followed Satie in the mood of its scenes.

In marked contrast, the score for *How to Pass, Kick, Fall, and Run* (1965), the work which followed *Variations V*, consisted originally only of the sounds of Cage's voice reading from a number of one-minute stories; in the first year of performances Cage's voice was electronically manipulated by Tudor and then broadcast through the public address system, though this interference in the sounds was later abandoned (Mumma 1975: 67). At the revival of this piece presented in London in 2002, these often amusing anecdotes seemed to compete with the dance for attention. Quite apart from the show-stealing delivery of Cunningham and Vaughan, seated to one side of the stage in front of the dancers, the narrative and self-contained quality of each little story demanded that one either follow it or ignore it altogether.

Cage and Cunningham's writings

The new direction adopted by Cunningham sometimes puzzled audiences, and Cage's programme note for a performance given in 1956 and reprinted in *Silence* under the title *In This Day...*, usefully addresses many the questions raised by people experiencing this work for the first time. (Cage 1968a: 94-95)

He comments first on the *independence* of music and dance, noting in passing that this independence is 'present also in the seemingly usual works': he does not expand on this idea, but it is actually of profound relevance to all forms of music and dance. Cage has always insisted on the need to free dance from subservience to something that it isn't, and logically speaking this view must therefore apply to all forms of music and dance. If one approaches a performance with the assumption that music and dance are in fact quite different and separate mediums, then it becomes easier to question received assumptions and conventions because the shift in focus required can make the familiar strange again. Cage and Cunningham believed that 'the support of the dance is not to be found in the

music but in the dancer himself, on his own two legs, that is, and occasionally on a single one'; drawing an analogy with the ways in which 'the music sometimes consists of single sounds or groups of sounds which are not supported by harmonies but resound within a space of silence'. Cage continues as follows:

From this independence of music and dance a rhythm results which is not that of horses' hooves or other regular beats but which reminds us of a multiplicity of events in space and time - stars, for instance, in the sky, or activities on earth viewed from the air.

We are not, in these dances and music, saying something. We are simple-minded enough to think that if we were saying something we would use words. We are rather doing something. The meaning of what we do is determined by each one who sees and hears it. At a recent performance of ours at Cornell College in Iowa, a student turned to a teacher and said, "What does it mean?" The teacher's reply was "Relax, there are no symbols here to confuse you. Enjoy yourself!" I may add that there are no stories and no psychological problems. There is simply an activity of movement, sound and light. The costumes are all simple in order that you may see the movement.

He goes on to speak of how Cunningham's choreography uses the whole body. Whereas in 'daily life people customarily observe faces and hand gestures, translating what they see into psychological terms', Cunningham requires his audience to use their 'faculty of kinesthetic empathy': 'it is the faculty we employ when, seeing the flight of birds, we ourselves, by identification, fly up, glide and soar'.

The activity of movement, sound, and light, we believe, is expressive, but what it expresses is determined by each one of you - who is right, as Pirandello's title has it, if he thinks he is.

The novelty of our work derives therefore from our having moved away from simply private human concerns towards the world of nature and society of which all of us are

a part. Our intention is to affirm this life, not to bring order out of chaos nor to suggest improvements in creation, but simply to wake up to the very life we're living, which is so excellent once one gets one's mind and one's desires out of its way and lets it act of its own accord. (Cage. 1968a: 94-95)

Certain key themes emerge from this text, and they are essential to bear in mind if one is to approach the work in the proper spirit. First, the meaning of a performance lies not in some 'message' that is being communicated through the media of sound and movement, either as metaphor or narrative, but in the activity itself. As Cunningham once wrote, 'if one thinks of dance as an errand to accomplish, as a message to be sent, then one misses the *spring* along the way. If one's concern is self-expression, then the proper area is psychoanalysis'. (quoted in Vaughan 1998: 97)

Second, the activity of making music and dancing is expressive in itself, and all members of the audience are entitled to find meaning and significance in what they see. Whereas some artists set out to communicate an idea or emotion or story as clearly as possible, Cage and Cunningham wish to create a situation which is open and capable of sustaining a multitude of different perspectives.

Third, the purpose of their work is not to provide the audience with mere entertainment or catharsis, but rather to change the ways in which they live and experience life. The combination of movement, sound and light in their work finds more suitable models in nature than in historical and artistic tradition: the movement of animals, natural landscapes, even the sounds and sights of modern urban living, do not set out to communicate as does the author of a text book or a storyteller, but all have an inherent beauty that is ours to grasp.

Cunningham frequently drew analogies with life experience when advising an audience how best to approach a performance. He spoke particularly of the need to change one's attitude and abandon traditional sets of expectations. If one becomes impatient, he once wrote, when waiting for someone to turn up, then 'you see everyone in

a non-relation; everything and everyone is not the person you await'. However if one puts aside that anxiety and becomes visually aware of the diversity of individuals who pass by, one realizes that even that people looking into storefronts 'without any intention of being self-expressive', are in fact 'extraordinarily so. Each action as it happens, and as you are aware of it, is absorbing [. . .] The most revealing and absorbing moments of life are the ones that have no past or future – that happen, as it were, without relevance – when the action, the actor, and the spectator are unidentified – when the mind also is caught in mid-air'. (Vaughan 1998: 97)

In a programme note for *Suite for Five*, Cunningham said that 'one must also abandon expectations: All this talking about dancing leads the audience to expect something. The weather bureau prepares you to "expect snow", and up comes a sunny day. I suppose I could say the dance *is* about silence, or has many moments in it that are *still*. Now I've led you to expect something, and after seeing the dance, you might say it isn't silent at all; that it is full of activity. An art, if it communicates anything, must have its communication in that place where the rational and the irrational do their intriguing and giddy duet; that area of response to nature where the action of nature, in all her twists and turns, is the evoking hand. I think that dance at its very best, and as in all the arts, that *very* best is very rare, produces an indefinable and unforgettable abyss in the individual spectator – it is only an instant, and immediately following that instant the mind is busy – questioning, deciding; the feelings are busy, agitating, confirming or denying. But there is that instant – and it does renew us'. (Vaughan 1998: 119)

In another essay, *Three Asides on the Dance* (written c. 1959) Cage addressed the question of why add music at all to dance which doesn't need it and is capable of standing alone. He answered this by turning the question around and suggesting that 'doing what one thinks is necessary is simply doing again what has already been done' and that the real reason for doing what didn't need doing was 'to leap beyond mentally imposed limitations'. (Cage 1993: 83-86) He went on to attack conventional ways of thinking about music and dance, and he made an analogy with species counterpoint when describing the increasing complexity of relationships possible between music and dance.

Starting from first species (one to one), he arrived at the fifth species with any number of notes against any other number. In music, composers are dealing at this point primarily with intervallic relationships (consonant or dissonant). Since there is nothing in dance that corresponds to musical intervals, at this stage the composer normally begins to work primarily on the level of mood and character, but since music can only reinforce or contrast the emotion of the dance, such relationships rarely go further than what might be seen as analogous to second species counterpoint. Cage regards the kind of thinking that believes music and dance should share the same structure, or that a climax in one art should be paralleled by a similar climax in the other art at the same time, as simplistic and overly obvious, leading to an art that lacks the complexity of real life.

The perception of music-dance relationships

Cage's philosophical outlook and aesthetic are quite fascinating in their own right, but it is necessary now to address the question of what actually happens in a performance. Although much has been written about the importance of chance in the collaborations of Cunningham and Cage, it is surely wrong to conclude that they were indifferent to the results of their processes in performance. Cunningham may have had no foreknowledge of the details of the music he commissioned, but it has been suggested that he sometimes selected his composers on the basis of his understanding of the kind of music they might be expected to produce. Part of the evidence comes from Earle Brown, who composed two scores for Cunningham in the mid-1950s - *Indices* (1954) and *Spring-Weather and People* (1955). Brown was then married to the dancer Caroline Brown, for many years one of Cunningham's most talented and admired dancers. According to Brown, writing of the 1950s, he 'used to feel that Merce had at least three distinct kinds of pieces: the very strange, seemingly psychologically oriented solo works, usually to the music of Christian Wolff, such as *Lavish Escapade*; the rather severe and "abstract" works such as *Solo Suite in Space and Time*, and the "romantic-classic" kind of piece which always seemed to be *about* something, but one could never quite grasp what it actually was. *Spring Weather* was distinctly the latter type. It was very elegant and beautiful and *classic* in feeling. The co-existence of sound and movement left long, still sections of the dance

“accompanied” by furious orchestral sound and great complex dance groupings
“accompanied” by simple and/or long quiet sound colours.’ (Brown in Klosty 1975:
p.’76)

Jordan (1979:19) has described a number of occasions when an unanticipated combination of music and dance led to rather less satisfactory results. When Christian Wolff provided a score for an *Event* mounted in 1976, he included a number of American Labour songs reflecting his political engagement at that time: unfortunately ‘the collisions of mood were unhappy and the Event consequently unsuccessful’. Jordan suggests that it is likely that Cunningham had chosen movement sequences for the performance on the basis of his knowledge of earlier works by Wolff, and that the problem with the songs was partly that the music had a strong pulse which interfered with the dance and partly that the songs had too clear an intention of their own which was at odds with the aesthetic of the choreography. Jordan also points to a number of moments where music and dance did come together in particularly memorable ways, such as a particularly striking trumpet solo which accompanied a long dance solo in *Rune* (1959), and the totally unforeseen way in which Gordon Mumma’s score transformed the tone and mood of *Place* (1966) from a light-hearted piece into something quite dark and menacing.

Something of how music and dance work together may also be illustrated by reference to *Travelogue* (1977), accompanied by Cage’s *Telephones and Birds*. The score requires that the performers equip themselves with a selection of recorded birdcalls and telephone numbers for reaching whatever pre-recorded messages are available in the vicinity of the performance, together with the means to call those numbers. The performers carry out chance operations involving the use of the *I Ching* throughout the duration of a performance in order to determine what sounds should be played, when, for how long, at what dynamic level, whether modified in any way, and broadcast through which set of loudspeakers. As with many other of Cage’s indeterminate works, it is not hard to surmise how a performance might actually sound, at least in general terms, by thinking through the various possible combinations of speech and birdsong that might

occur. But it is impossible to predict anything of the detail of a performance, including such questions as how it might begin and end, the predominance of particular sounds, the density of the textures, or the proportion of silence to sound. Consequently one can be sure that every performance of this score will be different and will form a unique relationship to the dance, and also that the evocative nature of the sounds produced may well affect the way that the spectator perceives the dance. For example, in a some filmed extracts broadcast some years ago there were some striking and memorable conjunctions of sound and movement: first, a virtuosic male solo was danced to the accompaniment of a most extraordinary exotic bird call; then, as this sequence came to an end, a group of dancers entered the stage carrying a large piece of cloth, and the dramatic bird call was supplanted by the sounds of dialling tones and distorted human voices. The juxtaposition of these two moments was remarkable and seemed to invite a variety of possible interpretations: for example, some people commented on the contrast between the natural wildness of the jungle and the allusions to modern urban life and technology implied by those sounds. However, the fact remains that the moment was unique; on another occasion, the combinations and sequences of sounds and movements might well be very different, and herein lies an important aspect of the fascination and multi-faceted richness that is opened up by this way of working.

The last score that Cage wrote for Cunningham was for his dance *Beach Birds* (1991). The music used is *Four*³, one of his late 'number' pieces in which the technique of time brackets is employed, allowing players to begin and end events at their own discretion within certain times. In most of the number pieces Cage specified pitch material if not rhythm, but in this piece the time brackets are left empty; instead the players are given material relating to one of four categories of action from which they can choose as they please: (i) remaining silent; (ii) the sound of a gently tilted rainstick (each player has three); (iii) one of the musicians may 'express a sine wave in the region of c'''' or play in that area, non-vibrato, a violin harmonic with imperceptible bowing, very quietly' (Vaughan, p. 259); (iv) 'Excerpts (any length less than 12 quavers) from *Extended Lullaby* 1-6 and 7-12 (chance-determined variations of the cantus firmus and the counterpoints of *Vexations* by Erik Satie) played very slowly and quietly on one or

two widely separated pianos (one “in” the auditorium, the other “outside”). Two pianos playing at the same time must not be in the same tempo, nor as though playing together.’ (Vaughan 1998: 259). The origins of the piano melody in Satie’s *Vexations* is sometimes clear to the ear: rhythms are preserved but pitches altered in the manner of Cage’s earlier *Cheap Imitation*, but at times the performance is too slow to preserve any true sense of rhythmic patterning and each pitch in effect becomes an event in itself. (Pritchett 1993: 202; Retallack 1996: 179 – 181, 327)

Like many of Cage’s late works, the music is extremely quiet, the players conveying a feeling of intense concentration. In the performance filmed with the modified title of *Beach Birds for Camera*, the beginnings and ends of sounds are virtually imperceptible, and much of the score is at the threshold of audibility, the high violin/oscillator pitches verging on the subliminal. The sounds of the music blend with other ambient sounds (the dancers’ steps, distant traffic), and there are moments when the dying fall of the rainsticks is hard to distinguish from the natural sounds of the environment. The piano melody lasts on average around 50 seconds. The notes of a distant off-stage piano tangle with those the main piano, and are hard to perceive clearly; the sounds of the rainsticks can persist for several minutes at a time. The music feels immensely slow and unhurried, and it is a key element in the creation of the uniquely contemplative atmosphere that characterizes this work. Essentially, its ingredients are a mix of silence, sustained and unvarying drones, and isolated attacks. As with Cage’s scores for *Duets (Improvisation III)* (1980) and *Points in Space (Voiceless Essay)* (1986) the immediate impression might be one of unvarying textures and monotony, yet if one listens carefully to the sounds there is a great detail of inner detail to be explored.

Vaughan says of the choreography that unlike much of Cunningham’s work, which is rhythmically very strict, ‘here the rhythm was more fluid - there were almost no counts, so that the sections could differ in length from performance to performance’. In Cunningham’s own words, ‘it is all based on individual phrasing. The dancers don’t have to be exactly together. They can dance like a flock of birds, when they suddenly take off. They are not really together; they just do it at the same time.’ (quoted in Vaughan 1998:

258) He also says that 'Cunningham did not intend the title to be taken literally', but the piece was 'clearly another of his nature studies, based on his observations of birds and, for that matter, people'.

There are also moments when sound and movement come together in telling details, as when a single tone on the piano can *seem* to encompass a whole gesture or phrase from a dancer, or places where the sounds cease before the completion of a movement phrase, so that a gesture which commences with some kind of accompaniment is suddenly left unsupported by sound. However, when one considers the overall relationship of sounds and movement, one of the most striking features is the contrast between the static and contemplative qualities of the music and the dance which, although lacking any sense of overall narrative, is nevertheless very varied in its dynamics and rhythms, with in places an almost conventional sense of organic growth and development, such as the gradual increase in activity in the opening minutes. As the choreography proceeds, particularly striking are the contrasts between moments of activity and motionless sculptural tableaux formed by groups of dancers. Another score might have followed, supported and enhanced these changes; Cage ignores them and instead exerts a calming influence that enhances the concentrated, almost meditative, aura of the whole and that arguably masks some of the more dynamic qualities of the dance.

After Cage

Cage died in 1992, and in the years since there have been some changes in the kinds of music presented by the company that inevitably reflect broader changes in new and experimental music. Laura Kuhn (1998: 96) even suggested to Cunningham that Cage's death, 'difficult as it was, seems also a kind of liberation', and that in 'her mind there was a very clear kind of demarcation of the works after John's death versus the works before... In *Ocean*, it seems there is unabashed move toward the romantic, toward the lavish, toward the loving. It has a kind of sweetness about it.' Similar observations could certainly be made about some of the music commissioned for Cunningham in recent years, not least *Biped*, first performed in 1999 and with music composed by Gavin

Bryars, who studied with John Cage in the 1960s but is best known as an English experimental composer of a quite distinct brand of post-minimalist music whose sound worlds and forms of continuity are far removed from those of Cage and Tudor. The music for *Biped* is dominated by a sustained and glacially slow cello melody that does not turn its back upon the traditional associations of this instrument with such qualities as passion and lyricism. The harmonies are basically tonal, characterized by sumptuous added note chords reminiscent of modern jazz (*My First Homage* is not untypical of Bryars' style and is in fact based on a chord sequence taken from a performance by the jazz pianist Bill Evans), and flowing harp-like arpeggios dominate the latter sections of the music. The music could almost be described as a journey into darkness and back to the light, and it falls into six main sections, the last essentially a coda. The first section is dominated by long held notes on cello and guitar; connections between notes are minimized as the ear focuses on whatever notes are sounding at any given moment rather than on what has preceded or will succeed that moment. A single harmony may be sustained for over a minute or more before moving gradually on to the next, often a matter just of a changed note or two; much as Cage often effectively destroyed or weakened the connections between sounds by separating them with periods of silence, so too Bryars reduces the perception of movement and progression by extending sounds well beyond the limits of memory. The second section is distinctly darker in mood, incorporating some ominous pre-recorded drum beats; the extensive use of echo and delay in these passages adds to the feeling of spaciousness. Bryars sees parallels between his music for live and recorded players and the choreography, with its use of live and virtual dancers (in this work Cunningham included projections of shadowy human figures made possible through the use of motion capture software). The third section is the part of the score most overtly reminiscent of the kinds of music most commonly used by Cunningham, and it incorporates the sounds of shaken dice. The fourth section is lighter in mood with an ecstatic melodic line accompanied by more perceptible harmonic motion, articulated in the form of flowing arpeggios which might even bring to the more fanciful mind images of angel harps (the music is even distantly reminiscent of Wagner, for example the opening of *Das Rheingold*, which also has an exceptionally slow harmonic rhythm). In the last two sections the long notes from earlier in the piece reappear, and the music has

the feel of an extended coda. The lighting scheme enhances the paradisiacal associations set up by the music in the latter part of the dance, and unlike the many Cunningham dances that end rather abruptly regardless of the continuity of the choreography, there is a sense here of the work being brought to its conclusion as the stage fills with moving bodies.

Some developments since Cage and Cunningham

American experimental dance since Cunningham, particularly the work of the Judson Church group of choreographers, has been extensively documented by Sally Banes (1980; 1983; 1992). In the dance of the 1960s there was considerable cross-fertilisation of ideas from experimental music, and Robert Dunn taught chance techniques to dancers, in part at least as a conscious reaction against the then dominance of the approaches of Horst and Humphrey. The Judson dancers explored the use of mundane and non-dance movements in a formal setting, including walking, running, and task-based processes: for example, Lucinda Childs' *Carnation*, performed in silence, involving the performer's strange and obsessive exploration of the possibilities of a number of disparate props including sponges, hair curlers and a colander. *Words/Words* (1963) by Steve Paxton and Yvonne Rainer took the idea of dissociating sound and movement to an extreme by having the music performed on a separate night to the dance, and in some of Aileen Passlof's performances the music came between the dances rather than during them.

As Steve Reich (1983: 336) has pointed out, 'the basic idea of the Judson dance group ... could be summed up as any movement is dance. This is the precise equivalent to the basic idea of the composer John Cage: any sound is music'. Although several experimental musicians, including Philip Corner, James Tenney, and LaMonte Young, created original sound scores for some of these dancers, it was not unusual to find choreographers also using more conventional music, albeit in unconventional ways. Yvonne Rainer used music from Berlioz's *Requiem* in *We shall run*, and 'a bad recording of Rachmaninov' mixed with the sound of chairs scraping on the floor for her *Three Seascapes*. By all accounts her use of powerful romantic music contrasted interestingly

with the more mundane qualities of the movement, which was not set to the music but could nevertheless take on something of the expressive meaning of the juxtaposed sound. (Banes 1983: 91) Banes also includes examples of choreographers using music by Bach, Ives, and Scarlatti, as well as rock and roll, all representative of a new interest in music, but using it ways quite distinct from an earlier generation of choreographers and probably mediated by the intervening experience of Cage and Cunningham's example.

Cage and Cunningham's methods represent perhaps the most radical and extreme solution to date of how music and dance can work together, but although their example has been liberating and influential few people have followed in their footsteps uncritically and some have reacted strongly against some aspects of their work. An important and in many respects prophetic critique of the Cage-Cunningham/Judson school of music and dance is found in Steve Reich's *Notes on Music and Dance* (1983). Speaking of 'the dance concert where no-one danced followed by the party at which everyone danced', he identified a basic human need for 'regular rhythmic movement, usually done to music'. He criticized Cage on the grounds that, after his pulse-based work of the 1940s, he 'put less emphasis on... the underlying impetus for dance, the natural human desire for regular rhythmic movement. He also turned away from the reality that people do in fact dance *to the music* - that music can and does supply rhythmic energy for the dance.' In Reich's view what was needed was 'a genuinely new Western art-dance with movements natural to the personality of someone living here and now, organized in a *clear* (i.e. universal) rhythmic structure, and satisfying the basic desire for regular rhythmic movement that has been and will continue to be the underlying basic impetus for all dance'. (Reich 1983: 338)

At that time Reich's partner was the dancer and choreographer Laura Dean, who made dances to Reich's *Phase Patterns*, *Clapping Music*, and *Drumming*, as well as being credited with the composition of some minimalist dance scores of her own devising. An interesting convergence of new developments of music and dance may be found, rooted in the preoccupations of the minimalist music of the later 1960s and early 1970s: extreme repetition, regular pulsation, slow and gradual processes. Dean's *Jumping Dance* - the score is included in Johnson (1981: 302) - can be seen as a close

choreographic relative of LaMonte Young's *X for Henry Flynt* in which any loud sound is to be repeated a large number of times as regularly and evenly as possible; as Cornelius Cardew pointed out, the real interest of that piece lies in the small deviations which result from the performer's inevitable failure to repeat the sound exactly. In Dean's piece, twelve performers on a grid of twelve squares (4 lines, 3 rows) jump up and down on two feet to a steady and undeviating pulse, emphasising each landing with a vocal 'ha', the particular tone quality of which is individual to each performer, but must remain unchanged throughout. The dancers are allowed to rest when necessary, standing still within the grid, and the piece ends when a silence of more than 2 seconds occurs.

If one considers developments in music and dance over the last thirty years or more, no one particular approach to combining music and dance seems to stand out; in a pluralist artistic world, many different approaches happily co-exist, but most - if not all - are in the final analysis capable of being understood as developments and extensions of the models described in these two chapters.

There are many choreographers who continue to adopt an essentially music-based approach. For example, Christopher Bruce's work is almost invariably inspired by and structured around his musical choices. *Ghost Dances* (1981) and *Sergeant Early's Dream* (1984), both set to sequences of folk music respectively from South America and from Ireland and America, structure themselves around the music, borrowing and adding layers of narrative suggested by the songs, and always moulding choreographic structure (phrase lengths, sections, tempo, metre, even stylistic references) to the music; in these works, it may be that the essential simplicity and clarity of the music allows Bruce scope in developing a language of great richness and complexity, but his work is also motivated by a genuine love of the music he chooses to use. In these respects, his approach relates to the Duncan and St Denis models, even though his work is very different in almost all other respects.

Other choreographers who have worked closely with music in varying ways include Mark Morris, Richard Alston, and Siobhan Davies. The programme notes for Anne Teresa De Keersmaecker's *Mozart/Concert Arias* (1992) included a music analyst

alongside the performers and other support staff, and a special emphasis is placed on musical analysis and score reading in the training of dancers at her school in Belgium. Christine Schmidt (1991) has shown how closely sections of her piece *Stella* (1990) relates to its music, a selection of Ligeti's *Études* for piano; the ability of the dancers to pick up musical cues in the highly organized chaos that characterizes Ligeti's *Désordre* is particularly remarkable. De Keersmaeker has also created a number of dances to music by Steve Reich, including *Fase* (1982) which uses a sequence of Reich's early and more strictly minimalist compositions: *Piano Phase*, *Violin Phase*, *Clapping Music*, and *Come Out*. Given the strictly technical approach Reich had normally adopted when speaking of these pieces, it is striking to find the composer praising De Keersmaeker for having understood the *emotional* content with such perspicuity. In an essay about the choreographic responses to his music of both De Keersmaeker and Jiri Kylian, he noted how 'many choreographers (and also a few music critics early on) focused on the formal organization of my early pieces to the unfortunate exclusion of all the interpretive and expressive nuances that make my, and indeed all, music come alive'. (Reich 2002: 215) De Keersmaeker's dances were, however, revelatory, and Reich maintained that she 'knew precisely what my early pieces were about'.

The carefully detailed use of lighting right at the start in *Piano Phase* creates overlapping shadows that slowly move in and out of phase. The second section, *Come Out*, is done on a darkened stage with two small hanging lights directly over the dancer's heads while they sit on stools. It suggests a police station. The movements, all done while sitting, serve to intensify the feelings of interrogation, brutality, anger and sexuality that are implicit in the tape: implicit but never understood or mentioned by the music critics, until de Keersmaeker captured both the technique and the audible theatre in *Come Out*. The third dance, to *Violin Phase*, is de Keersmaeker's solo. Again, she not only captures the formal aspect of the piece but, during the extended resulting melodies near the end, goes to the heart of its underlying lyricism. The final section, done as a kind of "vaudeville step" unison duet to *Clapping Music*, is a light touch at the end, yet when the two dancers work their way from upstage left

to downstage right, directly under the two "police" lamps still in place, the whole piece snaps together. (Reich 2002: 214)

Recent approaches to collaboration

In recent years the notion of collaboration has become fashionable in many walks of life, and is particularly attractive for many composers and choreographers. There have been many summer schools, courses and forums in which composers and choreographers are encouraged to exchange ideas and experiment. Whereas once the problems of collaboration were discussed mainly in terms of the different demands of the separate art forms, nowadays it is more likely that the focus will be upon issues of interpersonal dynamics and communication (one event, which took place in February 2005, was advertised in the listing magazine *new notes* as 'speed-dating' for composers and choreographer). There are many reasons why composers and choreographers might wish to collaborate, not least the stimulus and inspiration that can come from being exposed to new methods of working, but there are advantages and disadvantages that also need to be addressed. Some of these were considered at the end of the last chapter and concerned the different nature of the creative processes commonly used by composers and choreographers. Others factors however are often of a more personal and even spiritual nature; for example, Richard Alston has referred Mary Fulkerson's view of collaboration as 'generosity - to be strong enough in what you believe to open your work to other people, to open your work happily, not guardedly. But when I [Alston] finally got around to doing it, I suddenly realized that there was so much that I was being given back'. (Alston in Jordan 1992b: 72) In contrast, Philip Flood has focussed upon the need to be clear both about language and about points of contact and distance between the arts of music and dance: 'at its roots, collaborating is about negotiating control, both artistically and practically. People who can express their ideas clearly soon discover that they can also manipulate the relationship to their advantage, and therefore language, with its multiple layers of meaning, is central.' (Flood 1997: 39) Yet another point of view has been expressed by Roger Heaton, who has warned that no matter how idealistic the participants, all too often the resulting works end up 'like anything designed by

committee: they creak with compromise. All the friction of two very creative minds sparking together is dulled into bland, obscure banality by too much cooperation ...Collaboration is a fake notion. The idea of a 50/50 evolving mutuality is completely false.' (Heaton 1994: 12)

After one hundred years of exploration and debate, the search to find new ways for composers and choreographers to work together is still very much a vital and relevant issue. There have been many productive partnerships, including in Britain those between Ian Spink and Orlando Gough (see Rubidge 1992 for a detailed account of their working methods), and Lea Anderson and Steve Blake, who have explored rule-based approaches to collaboration, and whose creative personalities complement one another well. By setting out to devise different strategies in each new work, they aim to keep their creative relationship fresh. These strategies might sometimes takes the form of agreed 'rules of engagement': for example, never starting a new dance phrase together with a new phrase in the music, or beginning a new phrase on the first beat of the bar or ending on the last. Anderson is interested in the kinds of tension that can be set up between sound and movement and is keenly aware of the ways in which music changes how you see the dance. Areas of freedom for composer and choreographer are always negotiated, such as changes in texture but not length. Sometimes the music will precede dance, and sometimes dance will precede music.

There have been other notable collaborative successes, such as the dances that Siobhan Davies has created with composers such as Matteo Fargion, Gerald Barry and Kevin Volans. For Davies, music and dance must both realize their own form: in her view, the stronger the music, the stronger the dance. (Kimberley 1997) Music is important not least for its ability to suggest new avenues of exploration, and she has spoken too of wishing to match rather than mimic the music. Only when she has generated sufficient material of strength and quality does she begin to work with her chosen score, feeling herself now able to conduct a real dialogue with the music from a position of equality. In these collaborations Davies has clearly found kindred spirits with whom to work, and it is from such marriages of mind that some of the most impressive

work of recent times has emerged.

CHAPTER THREE

APPROACHES TO THE ANALYSIS OF MUSIC-DANCE RELATIONSHIPS

Analytical perspectives

The study of music-dance relationships in any given work may be approached from a variety of perspectives, including those of its makers, its performers, and its audience. Matters that might be examined from the composer-choreographer perspective include methods of collaboration, the relation of musical and choreographic style, and aesthetic issues. The performer perspective encompasses such topics as the interrelationship between dancers and musicians, and the nature of the dancer's kinaesthetic response to sound. The audience perspective includes consideration of matters relating to reception and perception, including the ways in which music and dance work together to create meaning and emotion. A fourth perspective belongs to the analyst, historian, or critic, who may draw upon any of the other viewpoints as is appropriate.

Each perspective is a source of different kinds of knowledge and understanding. For example, the experience of the dancer and the spectator may well be very different, though some overlap between the two may be possible in as much as kinaesthetic empathy on the part of the viewer may yield valuable insights and the dancer too must learn to cultivate an objective view of her/his performance.¹ Sparshott (1985) has addressed some of these issues, identifying twelve dimensions of dance meaning; he too makes a distinction between

¹ This difference may be illustrated by reference to an experiment in which a ballet class was accompanied by the sounds of radio news bulletins from passing cars. The outside sounds disturbed the spectators who constructed their own interpretations from this clash of strands; the dancers, however, either ignored the sounds or found their own ways of working with them, essentially untouched by their presence. (Preston-Dunlop and Sanchez-Colberg 2002: 54)

‘meanings delivered in the experience of dance and meanings delivered in the reflection on dance’. (p. 104)

Chapters One and Two examined music-dance relationships primarily from the perspective of composer and choreographer. The artists selected were all concerned to justify their practice, and unsurprisingly their views were often contradictory, partial and subjective. Such perspectives can nevertheless shed light on the decisions made in the creative process and deepen the understanding of the aims and intentions that inform a given work. In those chapters the experience of the performer was touched upon only very briefly, but topics such as the way in which a dancer receives and uses sound, as well as the slightly nebulous concept of ‘musicality’, are important, as is also the way in which a musician’s performance might be modified when working alongside dancers. Jordan (2000) includes some discussion of musicality within ballet, and the ways in which different dancers interpret the major roles of the classical repertory perhaps allows more scope for illuminating comparisons than is the case with the more idiosyncratic forms of contemporary dance. Another element central to a dancer’s musicality is rhythmic style, for example whether a dancer anticipates or lags behind the musical beat for expressive reasons; in both music and dance the different degrees of flexibility and play allowed in relation to an underlying pulse are an essential aspect of performance style.

This chapter is primarily concerned with music-dance relationships from an audience’s perspective. Although sophisticated techniques have been developed for the study of music and dance as independent art forms, the ways in which the two inform one another and together create meaning are more difficult to discuss objectively. Composers and choreographers may have been preoccupied with finding ways to work together, but there is also a sense in which it is immaterial how a work was put together, since in a performance the music and dance, together with décor, costume and lighting, are presented and experienced as a multi-media whole. The different elements can interact in

complex and sometimes unpredictable ways to create a meaning that is different in kind from the mere sum of its parts. Sometimes an effect may be carefully calculated, at other times chance may play the larger part, but it is rarely possible to ignore completely the impact that music can exert upon the perception of the dance, and vice-versa. This is not to deny that some people may consciously choose to direct their attention towards particular aspects of a performance and to ignore the others, but for many spectators the way in which the different components relate to one another is an essential element contributing the experience of a work. For example, if one changes the music or costumes or performance space, then the identity of the dance may well change too. The character of a solo dance performed on a huge stage will very likely be different when the same choreography is danced in a corridor or out of doors, just as the meaning and experience of a piece of music may well vary according to the context in which it is heard. Sound, movement and design have the power to focus and direct the spectator's attention, often profoundly influencing as well as enabling the understanding and reception of the work as a whole.

Structural analysis

Many studies that have addressed questions relating to music-dance relationships have been preoccupied with issues of structural analysis. A substantial body of work has been developed in the field of ethnochoreology, including a large volume of fieldwork documenting folk traditions in Eastern Europe.² Some of the analytical methodologies developed in that context have subsequently been adapted for use with Western theatre dance, notably the IFMC method (1974), which owes much to structural linguistics and requires that a dance be broken down into its component sections, phrases, motifs and cells; similar processes are then applied to the music, and comparisons made between

² Other examples include that of the Jankovic sisters (Jankovic 1975), and Martin and Pesovar (1961) in Eastern Europe; J.H.K. Nketia (1965) on African dance; Adrienne Kaeppler's studies of Tongan dance (Kaeppler 1972), and Gertude Kurath's studies of the music and dance of the Tewa Pueblos (Kurath 1969).

the two. Because of its emphasis upon structural relationships, this method is most usefully employed with pieces in which the choreography is closely based upon its accompanying music; for example, Ball (1994) employed the methodology in a study of the music dances of Paul Taylor, uncovering points of similarity and divergence between score and choreography as well as some of the ways in which the dancers conceived of the music when they worked with it in rehearsal and performance.

Structural analysis is useful for many reasons: not only can it demonstrate how a choreographer's work is related to a piece of music, but for a dance like Graham's *Frontier* it can also reveal something of how the composer has perceived the dance. Not only can structural analysis help uncover underlying patterns and deeper relationships that may exist between music and dance in a given style or genre, but it can also sometimes shed light on certain more general questions of how music and dance are understood by the participants. For example, Hanna (1993: 324) noted that 'in many cultures movement reveals the structure and performance of sound: through embodying a people's dance in one's own physicality, one can gain an understanding of their music'. She illustrated her observation by reference to the dances of the Tiv in Nigeria, in which the rhythmic movements of the individual limbs of the body corresponded directly to each of the polymetric layers of the music. In such examples, the physical relationships between dancers and musicians and the ways in which they interact and respond to one another is an essential aspect of the activity. This is phenomenon has also been described by John Miller Chernoff who travelled to Ghana to learn the techniques of West African drumming, but was told that it was impossible to learn the traditional drum rhythms without also learning the dances that they were to accompany. His account of playing for dancers is a rare and valuable attempt to describe the extraordinary interaction and communication that can exist between dancer and musician and which is an essential aspect of live

performance.³ (Chernoff: 1979)

In the field of Western Theatre Dance, the work of Paul Hodgins and Stephanie Jordan has tended to focus upon structural relationships. Hodgins (1992) has described a method of 'choreomusical' analysis, which he applied in studies of a group of works emanating mostly from balletic traditions. Hodgins' approach is rooted in a search for the similarities that can be identified between music and dance. He observes that not only are both time arts, but that 'the spiritual alliance of dance and music is apparent even in certain aspects of their respective vocabularies - phrase, breath, pause, tempo, pulse - not surprisingly, since both deal with movements of the body measured in time'. (p. iii) Hodgins distinguishes between two principal kinds of relationship, which he calls *intrinsic* and *extrinsic*. Intrinsic relationships 'emanate from the realms of musical and kinaesthetic gesture. They involve the iconic cross-disciplinary reflection of highly ostensible and idiomatic elements, their interpretation largely unprejudiced by context.' Extrinsic relationships 'admit the presence of an implied third party to the choreomusical marriage - an external element such as a characterization or narrative event which is acknowledged in some way by both music and choreography'. (p.25)

Intrinsic relationships 'do not depend upon context' and have objective measurable qualities. Their identification demands consideration of six categories, including: (i) rhythmic relationships, such as the ways that musical accents and metre are reflected in the dance, or rhythmic sounds produced by the dancers form 'an integrated rhythmic element of the score'; (ii) dynamic relationships, such as the relation of musical volume to size of gesture; (iii) textural relationships, such as the identification of dancers with particular instruments or the relationship

³ Another example of the crucial importance of live interaction between dancers and musicians is found in Lange's account of Polish folk music and dance. He describes a practice in which dancers sing a tune of their choice, which is then taken up and varied by the musicians; it is essential that the musicians are able to respond immediately and sympathetically to the dancers. When Lange experimented by playing recordings of music he had taped at a previous meeting, the dancers could not dance to it and complained that the music was not following them. (Lange 1975: 104)

between the use of counterpoint in music and the choreographic deployment of dancers; (iv) structural relationships, considered at the levels of large sections, phrases and motifs; (v) qualitative relationships, including the relationship of tessitura in music and dance; also timbral relationships, by which he means the association of particular kinds of instruments with different dancers; relationships of articulation, including the use of legato and staccato in music and dance; relationships of dissonance and consonance, and how these might be shown through differing degrees of tension in the dance; (vi) mimetic relationships, by which a dancer might attempt to show a sound in movement. (pp. 26 – 27)

Hodgins defines extrinsic relationships as depending ‘largely upon narrative and cultural context - the shared knowledge of the ballet’s characters and plot (if any), as well as the audience’s pre-knowledge of pertinent sociological, psychological and mythological information’, and he identifies three categories of correspondence:

A. Archetypal: a musical theme, texture or instrumentation and a corresponding prescribed movement phrase or vocabulary are associated with archetypal characters or themes.

B. Emotional/Psychological: the score and choreography reflect the emotional and/or psychological state of an individual character or group; often used as a foreshadowing device.

C. Narrative: the music and movement help to depict an important element or event of the plotline in a narrative choreography. (p.28)

Hodgins’ methods are deeply rooted in the kinds of assumptions regarding music-dance correspondences that inform St Denis’ music visualizations. Jordan (2000) has adopted similar approaches in her studies of Humphrey, Balanchine, Tudor and Ashton, describing her method as a combination of an expanded music

visualization theory derived from St Denis and a rhythmic counterpoint theory of her own devising. Her analyses involve consideration of both the macro-structure of a piece and the more detailed relationships that emerge when examining elements such as energy, texture, metre, articulation, accent, points of multiple concurrence, beat/metrical organization, hypermetre, event clustering, motifs, orchestration, and dynamics. Her doctoral thesis included detailed graphs demonstrating the relationships between pitch contour and movement level in music visualizations by Doris Humphrey, with a particular focus on the use of different body parts, level and the speed of events. (Jordan 1987)

Certain aspects of music visualization techniques are however problematic when analysing music-dance relationships. Questions arise as to what exactly is meant by the idea of dancing in time to the music, or indeed what is understood when people speak of the 'rhythm of a dance'. Dance – like music – exists in time, and the ways in which it unfolds temporally contribute profoundly to its character and identity. It is clear that many factors contribute to the rhythm of a piece of music: beyond its surface rhythmic features, its harmonic rhythm, the proportioning of its sections, and the ways in which one section succeeds another, all contribute to the manner in which a piece of music flows through time. Dance too manifests rhythm in particular and unique ways, including not only the use of clearly defined rhythmic patterns marked out by different parts of the body, but also more generally through the ways in which the body moves through space and time. It is possible then to argue that rhythmically music and dance are only able truly to connect at a relatively superficial level. For example, sometimes dancers may mark out a clear rhythmic pattern with the feet, arms, torso, or even - in one section of Lea Anderson's *Flesh and Blood* - movements of the eyes. But this raises the question of what exactly constitutes the rhythm of these movements: the sequence of impulses they mark out, or something more detailed and subtle found in the *transitions* between these accents.

Aspects of this problem were touched upon in Chapter One in relation to music visualization techniques, but it is necessary here to consider aspects of musical and dance rhythm with regard to perception. When a sound and movement occur in unison, whether by accident or design, this constitutes a moment that has to be accounted for in structural terms. However, unison between sound and movement is not merely a neutral incident in the continuity of the work but can also carry an expressive force. Unison is sometimes used because of the strength and power it gives a movement when performed simultaneously by several people; unison between sound and movement can also achieve comic effects, most obviously in the whole idea of Mickey-Mousing the music; and rhythmic unison too can make a socio-political statement of solidarity and strength, as in a musical composition like Louis Andriessens's *Workers Union*. One might also make a distinction between moments of loose unison, as in sections of Jonathan Burroughs' *Stop Quartet* where the dancers often share movement material but make no attempt to hide the personal differences in their interpretation, and the tight unison of show dancing and classical ballet: each instance of unison makes a distinct expressive statement.

Unison between a movement and a sound may serve to direct the attention to particular moments in the continuity of the movement, but it can just as easily detract attention from the transitions between those moments. This can be seen in Mary Wigman's *Witch Dance*, in which certain moments are emphasised by percussion attacks but the transitions between those moments are inevitably given less emphasis. If one is to base a method of analysis on comparing rhythms of music and dance, then it is necessary to be clear about the points of contact and difference. The rhythms beaten out by dancers in some forms of pulsed and metrical dance are more often than not very simple, and they completely lack intrinsic musical interest when divorced from the dancing body with all of its expressive physical and human qualities. The present writer has observed ballet classes in which the rhythm of every exercise could – at least on a very superficial level – be described as an absolutely even series of beats, the dancers for the most

part simply moving from one downbeat to the next, and the downbeats being expressed in movement either by the completion of a gesture shown through a momentary hold or by a change in the direction of a movement. The interest of the exercises and the true nature of their rhythmic life are to be found entirely in the way the dancers move between each downbeat: the kinds of energy used, the parts of the body employed, and the pathways traced in space. Music and dance are rooted in a shared pulse, and the music regulates the timing of the movement inasmuch as each musical downbeat indicates where in the flow of movement a dancer should have arrived. But the music too continues in its own purely musical terms between these downbeats; and beyond sharing metre, pulse and general dynamic and accentual qualities, sound and movement objectively speaking have little in common. But although Cage and Cunningham may leave things at that, the truth is that many other connections between music and dance do often come into play, including dynamics, phrasing, melodic contour, even harmonic rhythm as a means of articulating phrase structure. The connections made could be 'dismissed as essentially quasi-synaesthetic, but they are an important aspect of the art that cannot be overlooked.

Rudolph Laban provided some important insights into the nature of rhythm in human movement, differentiating between *space-rhythm* which 'consists in the alternative use of various directions resulting in various forms and shapes', and *time-rhythm* which is 'manifest in the division of the continuous flux of movement into parts of duration in time which can be either metrically regular or free, irregular'; there is also *weight-rhythm*, associated with time-rhythm, which is concerned with the 'accented and unaccented parts of movement sequences'. (Maletic 1987: 95)

Related to the area of rhythm is the consideration of phrasing of movement and dance. An implicit reference to this aspect of rhythm can be found in the following considerations: Every movement has a *beginning* in *stillness*, a path which leads to a new *stillness* which is its *termination*. The path can be

performed with an increase or decrease of force; with an increase or decrease of extension in space; with an increase or decrease of stability. This initial intensity (in force, speed, extension in space, and flight) can also be related to previous or consecutive movements in terms of increase or decrease.

Movements which are performed without increase or decrease are thus always led at the same distance from the body, and with the same emphasis retaining the same muscular tension and speed, they appear mechanical, lifeless. The harmonious liveliness of movement requires a constantly fluent change of shades of intensity. (Laban cited in Maletic 1987: 96-97)

Maletic contrasts the work of Laban and Dalcroze, quoting Hans Brandenburg's delineation of the differences between the two reformers: 'Laban does not intend to transpose musical rhythms into bodily rhythms [as does Dalcroze] but stimulates his students to draw rhythm from their own body movement.... The double function [of movement in space and time] creates such an endlessly rich material that the silent movement becomes for Laban the most fulfilled dance.' (p. 160) For Laban, dance rhythm is 'not time-duration divided by accents, as one tries to interpret this context in music. Rhythm is the law of gesture according to which it proceeds at one time more fluently and at another less fluently. Tensing and relaxing of the body arises through this, which presents nuances of force. In addition the gesture needs a duration in time for its sequence in space.' (from *Die Welt der Tanzers*, cited Maletic, p.211)

Laban's view of dance rhythm is important, as it focuses attention on the dangers of making too easy and direct an analogy between the rhythmic structures of music and of dance. Pulse and metre may provide an underlying framework for understanding dance rhythm - a kind of time scaffolding - but any attempt to match impulses and accents shared by both music and dance must also consider the transitions between these points as well as the intrinsic rhythmic qualities of both music and dance. Movements can be timed either to coincide with the pulse of the music or to pass through the musical beat. Notating the rhythmic patterns

created by the 'hits' might offer one way for defining the rhythm of a movement, but in fact this would only provide a very partial description of the rhythm of a movement. Just as to notate only the rhythmic patterns of a piece of music, which require pitch and dynamics and harmony to be brought to life, would provide an extremely limited representation of the actual sounds, so omitting all those other factors that make movement an expressive art form – body part, energy, size of movement, articulation, momentum, accent – would remove so much that is truly essential.

Techniques based upon the premises of music visualization are essentially rooted in a search for similarity; divergences and contrasts derive their significance in relation to a particular set of expectations. These methods can reveal much of value, but are perhaps of rather less immediate relevance when dealing with contemporary and experimental work. A structural analysis of an indeterminate work by Cage and Cunningham might reveal a total absence of meaningful relationships between sound and movement, and yet people are able to discover coherence in their work and that of others who have cultivated varying degrees of independence between music and dance. There may well be a point in applying these methods to such work, and it is very hard not to speak of music and dance in language that is not rooted in the perception of similarity and difference, but new approaches are nevertheless needed if a deeper understanding of such relationships is to be achieved.

Random juxtapositions of music and movement

In Cage and Cunningham's work, sound and movement are presented simultaneously; any direct relationships that do arise between the two may well be entirely the product of chance, but this is not to deny that such moments occur. It is easy to extend this idea into experiments in which passages of dance or film are randomly accompanied by different pieces of music or sound. Published accounts of such experiments include an essay by William Penn (1990), who conducted an

exercise with a student group in which different styles of music were used to accompany the projection of a slide showing an image of a third century bronze depicting a boy's face. Penn found that different kinds of music would bring to life different aspects of the image: for example, viewers perceived the significance of facial expression and hair in different ways when the image was accompanied successively by music from the film *The Omen* and a 1920s Charleston. It seems probable that an enabling factor in this was the blank and impassive expression of the boy onto which different interpretations could more easily be projected. Similar experiments suggest that when an image is less open or ambiguous, such forms of transference are less easily achieved. Tagg's experiment substituting different musics for the title credits of *Emmerdale* was similarly facilitated by his choosing images that were capable of many readings: a house in the countryside might as easily be a site of romance, grief, joy, nostalgia, fear or horror. (Tagg 1999)

Penn also points out that the aspects of music that are transferred across to an image may well vary in unpredictable ways. For example, a composition may belong to a historical period and for some listeners embody strong associations and imagery relating to that time. It does not necessarily follow, however, that a simple link to that period will inevitably be stamped on a visual image. A frequently cited example of this phenomenon is Kubrick's use of a Viennese waltz to accompany images of a spaceship in his film *2001*; arguably, it was the general qualities of that music, such as its grace, flow and elegance that were transferred to the visual image rather than its specific historical connotations.⁴

⁴ Penn (p.51), however, also quotes Jerry Goldsmith who objected to Kubrick's choice of the *Blue Danube* 'because it is so familiar and unrelated to the visual'; he complained that the pieces selected by Kubrick 'had no relationship' and 'could not comment on the film because they were not part of it'. Another point of view is expressed by Russell Lack (1997: 303 – 304) who considers the use of the waltz within the film as whole, suggesting that Strauss's music signifies 'order' when it accompanies the spacecraft as it orbits the earth; by contrast, later in the film, the 'more ambient sound fields of Gyorgy Ligeti are clearly used to represent something like deep space'. Burt (1994: 126) takes a similar view, adding that the strongly metrical qualities of the waltz 'give a heightened sense of direction and purpose in accompaniment to shots of a shuttle on its way to the space station'; the strongly contrasted music of Ligeti is used in sequences when the space ship is extremely far from earth, and imparts a sense of time having been suspended and of

Penn talked too about how music can affect the perception of the passing of time, referring to a lecture-demonstration given by Bernard Hermann, who showed a clip from *The Magnificent Ambersons*: without music the sequence was judged boring and slow-moving, but when music was added the images appeared to move faster and to be better paced, even though the music was also slow. (pp. 54 – 56)

Hodgins describes a similar experiment, in which a short and quite deliberately bland piece of choreography was shown to a number of groups, each of which saw the dance either with or without musical accompaniment. As with Cage and Cunningham, no attempt was made to fit the dance to the different musical scores selected, which included a highly ornate Beethoven slow movement whose nature was such that the presence of a perceptible underlying pulse was almost completely obscured, a lively rhythmic piece by Bach, and an unidentified piece of dissonant and arrhythmic electronic music. Each group was asked questions about how they had perceived the dance, with particular reference to its duration, movement qualities, structure and textures. In general it was observed that: (i) where the musical pulse was most clear, people's sense of duration was also most accurate; (ii) the complexity of events in the music had some influence on the way the tempo of the dance was perceived, musical events being 'generally more temporally compressed than dance events, the former in effect stretching the perceived length of the latter by their relative density'; (iii) when the music had a clear and consistent tempo, the audience's ability to perceive changes in the tempo and rhythm of the dance was diminished; (iv) perception of dance structure was affected by musical structure, so that multi-sectioned music lead people to see more structural divisions in the dance than those who saw it in silence; (v) the qualities of the music had a small but

endlessness. Lack also quotes Kubrick who maintained that for many people today Strauss's music has lost its Palm Court Orchestra associations. 'It's hard to find anything better than the Blue Danube for depicting grace and beauty in turning. It also gets about as far away as you can get from the cliché of space music.' (p.304)

measurable affect on the way people perceived the dynamics of the dance (e.g. sharp/angular versus smooth/supple); (vi) a direct relationship was noted between the presence of counterpoint in the music and the audience's perception of contrapuntal relationships (real or imagined) in the dance. (Hodgins 1992: 3 –7)

Of particular interest is the observation that musical structure can affect the perception of choreographic structure. On many occasions experiments in random juxtapositions have shown that changes in musical texture or mood, the addition or subtraction of an element to the music, the beginning of a new phrase/section, or even the music just coming to an end, can take the dance into new areas of feeling or meaning even though nothing of substance may have changed in the movement. There is a remarkable moment in the film of Cunningham's *Beach Birds* when a male dancer balances for an extraordinarily long time, supported by one leg with bended knee, his arms outstretched like the wings of a giant bird. At first the balance is accompanied by the sounds of a rainstick whose unvarying trickle of sounds matches the stillness of the movement in a quite straightforward way; after a while however the sounds abruptly cease, yet the dancer maintains his position regardless. The effect is extraordinary when the dancer is suddenly alone and without the company or support of sound, and the unvarying sustained movement is - perceptually at least - effectively divided into two parts.

Another experiment, in many respects identical to that described by Hodgins, was conducted by Heather Habens while a student at the Laban Centre. Her particular interests were two-fold: first, to see how different pieces of music might influence an audience's perception of the emotional qualities of a short dance she had devised; and second, to test how a dancer's performance of that sequence might be affected by the use of sharply contrasting styles of music. One observation that emerged from the experiment related to the way that people tended particularly to focus upon those moments in the continuity where some kind of compatibility between the style of music and the movement could be

identified. Revisiting a video of the experiment revealed other factors not originally remarked upon at the time. For example, at one point in the choreography the dancer performed a slow turn before travelling down stage along a diagonal pathway. In one version, set to the slow movement of a Tchaikovsky string quartet, this particular moment coincided with a point where a musical phrase ended and the next began, the turn coinciding with an imperfect cadence and the diagonal travelling with the start of the new musical phrase. The function of the turn could be directly compared with that of the cadence, clearly marking the end of one phrase and the transition into the next. However, in another version, accompanied by some atmospheric electronic sounds, the turn was perceived as just another moment in the continuity of the dance, without any special structural significance. The perception of the rhythms and phrasing of the movement was consequently far more 'open' and less directed, a quality consciously sought by many choreographers today.

Apart from these kinds of random juxtaposition of sound and movement, it is sometimes possible for a musician to experiment in more deliberate ways. Accompanying dance improvisation classes has provided many opportunities for this, though it has often been when working with exercises that were simple and repetitive that the most productive opportunities arose; in these instances the dancers were in no way dependent on the music and could therefore continue to work undisturbed by the disparate range of sounds produced. For example, in one exercise the dancers rotated the head in a slow repetitive motion over a period of several minutes. Different accompaniments did not change the way the dancers executed this movement, but the perception of its emphasis and motivation could be altered in subtle but quite distinct ways. Playing in time with the movement emphasised its mechanical and repetitive qualities, while playing out of time in a rhythmically free style with space between notes and musical phrases allowed the subtle rhythmic inflections of each individual dancer's performance of the movement to become clearer; very quiet, gentle and sparse music helped create a strong sense of contemplation and stillness. A rhythmically free, but nevertheless

repetitive musical phrase seemingly became the invisible object of the dancers' focus as the direction of the gaze changed from one side to the other. When music and movement went together in a very close rhythmic relationship, the illusion could be produced that either music or dance were in some sense controlling the other, robbing it of its independent rhythmic vitality; this approach also directed the attention towards those moments where music and dance came together, rather than upon the transitions between one moment of synchronicity and another. Sparser music, whether pulsed or not, reduced the number of moments when musical accents and movement impulses coincided and allowed one to see the inherent qualities of the movement with greater clarity.

These examples are representative of many similar moments that have been noted in both informal experiments and theatre performances, but if this line of reasoning is to progress beyond the merely anecdotal it will be necessary to provide a stronger theoretical basis from which to develop new approaches to analysis.

The lessons of film music

Many influences contribute to a choreographer's artistic identity. Their physical training, their knowledge of music and other art forms, and indeed their life experiences exert a profound influence upon their development. There may be points of continuity with past practices, and the properties of the human body do not change. But dance is also open to new influences, in particular the possibilities opened up by digital technology, including sophisticated modern lighting rigs and sound systems, the use of video projections, and the motion capture devices used in recent work by Cunningham and others. Also, in the last hundred years or so our experience and familiarity with music heard in relation to moving images has developed enormously, seen most obviously in film and television: arguably the ways in which music is used in these media has had an impact on the way that music is used in dance. This is quite apart from the

growing interest in dance conceived specially for the camera and the many possibilities opened up, including the use of different locations, structural edits, long shots, close-ups and many other devices specific to film.

There are many similarities in the role and function of music in dance and in film, particularly when considered from the audience perspective. There are also some important differences, not least in the matter of a dancer's kinaesthetic response to sound. In a film the music is normally added long after the filming and editing are complete; the performance of its participants can in no way be influenced by the music, and more likely than not the music will not even have been composed at the time of filming. Dance, even if created and rehearsed without any knowledge of the music that will subsequently accompany it, is rarely performed without sound, and dancers can and do respond to that sound in the ways that they move. Even if they do not set out to dance *to* the music, dancers respond kinaesthetically to sound, and it may take some considerable effort on their part not to be influenced in some way, consciously or otherwise, by the presence of sound.

There are nevertheless also many points of similarity between film and dance, inasmuch as in both art forms music is combined with images and movement to create meaning and emotion. What is seen and what is heard can work together in a dynamic process out of which may emerge an experience that is qualitatively different to that produced by each element experienced separately. Abstract music can acquire new or more specific emotional connotations and meaning when it is heard in relation to film or dance, and the meaning and emotional content of visual imagery can be clarified and enhanced, even subverted, when juxtaposed with music.

Musical meaning

Music can take on particular meanings and associations according to its familiar functions, and these meanings may be carried over when that music is heard in other contexts. This observation has led to attempts to develop ‘affective lexicons’ of music, in which particular musical features become associated with particular meanings. David Sonnenschein includes accounts of several attempts to codify the meanings of music and sound, citing eighteenth century tables that attempt to relate musical characteristics to emotional states and make direct connections between particular instruments and different personality types (Sonnenschein 2001: 108, 141). Philip Tagg, best known for his extended study of the title credits of *Kojak*, has also taken inspiration from the baroque theory of the affects. (Tagg 2000: 45 – 50) With regard to the *Kojak* theme, he set out to show how the various layers of the musical texture could each be related to different aspects of the drama. The striding horn melody, which is clearly intended to be associated with the series’ hero, is related to similar themes depicting heroic figures which Tagg finds in Wagner, Strauss and other late romantic composers, while the inclusion of funky bass lines and Latin percussion hint at the Hispanic and Black African underworld in which many of the stories are located; shimmering string and synthesizer lines are related to textures in *Petrushka* and other works where such textures are used to conjure up the bustle of crowds. This summary grossly oversimplifies Tagg’s thesis, which is supported by a vast amount of detailed evidence and musical analysis, but in essence the idea that one can deduce the meanings of different musical devices by collating and comparing different instances in which they are discovered is useful and has been referred to occasionally in the two extended case studies included here as chapters 4 and 5.

The main elements of Tagg’s analytical model for popular music include: (i) a checklist of parameters of musical expression; (ii) the establishment of musemes (minimal units of expression); (iii) the noting of figure/ground (melody/accompaniment) relationships; (iv) the transformational analysis of

melodic phrases; (v) the establishment of patterns of musical process and their relative congruence with eventual patterns of extramusical process; (vi) the falsification of conclusions by means of hypothetical substitution. (Tagg 1982: 45) His checklist of parameters directs the analyst to the following aspects of a musical composition: (i) aspects of time; (ii) melodic aspects; (iii) orchestration; (iv) tonality, texture, and harmony; (v) dynamic aspects; (vi) acoustical aspects and the performance situation; (vii) electromusical and mechanical aspects. Most of these actually relate closely to the categories included in Hodgins' list of intrinsic choreomusical relationships. (pp. 47 – 48)

Tagg's technique of *interobjective comparison* (IOC) sets out to describe music by means of other music; to be conducted properly, it requires the analyst to gather together a huge quantity of material to be used for comparative purposes (around 350 pieces for *Kojak* and 130 for Abba's *Fernando*; the sheer labour involved in such an exercise has no doubt discouraged others from treading his path). This body of material is then searched for items of musical code (IMC), such as motifs, musemes or general sonorities that are also found in the piece to be analysed. When correspondences are found they can then be 'related to extramusical forms of expression. Such relationships can be established if pieces in the interactive comparison material share any common denominators of extramusical association in the form of visual or verbal meaning'. (p. 49) When the items of musical code of the analytical object (AO) have been identified (Tagg found 13 main musemes in the music for *Kojak*), 'their affectual meaning in associative verbal form should be corroborated or falsified' using a technique known as 'hypothetical substitution'. Tagg uses as an example the Swedish national anthem: by altering its melodic contour, key, rhythm, upbeat, phrasing tempo, metre, and invoking similarities with other similar tunes (National songs, revolutionary songs, the ode to joy etc), he aims to discover which musical parameters contribute to the dignity and solemnity that is suited to a national anthem, and which subvert it (in this instance tempo, articulation, metre and lyrics are found to be most potent). (pp. 51 – 53)

He then considers how the musemes may be combined both simultaneously and successively to create 'museme stacks'. 'Several separately analysable musemes are combined to form what the listener experiences as an integral sound entity. Such museme stacks can be seen as a vertical cross-section though an imaginary score.' Much of his discussion of *Kojak* is in effect an examination of the nature of relationship between melody and accompaniment: the *Kojak* theme (Tagg uses adjectives like virile, energetic, and heroic) stands out over its accompaniment whose various strands include evocations of unrest and male aggression through the use of percussion rhythms and the 'subcultural bass lines which rumble throughout'. In this way the music sums up, albeit in combination with the visual imagery of the title credits, which is also discussed in great detail, the relationship of Kojak to his environment.

Tagg's relevance here is found in aspects of his method, including his checklists and the use of hypothetical substitutions to deduce aspects of musical meaning. Instrumentation, rhythm, melody, and harmony have the power to form languages in their own right, and his method provides one means for unlocking the ways in which these codes may operate.

Other film music writers have focussed more on music's ability to direct the spectators' attention in different ways. Claudia Gorbman (1987: 16 - 17) discusses a cycling sequence from *Jules and Jim*: the cyclists are seen from a distance, and she explains how the simple, repetitive qualities of the music seem to emphasize the predictability and regularity of the pedalling motions, though the rhythms of music and actions are in no respect co-ordinated. She then experiments with 'commutations', proposing, for example, that changing the music into a minor key might inject a quality of poignancy, or that speeding it up might impart a greater feeling of energy and optimism to the images; changing the scoring may also make a difference, with violins creating pathos, the use of a tuba making for humour, and imitative or denotative scoring such as *col legno* violins

adding a comedic touch. Different styles of music might also affect the perception of the images: boogie piano might inject humour, Beethoven's Fifth Symphony an 'absurd epic grandeur'.

Nicholas Cook has argued that musical meaning *emerges* in different contexts, and that the attributes of a piece of music can be transferred to other objects with which it is associated.

If the music gives meaning to the images, then equally the images give meaning to the music ... instead of talking about meaning as something that the music *has*, we should be talking about it as something that the music *does* (and has done to it) within a given context. (Cook 1998: 8-9)

Cook argues that it is the qualities of liveliness and precision characteristic of Mozart's overture to *The Marriage of Figaro* that enabled the makers of a commercial to imply the presence of similar qualities in a car; in another context that same music might signify something very different, not least when heard at the opening of the opera for which it was originally composed. Similar phenomena may be observed too in music-dance relationships.

Annabel J. Cohen has attempted to test the idea that music affects the way that images are interpreted using methods from experimental psychology, in particular the approach known as associationism which attempts 'to account for complex mental phenomena in terms of interconnected component elements'. Cohen (1993, 2001) has described some of the ways in which experiments using methodologies from cognitive psychology have been used to explore the ways in which auditory and visual stimuli work together in the context of cinema. Like Michel Chion, whose contribution is to be considered later in this chapter, she places a strong emphasis on examining the ways in which what we see can be altered by what we hear, and refers to Chion's concept of 'added value', the notion that sound 'engages the very structuring of visions...by rigorously framing

it'. (Chion 1990: 7) She notes the ability of music to bring images to life and to draw the spectator into the drama on screen, and identifies several possible functions for music in film, including its ability to interpret a scene and add meaning and its ability to aid memory and suspend disbelief; similar functions for music can of course also be observed in many dance works.

Cohen's practical experiments have tended to deal with very simple materials, much less sophisticated than any of the music-dance works considered here, though this is not to invalidate the relevance of the underlying principles at work; in her basic premises, it is also hard not to see connections with many of the principles of music visualization. In one experiment (Cohen 1993) the visual stimulus was a computer-generated bouncing ball that moved at three different speeds and at three different heights. Questions were asked in order to establish degrees of happiness or sadness suggested by different patterns of movement, the answers being graded according to a five-point scale. The initial conclusions were perhaps not particularly surprising; for example, 'low slow bounces were judged as sad, and high fast bounces were judged as happy'. (Cohen 2000: 362) These images were subsequently shown with simple musical accompaniments based on broken major triads that differed only in tempo and pitch. When experienced purely as sound without visual accompaniment the higher, faster pieces of music were generally considered happier than the slower, deeper music, and again, this finding seems not particularly startling. More interesting are the results of the tests where music and image were shown together. Cohen's results suggested that where music and moving image were congruent, they reinforced one another's meaning, but when they diverged opinion was more divided as to meaning.

Another experiment undertaken by Cohen took for its visual material an animation film whose three 'characters' were a small circle, a small triangle and a large triangle. The film was shown both without music and with two contrasting soundtracks, again both of a very simple nature, specially composed for the purpose. Both film and music, separately and together, were rated according to

twelve bi-polar scales (e.g. fast-slow, nice-awful) that had been designed to explore reactions to one of the three dimensions of emotional meaning proposed by Osgood and others in 1957: activity, evaluation and potency. Some of the findings of this experiment are of limited usefulness in a dance context, for example the tendency noted to interpret the behaviour of the three figures in anthropomorphic terms: dance is normally performed by human beings. More useful is the finding that music can focus the attention in different ways and influence the spectator's interpretation of events in varying degrees depending on certain conditions. Whereas the two soundtracks were judged to have similar activity levels, the relative activity levels of the three geometric shapes differed from one soundtrack to the other; for example, the small triangle was judged more active with one of the scores, the large triangle with the other. Marshall and Cohen argue that 'shared accent patterns in the music and in the motion of the figures operated to focus attention on the temporally congruent part of the visual scene, and subsequently associations of the music were ascribed to this focus'. (Cohen 2002: 257) In this way music can direct attention to an object or activity on the screen, and by implication too can surely distract attention in similar ways. It must be significant that when viewers years later described their memories of St Denis and Shawn's music visualizations, it was the moments of exact coincidence that were recalled for the most part. (Jordan 1984: 41)

Cohen (2001) also describes eight functions for music in a film or multi-media context, several of which in varying degrees are applicable in a music-dance context, including: its ability to mask extraneous noises; to provide continuity between movements, phrases and sections of the dance; to direct attention to important features; to induce mood; to communicate meaning and further the narrative, especially in ambiguous situations; to enable the symbolization of past and future events through leitmotifs. Music too can 'heighten the sense of reality of or absorption' in the theatre through arousing emotion or directing attention, and it can also add to the aesthetic effect of dance. (p.258)

Michel Chion (1994) has written of the way in which the ear focuses the eye and the eye focuses the ear, and he has noted the extraordinary power of sound to give rhythm, continuity, meaning, and emotional content to a sequence of visual images. (pp. 3-4) For Chion audio-vision works in a reciprocal manner, although he maintains that in the final analysis the primacy of the image remains unavoidable:

Sound shows us the image differently than what image shows alone, and the image likewise makes us hear sound differently than if the sound were ringing out in the dark. However for all this reciprocity the screen remains the principal support of filmic perception. Transformed by the image it influences, sound ultimately reprojects onto the image the product of their mutual influences. (Chion 1994: 21-22)

Much of what Chion has to say is primarily concerned with *sound* in film, and he says almost nothing about music in the more traditional understanding of the word; nevertheless, many of his observations can be related to dance theatre. On one level, his analytical approach can be related directly to the increasing number of dance works that are accompanied by sound scores built up from a range of sonic ingredients including samples, found sounds, and natural or environmental sounds, in preference to music in the more conventional sense of the word. It is not unusual nowadays to find sound accompaniments for dance devised by people with a background in sound design rather than music, a phenomenon considered by Pulkinnen (2001). Cathy Lane's score for Rosemary Butcher's *Scan* consists entirely of recorded and electronically processed sounds evocative of both wind and breath, though most probably not intended to be literally representative of either; there is no pulse, melody, nor any immediately apparent sense of musical development or contrast, and the dance has no structural connection to the sound; rather the music creates an environment within which the dance unfolds, and which also surrounds and envelops the audience.

Butcher herself has spoken of wanting to use sonic ‘landscapes’ for her choreography, not least because their quality of openness does not impose itself upon the movement, though at the same time the music is able to create a clearly defined atmosphere and lend continuity to the action. When Butcher has worked with music in the more traditional sense, she has commissioned pieces with similar qualities, such as Michael Nyman’s haunting score for *Touch the earth* (1987) or Johnny Clark’s Feldman-inspired music for *Fractured Landscape, Fragmented Narratives* (1997).

Nevertheless several of Chion’s concepts can also be related to more mainstream work, and he contributes some useful terms to the sparse vocabulary that currently exists for describing sound-movement relationships. Two following are particularly worth noting here. The first is *added value*, a term that refers to the way in which sound can enrich an image, either by infusing it with emotional depth or communicating some kind of information about that image. The second is *synchresis*, seen partly through the production of *synch points*, defined by Chion as ‘the forging of an immediate and necessary relationship between something one sees and something one hears’. (p. 5) Expanding on this idea, Chion has written as follows:

‘Synchresis’ – a Lewis Carroll-style word I have forged (from synchronism and synthesis) - is the name I give to a spontaneous and reflex psycho-physiological phenomenon that depends on our nervous and muscular connections. It consists of perceiving as one and the same phenomenon - which manifests itself both on the visual and sound levels - the ‘concomitance’ of a precise sound event with a precise visual event on the sole and only condition that they happen simultaneously.

Through this phenomenon, which literally cannot be controlled, we are led instantaneously to establish a tight link of independence between sounds and images that are often quite unrelated in reality, and to assign them a common

origin even if they are of completely different natures and sources. Synchresis therefore allows for the use of almost any sound effect for the footsteps of a character on the screen, in total freedom of expression. (Chion 2000: 205)

Synch points can occur by chance, or they may be carefully and deliberately placed. (pp. 58 – 65) In dance, synch points are those moments when a sound and a movement coincide in a meaningful way; they may be exactly synchronized or at least sufficiently close in time for a direct connection to be made.

Chion also uses the words *empathetic* and *anempathetic*. The term ‘empathetic’ refers to the use of familiar musical devices to emphasize and illustrate the feelings of a given dramatic situation: ‘the music feels the feelings of others’ and ‘takes on a scene’s rhythm, tone and phrasing’. (p. 8) The term *anempathetic* is used in relation to effects created by music which does not participate directly in the dramatic situation: ‘this juxtaposition of scene with indifferent music has the effect not of freezing emotion but rather of intensifying it, by inscribing it on a cosmic background’. Chion offers examples of dance bands and music boxes whose ‘studied frivolity’ reinforces the individual emotions of the characters, and an example found in DV8’s *Dead Dreams of Monochrome Men* is noted in Chapter Four. Anempathetic effects can also be produced by noise, and Chion gives the example of a fan or shower that continues after the death of a character.

Chion also discusses the way in which sound affects a viewer’s perception of movement and speed. For Chion, sound implies movement, however minimal, and he discusses how it can structure or influence the way in which movement is perceived. He notes that the fast movements of a fight are not confusing because they are ‘spotted’ or punctuated, and claims that ‘sound superimposed on an image is capable of directing our attention to a particular visual trajectory’ and ‘can even make one see a rapid movement that isn’t there’. (pp. 11-12) Chion

identifies a number of aspects of temporalization and the power of sound. Atemporal static shots can be inscribed onto a time continuum via sound, much as in dance moments of stillness, static tableaux or an empty stage can be energised or vitalised in different ways by musical accompaniment; these can differ in degree from 'exact to vague'. Sound can also endow images with what Chion terms *temporal linearization*: 'synchronous sound imposes a sense of succession', and sound can *vectorize* or dramatize shots by imbuing them with a sense of direction or a goal. Chion says that if an image has no temporal animation in itself, sound can bring the image into a temporality that it introduces entirely on its own. On the other hand, if an image has temporal animation, sound can – depending on its nature –animate that image in varying degrees by combining its temporality with that of the image. (p. 14) A sequence of apparently unrelated images can then be placed in a linear time continuum, with sound taking on a unifying function.

Chion has discussed these ideas at some length, considering the conditions necessary for these different effects to work. He suggests that a smooth continuous sound has less power to animate an image than an uneven or fluttering one (a violin tremolo will bring about a more tense or immediate focus on an image than a sustained note); he also claims that predictability in the progress of sound is less animating than unpredictable sound, which puts the ear on the alert, though extremes of regularity can create tension because the listener anticipates the possibility of fluctuation. (p.14-15) For Chion the degree of stability and the manipulation of expectations (e.g. in the distribution of synch points) are a key factor.

Chion also addresses concepts of harmony and counterpoint when applied in an audio-visual medium, and suggests that counterpoint is an inappropriate term inasmuch as in music different lines are combined using the same material (sounds, notes) to make harmony, whereas sound and sight are two quite distinct modes of perception. These distinctions are obviously relevant in considering

similarities and differences between music and dance. Dance may share many terms and concepts with music, including rhythm, dynamics, space, harmony and counterpoint, but there are fundamental differences between the ways in which these are manifested. Nevertheless it does seem reasonable to speak of rhythmic counterpoint when accents occurring in the music and dance relate in particular ways, as Jordan (2000) has described in the work of Balanchine and others, or as might happen in classical Indian dance where dancers express the rhythms of the music in their bodies: in instances like these the possibility of rhythmic counterpoint does exist.

Lastly, Chion (pp. 187 ff) proposes a method that requires the analyst to experience sound/music and image/film (or dance) both separately and together. He recommends that experiments be made with substituting different sound tracks, and uses the terms *masking* (experiencing the sound and image separately), and *forced marriage* (the superimposition of different soundtracks on a given piece of film as a basis for asking questions about what the image resists and to what does it yield). In this respect, his methods are identical to those of Cohen, Cook, Tagg and others.

The usefulness of both Cohen's and Chion's findings for music-dance studies is located partly in the way in which they illuminate the ability of music to focus attention and explore the conditions which best facilitate this. But even more valuable is their insistence on the reciprocal nature of the relationship between sound and movement. This crucial issue has also been examined by Nicholas Cook (1998), whose study of musical multi-media contains many valuable insights, not least in relation to the inadequacy of much of the language commonly used to speak of such relationships, has pointed out that most existing approaches to analysis are based on the search for unity and for similarity, criticizing Eisenstein's approach to music for its relentless pursuit of parallelism. (p. 57) Cook points out the dangers in becoming trapped in such a way of thinking, not least because meaning comes from difference rather than similarity.

(pp. 78-81) In talking about music-dance relationships, it is easy to invoke the 'quasi-synaesthetic' correspondences upon which, as Cook suggests, multi-media depends very heavily. (p. 75) This is not to reject such correspondences entirely: undoubtedly these are among the fundamental ways in which many people actually do conceive such relationships. However, the conditions which enable the emergence of meaning out of the encounter between the very different media of sound and human movement are often more complex. People frequently speak in terms of music reinforcing the meaning of the dance, but this implies that the music embodies an unambiguous meaning from the outset whereas, as Cook argues, there is a sense in which music is empty of meaning, but depending on context is able to take on a variety of meaning; quoting Edward Cone on the relation of music and text in song, Cook writes that 'music does not express emotions, but appropriates them'. (p.96) Cook makes several suggestions with regard to methods which are also interesting to consider in relation to music and dance, not least the idea of inverting relationships; a score might have been composed to the structure of the dance and its logic can be understood in those terms, but if one turns the equation on its head and asks how the choreography might be said to relate to that score then it becomes possible to see things in a new and sometimes surprising light.

The study of certain aspects of music and dance in Ashton's ballet *La Fille Mal Gardée* which concludes this chapter was partly prompted by such considerations, including the observation that in this work music that is expressively comparatively neutral, or originally composed to be heard in a very different context, takes on the qualities of the drama and its leading characters to a quite extraordinary degree.

La Fille Mal Gardée

Although the main focus of this thesis is upon contemporary dance rather than classical ballet, many aspects of the approach to the study of music-dance

relationships explored here can be demonstrated clearly and simply with reference to Frederick Ashton's ballet *La Fille Mal Gardée*. Although its musical approach might perhaps be considered as embodying many aspects of traditional musical practice against which contemporary choreographers rebelled, there are also points of continuity and similarity.

La Fille Mal Gardée was first performed in 1789, and in its time was remarkable for its balletic portrayal of ordinary country people as opposed to the figures from classical mythology and ancient history favoured in the court ballets and operas of composers such as Lully and Rameau. The ballet is an uncomplicated romantic comedy, and its central characters are the Widow Simone, effectively a pantomime dame danced by a man *en travestie*, her daughter Lise, and Lise's two suitors: Colas, a good-looking farm-hand with whom Lise is in love, and Alain, the simpleton son of a wealthy land owner.

The first production of the ballet used music arranged and composed by an unknown composer, presumably a hack musician employed by the theatre to undertake such tasks. According to John Lanchbery, who arranged and composed the music for the Ashton version of *Fille*, the score consisted of many short items, mostly eighteenth century dance movements, whose general characteristics and anonymity apparently gave him few clues about which parts of the drama they might originally have accompanied. (Lanchbery 1960) The main quality demanded of music for dance in the eighteenth and nineteenth centuries was that it provided clear melodies and rhythms to guide and support the dancer. As a means of clarifying the narrative and motivation of the *dramatis personae* the music for the first production of *La Fille Mal Gardée* also included a number of popular songs of the day in instrumental arrangements, a device known as the *air parlant*. (Jordan 2000: 70) A contemporary audience would have been familiar with their associated lyrics and understood how the songs related to and commented upon the action. A revival of the ballet in 1828 used a new musical score by Hérold (1791-1833), who incorporated music from the original

production into his score as well as composing some new sections himself; in addition he borrowed music freely from other composers, notably Rossini (the opening number from *The Barber of Seville* and the storm scene from *Cinderella*). It was common for music composed for one situation to be reused in new and different contexts and so acquire new meanings and resonance. Although Rossini's storm music is used to accompany a storm in both ballet and opera, and therefore retains its original dramatic function, the other melodies have been lifted from their original dramatic context and made to serve new expressive roles within the ballet. A revival of *La Fille* staged in 1837 also contained a new pas-de-deux set to music arranged from Donizetti's *L'elisir d'amore*. A new production by Taglioni in Berlin in 1864 used completely new music by Peter Ludwig Hertel, and since then there have been many other productions using various versions of the Hérold and Hertel scores. (Lanchbery 1960: 12, 17)

Ashton's version, the subject of the present discussion, was first performed in 1960, with music composed and arranged by John Lanchbery. Ashton and Lanchbery worked closely together on *La Fille Mal Gardée*, each contributing suggestions to how the music should be put together. Lanchbery and Ashton clearly had their own vision of the kind of work they wished to create; despite their commitment to drawing upon original source materials, they were uninterested in creating a mere historical reconstruction. More recently, the original version of the ballet was reconstructed for the Ballet du Rhin by Ivo Cramer with its original music, though there must nevertheless have been some guesswork as to the order of numbers and their place within the ballet, and the steps can be little more than an informed guess as to what might have happened given that all that survives of the original production is the libretto and a few prints depicting the action.

It was Ashton's expressed wish to work from the original scenario and to use as much of the original music as possible. Lanchbery was brought in to work on the ballet after both Malcolm Arnold and Alexander Goehr had turned down

the project on the grounds that this musical material was too trite and banal to make anything of interest. (Vaughan 1977: 304) Lanchbery drew on both the original Bordeaux music, the orchestral parts of which had survived, and Hérold's music for the 1828 revival; he also examined the Hertel score, but rejected it as 'banal, hackneyed, and teutonic', though the music for Simone's Clog Dance is based on music by Hertel. (Lanchbery 1960: 13 – 14) The Donizetti music for the Fanny Elssler *pas-de-deux* was included, as Ashton wished to recreate as closely as possible the original steps according to the memories of Tamara Karsavina. (pp. 15, 17)

The major problem to be solved in the creation of a musical score for Ashton's ballet lay in the fact that Hérold's score contained only a single indication of which action the various numbers were intended to accompany. Consequently, it was Lanchbery's first task to match music to action. As the original music was made up from many short numbers and therefore lacked a convincing sense of continuity, Lanchbery also decided to combine the music into longer, more developed sections. He also carefully matched themes to the different characters and situations. (p. 14) Working to a detailed scenario prepared by Ashton, he used as much of the original music as possible and also composed some additional music in an appropriate style when required.

The musical score for this ballet works on a number of levels: it provides a structural framework for the choreographer and a rhythmic support for the dancers, but it also underscores and supports the dramatic action of the narrative in a very direct and straightforward manner. The contrast with Cage's scores for Cunningham is striking. If Roland Barthes' phrase about 'the terror of uncertain signs' (cited Gorbman 1987: 58) comes to mind when considering the reception some critics have accorded the dance accompaniments of John Cage, often resorting to supposedly humorous but ultimately trivializing attempts to describe the sounds heard, for a typical audience for *La Fille Mal Gardée* there is no such ambiguity of musical intention, and the familiar musical codes of the eighteenth

and nineteenth centuries operate with clarity and precision to complement and enhance the action. Music and dance always seem to work closely together and inform each another in many different ways. To a degree this happens through the intrinsic qualities of the music and dance themselves, particularly the mime sections. Heard apart from the dance and without knowledge of the actions that it accompanies, the music might well conjure up generalized images and sensations from the world of the ballet, individual numbers evoking particular emotional qualities and situations such as romance, anger, the pastoral, or the comic. The dance, deprived of its music, but with its setting, costumes and movement intact, is certainly not abstract or ambiguous, and its gestures and rhythmic clarity serve the narrative in a direct and straightforward manner. However, when music and dance are experienced together they are able to imbue each other with new or added significance. For example, musical structures that might be explained in terms purely of musical convention (for example the B section of a ternary form number being composed in the relative minor key of the A section) can become dramatically meaningful in the context of the ballet.

Another aspect of Lanchbery's work was the orchestration of the music. The power of different instrumental timbres to evoke associations and connotations in the mind of the listener has already been mentioned, and Lanchbery employs many familiar codes and conventions in his use of instruments to comment on the characters and the action. Sustained, long-breathed melodies carried by violins, with harmonies filled out with flowing harp arpeggios, signify the idea of romance in the main theme of the overture and later in a duet later danced by Lise and Colas, marked in the piano score 'Love is upon them'. Instruments of extreme tessitura are used for comic effect, notably the deep trombone notes and tuba solo to which Alain dances his first solo, the music staccato and disconnected, emphasizing his lack of physical co-ordination and contrasting markedly with the more sustained and legato music which introduces Lise.

Lanchbery's score is also remarkable for its ability to match themes with characters, their rhythmic and melodic features working effectively to intensify the different dramatic situations. Although there is no rigorous Wagnerian system of leitmotifs at work in the ballet, Lanchbery does attach themes both to the main characters as well as to actions (e.g. churning the milk), general moods (tranquillity, longing), and dramatic ideas (a 'disaster' motif is introduced in the last act, very clearly established in the doom-laden stormy orchestral prelude). Some of these themes recur throughout the work, whereas others serve their particular purpose and are then abandoned (e.g. Lise's Rossini melody). Ashton uses these themes in a variety of ways: for example, Lise makes her entrance to the Rossini melody from *The Barber of Seville*, descending the stairs at the side of the house to the farmyard, and at this point the music serves primarily to underscore her entrance and establish the main traits of her character. Later she dances to that same music, and particular features in its melody and rhythm are each time used in different ways and to varying choreographic and dramatic purpose. For example, but without wishing to labour the point, in bars 13 – 14 there is an octave leap from g to g', with the higher g emphasized through being held for 1 ½ beats. Each time this motif reappears it coincides, albeit very subtly, with a different elevated gesture: the first time it is heard Lise runs up a ladder to look through the stable window, and on its second and third occurrences Lise throws a ribbon into the air. Ashton is not concerned with music visualization in the St Denis/Shawn manner, but such moments could legitimately be referred to as Moments of Music Visualization: they are similar to but quite distinct from Chion's 'synch points'. Lise's entrance also immediately establishes the essential qualities of her character. Clearly this is partly achieved through the dancer's obvious youth and beauty, but the contribution of the music is also important and the aptness of her theme can be explained in several ways. Jordan has suggested that she enter quietly so as not to wake Simone, and that the text of the Rossini aria ('Piano, pianissimo') determined the choice of the theme. (Jordan 2000: 70) To make this connection, however, demands some knowledge of the original opera; in addition, Lanchbery uses only the orchestral accompaniment, omitting

the vocal line, which is more staccato in its articulation. Another possible interpretation might be found in the shape of the melody itself: the construction is simple in that for the first six bars the music rises up the scale of G major from g to a', rhythmically alternating long notes with quicker semiquaver groups; in the last two bars, the music rapidly descends to the opening g, again following the same scale. The first part of the melody could be seen as paralleling the dreamy, romantic side of Lise's character; the second perhaps represents the light-hearted aspects of her character and might be compared to the sound of laughter. Although such an explanation might seem fanciful, in the context of the ballet it is not so outlandish or absurd. Later, when Colas makes his entrance and he explores the stage looking for signs of Lise, we hear the theme again, and its use indicates very clearly where his thoughts lie.

This section contrasts strongly with the immediately succeeding music that introduces the Widow Simone, also from the first scene of *The Barber of Seville* where it serves as a contrasting B section in a ternary aria. The scoring here is dominated by woodwind instruments and *pizzicato* (as opposed to *arco*) strings; juxtaposed with the music for Lise, the passage has a more raucous quality. The nagging aspects of her personality are reflected in the repetitive nature of her music, making use of insistent *ostinati* and sequences to develop and extend the material. Curiously, however, the music used to introduce Simone in the Ballet du Rhin version is actually that used by Lanchbery for Lise's Ribbon Dance. In the context of the ballet these observations may seem very straightforward and obvious, but the real point being made here is that the full meaning and significance of these moments in the drama is not located so much in the intrinsic qualities of the music and dance considered independently of one another, but rather in the way that each takes on qualities of the other. One can understand the music purely in its own terms, but it remains the case that quite mundane features, not least the use of major and minor modes, take on an added potency within a dramatic context. People sometimes speak of major keys as happy or bright, minor keys as sad or dark, though such distinctions are a little

crude. In this ballet, however, the modes do operate in this way, their intrinsic qualities brought out and enhanced by the narrative. Lise and Colas are introduced with major key themes, though in their melancholy moments the music will shift to the minor mode; Simone and Alain are identified initially with minor key music and the contrast with the romantic couple is further underlined. Minor key music is also used for Simone's Clog Dance, enhancing its grotesquery, for the storm scene and for the disaster motif that becomes important in the latter part of the ballet. When the landowner Thomas storms out, furious that Alain will no longer marry Lise, his introductory music, with its pompous chords and empty scale passages, which was heard first in the major key, is now transformed into the minor mode.

Lanchbery also makes dramatic use of tonal contrasts. For example, there are many places in the ballet where simple closed forms are used, such as ABA with the B section in the relative minor or major key. Colas makes his first entrance together with his friends, accompanied by the 6/8 major key theme that is associated with him, a genre of music typical of that used to characterize male leads in classical ballet; left alone he looks around for Lise, and at this point the music moves into C minor, reinforcing a passing feeling of melancholy and solitude, before the music returns to the A section theme for a bravura solo with big jumps and turns for which the music provides powerful rhythmic and dynamic support. The minor mode is also used for the sad, longing melody, full of sighing suspensions, which accompanies those moments of mutual longing the two lovers feel for one another. In these ways, major and minor tonalities are used in a direct and straightforward manner to underscore moments of happiness, anger, melancholy, and solitude.

Tonality also plays a part in creating and differentiating contrasted emotional worlds. The most vivid example of this is to be found in the scene where the Widow Simone falls asleep leaving the captive Lise free to act out her dreams and subsequently to dance with Colas. Here the music moves abruptly

from F major (a bright and lively dance for which Simone beats out the pulse on a tambourine) to the flattened submediant key of D flat major (when Simone wakes the process is reversed). The abrupt move to a tonally remote key helps to create the feeling of sensuality and dreaminess appropriate to the scene, enhanced by the gentle, widely spaced string chords heard at this point, and dramatises musically the distance between Lise's world of daydreams and her life with Simone. There is a similar moment in Act One when Colas tempts Lise away from her work. During the course of a lively dance marked *Playing Horses* in the score, complete with sleigh bells, the music again moves abruptly from F major to D flat as the couple forget the world around them, anticipating and preparing the key of the duet which immediately follows and is marked *Love is upon them*. The lovers are completely caught up in their own world, the distance from mundane reality once more being emphasized by the move to D flat major; up to this point the music has remained within a comparatively narrow range of keys, particularly D and G, so the abrupt shift takes the audience on a long journey not only in terms of tonal space but also of emotional space.

Tagg drew upon the baroque theory of the affects, and many formulas familiar from eighteenth and nineteenth century music are to be found here fulfilling a dramatic function, notably the bagpipe-like open fifth bass drones and horn calls which accompany the trip to the country for a picnic at the start of scene 2, clearly alluding to the opening of Beethoven's Sixth Symphony.

Lastly, there is the manner in which the music can often affect the spectator's perception of the structural and dynamic qualities of the choreography. The *Dance of the Cock and Hens*, the first dance of the work, is a case in point. The cock and hens are first glimpsed as shadowy figures asleep on a bench in the farmyard wall towards the rear of the stage. The awakening of the birds begins during the second half of the overture: after stretching to full height the cock begins to move, first forwards and then in a circular pathway with big, expansive steps, raising and lowering the wings in a manner that parallels the increasing

dynamic of the music. The hens descend from their perch immediately afterwards, to the sound of a cuckoo-like birdcall in the orchestra, and shake out their feathers. But although connections can be made between the timing of music and dance, there is no attempt here to match movement qualities in the music, or vice-versa; the flow of the music with its constant undertow of triplet quaver arpeggios contrasts with the sharper movements of the birds who clearly mark out the pulse in their highly stylised steps. Without sound it is possible to imagine a very different kind of music that instead picks up on and amplifies in a rather more obvious way the rhythmic characteristics of the movements; one could make a direct comparison here with opening dance of Christopher Bruce's *Rooster* (1991) which visualizes with mimetic movements of the head and neck the eponymous track by the Rolling Stones. In *Fille* the music provides a time structure for the action, but the music does not emphasize movements in any particular way.

Nevertheless, although music and dance each have their own rhythmic and dynamic qualities at this point, they do still work to a common underlying pulse. The movement, although closer to mime than to dance, has a rhythmic clarity that communicates well whether seen with or without sound accompaniment. The movements of the cock and hens are always rhythmically precise, not only in their stepping patterns but even in the timing of such actions as the rustling of feathers and the descent from their perch, all of which are organized in accordance with the musical pulse.

The *Dance of the Cock and Hens* itself is heralded by a lively five-bar introduction that marks a clear change in the mood and dynamics of the music. The music has a fanfare-like quality, reminiscent of a cockcrow. The demarcation lines between the overture, the introduction and the dance itself are clear and obvious in the music, though without that music the divisions in the movement are nothing like so strong or clear-cut. The music therefore marks out and emphasizes the change of mood, and enhances the perception of the structural

divisions in the movement. Significantly, Ball (1994) too has noted the difficulties in establishing choreographic phrasing in the dances she analysed when the music was absent.

The music for the dance itself is very lively, in 6/8, and in ternary form (A A' B B' A A' + 5-bar coda). The music is in G major, and is mostly harmonized with chords I and V; only at the ends of phrases are there additional chords to create more extended and defined cadences. The piece opens with a joyful, trumpet-like melody based around a rising G major arpeggio, strong accents being attached to some of the main beats through the use of rising acciaccatura figures reminiscent of those used by Rameau in his onomatopoeic keyboard piece *La Poule*. The cock and hens tend to use the accents in the melody to jump, kick, raise their wings, or scratch their calves, but although the accents in the music provide a structure for the steps, the most significant aspect is surely the way in which the music gives added power and strength to these moments, sharpening the rhythmic focus of the dancers' performance for the spectator. The other layer of the music is a neutral vamping accompaniment of pulsating repeated quaver chords, which provides rhythmic energy and drive.

The phrasing of the music is clearly reflected in the choreography; the birds, for example, face in different directions for the different musical phrases (in A they face the audience, in A' they turn their backs). The strong musical accents serve not only to strengthen the visual impact of the jumps and kicks in the choreography, but also to structure them. The added power of the return of the A section of the music helps to strengthen the perception of the power of the movement with its forceful kicks and jumps.

These sections of *La Fille* have been considered at some length not only because they demonstrate some aspects of the analytical approach being developed here, but also because they lead to questions concerning the degree to which similar phenomena still exist in contemporary dance. This chapter has

already touched upon the ability of musical structures and tonal functions to affect perception of the structure of a dance. In the course of this thesis, the extent to which intrinsic musical qualities such as timbre/orchestration, mode, intervallic tensions, melodic contour, accent, association and connotation, and texture inform the understanding of a perception of the dance, as well as vice-versa, has often been mentioned. Consideration of *La Fille* shows how such relationships derive in part from context: the structures and melodies of this ballet are in themselves for the most part formulaic and neutral, embodying the conventions of eighteenth and early nineteenth century dance music, but heard in a dramatic context they seem to take on some of the qualities of the action and achieve a new significance. Similarly, perception of the dance is focused in different ways by the music. The studies of *Never Again* and *Points in Space* in Chapters Four and Five ask to what extent similar mechanisms may be discovered in these very different works.

CHAPTER FOUR

NEVER AGAIN

Never Again is described in its title credits as 'an original work created and realized collectively by Lloyd Newson and DV8 Physical Theatre'. The work was commissioned by Channel 4 and filmed in thirteen different locations around London in 1989.

DV8 was founded in 1986 by Lloyd Newson, Nigel Charnock, Liz Rankin and Michelle Richecoeur. Their name has been variously been interpreted as a homonym for the word 'deviate' and as relating to the words 'dance' and 'video 8'. Despite the strongly collaborative nature of their working processes, Newson is the principal choreographer and spokesman for the group; his presence and guiding spirit has been the constant factor in DV8's evolution. The group made its mark quickly and rapidly established itself as an important and influential presence in British dance, winning large audiences and international acclaim. There are many factors informing this success, not least the bold theatrical imagery and physical risk-taking that is the hallmark of their performances. Within the context of British contemporary dance in the 1980s in which a cooler and more abstract aesthetic seemed to dominate, DV8's performances were startling in their sheer visceral impact and readiness to deal with taboo issues of sexuality, gender and social alienation. Newson has little time for the purely aesthetic and has spoken of his lack of interest in dance for dance's sake, or for the pursuit of abstract patterns of movement in space: 'I only create when I have something to say . . . the work is always about issues; things that concern or affect my life at this given time'. (Watson: 1993) In fact, Newson's work is primarily concerned with the ways that people relate to one another; he has often dealt with themes of loneliness, isolation and oppression, and many works explore issues relating to gender stereotyping and homosexuality. He is fascinated by the relationship of body language to social attitude, and in one interview spoke of the ways in which arms clasped in a duet might just as easily embody intimacy or entrapment. (Meisner: 1992) His attitude towards common choreographic devices such as the use of unison reflects this same psychologically informed approach to form: 'I know why dancers do a lot of unison,

because the form conveys power – but I think very few people question, really, the idea of unison. If in real life I did exactly the same movements as you were doing, it would probably freak you out.’ (Meisner 1992)

As with Pina Bausch’s work, which had a powerful influence upon Newson and several other British choreographers in the 1980s, the performers contribute hugely to the creation of each new work, drawing upon their own lives as well as researching new areas of experience. Because performers are required to make a deep personal investment in the creation of each new work, revivals with new cast members have been rare and sometimes problematic in a way that is not the case with other forms of dance theatre in which there is not the same degree of personal identification between an individual performer and his/her role. The work also requires a very particular kind of performer: Newson once said that ‘he was tired of young, nubile, thin things who have only had a life in the dance studio’, and that he preferred instead to draw on the maturity and insight of older, more self-aware performers. This has occasionally led to some unusual, if also very striking castings: *Bound to please* (1997), which explored the topic of the body beautiful, included a role for the actress/dancer Diana Payne-Myers who appeared naked although by then aged nearly seventy (Snape, 1999: p.10); *the cost of living* (staged in 2000, and reworked for film in 2004) featured David Toole, who was born without legs but is nevertheless able to move with tremendous strength and agility using only his hands for support.

Although much has been written about the socio-political aspects of DV8’s work, commentators have rarely addressed the use of music in their performances. Keith Watson’s review of *Enter Achilles*, a piece which explores aspects of masculinity and is set mainly in a pub, commented on the way the piece used juke-box hits in tandem with an ambient score by Adrian Johnston to underline its themes.

Music [is] always a key factor in DV8’s work. Keenly aware of the power of the popular song when it comes to plucking sympathetic chords with the audience, Newson mercilessly plunders pop’s back catalogue to pull out a magnetic sound track to set alongside Adrian Johnston’s evocative score. Carmel’s *Bad Day*, Tom Jones’s version of *Kiss*, REM’s *Shine Happy People*, The Only One’s *Another Girl*, *Another Planet*, Haysi Fantayzee’s *Shiny Shiny* (yes, really)...these should all end up

on a TV-advertised CD of 'Songs To Get Drunk To'. (Watson: 1996)

Janet Adshead-Lansdale (2002) has discussed elements of the score for *Strange Fish* from a feminist perspective inspired by the work of Susan McClary and Carolyn Abbate, focusing on 'vocabularies of sound and movement that might represent male and female characters, or more subtly, femininity and masculinity: a semiotics of gender as revealed in a set of conventions'. (p. 123) She describes the extraordinary multi-layered vocalizing of Melanie Pappenheim as representing the subversive voices of women, and refers to different kinds of vocal production as embodying different aspects of gender identity. She identifies a particular kind of eroticism in those moments when Pappenheim sings with and against herself in multi-tracked recordings, invoking Elizabeth Wood's term 'sapphonic'; she interprets the use of these textures as a denial of 'the culturally dominant male/female pairing in representations of love, ecstasy and conflict'. (p. 133)

A number of general musical preferences can be gleaned from DV8's work list. In addition to an interest in pop music, often used ironically, a number of favoured collaborators may be identified. Adrian Johnston worked on *Enter Achilles* (1995) and *Bound to Please* (1997), and he collaborated with Jocelyn Pook on *Strange Fish*; Pook wrote the score for *MSM* (1993) and collaborated with Sally Herbert on the music for the stage version of *Dead Dreams of Monochrome Men* (1988). Herbert worked on *My Body, Your Body* (1987), and 'if only...' (1990), but is best known for her score for *Dead Dreams*, DV8's most notorious work; inspired by the life of the serial killer Dennis Nilssen, this piece included scenes of homosexual murder and necrophilia. The approach to music in *Dead Dreams* is in fact typical of much of DV8's work at that time, and several of its features recur in *Never Again*. The first music heard accompanies a scene set in a discotheque and uses the drum machine and synthesizer rhythms of the period in a naturalistic way to create a suitably trance-like ambience and sense of place. As the action becomes stranger and darker, the musical commentary becomes increasingly valuable for its ability to contribute dimensions of feeling that are not necessarily present in the images alone. There is a long passage consisting only of aggressive, highly repetitive electronic drum rhythms, underscoring what is probably the most violent and physically extreme sequence in the choreography; the mechanical and unvaried quality of these sounds together with their high volume and fast tempo

enhance the brutality of the scene, as well as bringing an element of formality which might otherwise have been lacking if the only sounds present had been those created by the actions of the dancers themselves. The score also includes a variety of electronic soundscapes, some augmented by solo strings, which bring an altogether darker and more interior quality to the action. The musical approach is striking for the way in which it adds qualities almost of tenderness to actions that most viewers would regard as sordid and perverse; largely because of the music, the murder and its aftermath seem to be transformed into what might almost be described as a strangely erotic ritual. It is the loneliness and despair that underlies these acts that is emphasised rather than the psychologically warped character of the Nilssen figure. Another score might have emphasised the sheer horror of the actions, and indeed the images stripped of music take on a mundane and far more shocking aspect. Arguably the most chilling and callous moment is also achieved through the use of music, and occurs at the very end when Newson puts on a recording of a frothy up-tempo pop song while surveying the effects of his handiwork (two almost naked men lie on the floor, a third hangs upside down from the ceiling).

In their earliest works DV8 sometimes dispensed with music altogether for long periods, making telling use of the sounds created by the dancers' breath and their bodies crashing against both one another and the floor and walls of the dance space. The film of *My Sex, Our Dance* (1986) contains little music as such but is aurally very vivid; filmed in a space with a highly resonant gymnasium-like acoustic, the sounds made by the two male performers in this athletic and often violent dance colour the piece in a remarkable and evocative way. When music is introduced towards the end of this piece, it is apparently an ironic version of James Brown's *Sex Machine* by The Flying Lizards, though the acoustic renders it unrecognisable as such in the film version of the dance. (Winter: 1989, p.12) Similar remarks apply to *Deep End* (1987), where the sounds of raised voices, screams and cries, heavy breathing and of physical movement assault the viewer for long periods; when at one point a sentimental love song is played ('A man and a woman'), the work briefly enters an altogether different emotional world, far from the heightened realism and hysteria that surround it. There are several comparable moments in both *Dead Dreams* and *Never Again* when music is replaced largely by the sounds of the dancers' actions. One effect of dispensing with music in these works is to heighten the audience's awareness of the degree to which the performers push

themselves physically, an aspect of dance that is rarely emphasised in performance and is to some degree even masked by the presence of music.

Never Again deals with a broader range of sexual relationships than some of DV8's earlier works, which had a more exclusive emphasis on male homosexuality. It was created specially for television and first screened as part of a campaign against the then notorious Section 28, which outlawed the promotion of homosexuality in schools and was widely seen as a part of a backlash on the part of the Conservative government against liberalization and the growing social acceptance of sexual minority groups; the title of course is a slogan coined for use in relation to the holocaust.

Never Again occupies a problematic place in DV8's output and has now effectively been airbrushed from the group's official history. Whereas many of DV8's pieces exist in both staged and film versions, *Never Again* was only seen in its television incarnation. Newson apparently considered the work a failure, and he has never shown any inclination to revisit it or to rework its material for the stage. The reasons for this dissatisfaction are unclear: Ana Sanchez-Colberg, who appears among the crowd in the cocktail party scenes, recalled that the filming was completed without any obvious friction between Newson and the director (personal conversation); later, however, when Newson saw the finished product he became unhappy and more or less disowned the piece. Exactly where the problems were felt to lie remains obscure, as Newson has never spoken publicly of how the completed work fell short of his original intentions. As a consequence there are no references whatsoever to the film on DV8's otherwise comprehensive and informative website, with the single exception of a passing mention in an essay by Josephine Leask, and background information about the making of the work is now virtually non-existent.

Never Again has perhaps become something of a period piece, rooted very much in the time at which it was made: with the passing of time its flaws and weaknesses have become harder to ignore, and many viewers now find that it has dated badly. Nevertheless its musical score is interesting to consider as it exemplifies and illustrates many of the issues discussed in the previous chapters. The main focus of interest in this account of *Never Again* is the music and its relation to the overall shape and structure of the film as a whole. Considered in relation to the historical models outlined in Chapter

One, the work might be said to belong within the Horst tradition, the music carefully tailored to the structure and dramatic content of the film; the relationship between music and movement, however, inevitably lacks that direct physical contact between musicians and dancers that Horst so clearly valued.

Never Again is also comparatively unusual in DV8's oeuvre in having a through-composed, original score. The nature of the involvement of the composer in the planning and evolution of the work is not known, but not one of the dancers who appeared in the piece and to whom I have spoken about the experience have any recollection at all of working with music during the making and filming of the piece other than in the one section which does demand a high degree of rhythmic co-ordination and for which a rhythm track of some kind was used in rehearsal.¹ Wendy Houston, a long-standing collaborator, has confirmed that Newson prefers always to create the movement first and then to seek out suitable existing or specially commissioned music, and in this respect the work does not appear to have been an exception. (personal conversation, October 2003) However, even if the working process had been different from that which has been assumed here, the observations made in relation to the score would remain valid since they are primarily concerned with the contribution of the music to the work seen from the spectator's perspective.

Some general observations regarding the score

The music for *Never Again* was composed by Dave Sinclair. Its musical language is eclectic, drawing on a range of different styles and approaches: parts of the score are modal, consonant and melodic, but there are also percussion-dominated sequences, electronic soundscapes and sections in which music in the conventional sense of the word disappears and the sounds of the environment in which the actions take place come to the foreground. A number of disparate styles are alluded to including rock, ambient and contemporary classical music; rather than aiming for a consistent musical language, Sinclair draws upon whatever devices seem most apt for the evolving drama. The instrumental resources include synthesizer, electric guitars, piano and percussion,

¹ Many of the extras employed for the cocktail party scenes were recently graduated students from the Laban Centre. I have spoken informally to several of these dancers about their recollections of the filming of this work, in particular Ana Sanchez-Colberg; I was also able once to question Wendy Houston.

all sound sources characteristic of rock music and primarily bearing urban connotations and associations. The musical style and instrumentation selected for each section make strong statements in their own right, and the succession of contrasting textures speaks directly and immediately to the viewer. These choices undoubtedly contribute to the identity and meaning of the work as a whole, and given a different set of musical decisions the emotional impact and significance of *Never Again* might have been very different.

The method of study adopted was to consider the music and images separately, as well as examining the ways in which they work together. As no notated score was available for study, it became necessary to transcribe sections of the music; this was not easy given the limitations of the sound quality of the videotape, and only a few sections have been included here in outline form.

In order to provide an overall context for this discussion of the piece, a general synopsis of the action in each section is included, after which the music is discussed in fuller detail both in its own right and in relation to the drama. For convenience, the film has here been split up into four parts; the divisions do not necessarily have any particular structural significance, and in the film these sections follow one another without a break

Synopsis of the action

Never Again centres on the experiences of three couples: two men, danced by Russell Maliphant and Lloyd Newson; two women, danced by Wendy Houston and Michelle Richecouer; and a man and woman, danced by Ann Dewey and Nigel Charnock. Sequences in which these characters feature are interspersed with crowd sequences, 'providing images of the personal amidst the impersonality of the crowd, the sense of impersonality in the group sequences emphasised by the lack of individuality in the movement material that the group members performed'. (Rubidge 1993: 206) The male and female couples may be considered as representative of gay and lesbian sexuality; the relationship between the man and the woman is less straightforward and sometimes confusing, although they are presumably intended as essentially a heterosexual pair. After the tenderness of the opening scene, in which Charnock and Dewey both appear,

and the exhilaration of their subsequent duet, fear and unease begin to intrude, seen in the way that they look at one another at key moments, and ultimately they seem to become estranged. Charnock has a brief enigmatic encounter with Houston in the central section of the work, seemingly part of a desperate search for intimacy and human contact; Dewey however disappears from the action following a scene in which she is pelted with tin cans, and she is not seen again other than in a fleeting moment when she is glimpsed behind an iron gate before fleeing from Charnock.

Near the start of the piece, two of the couples (but not the two men) appear among the guests at a cocktail party being held on a high platform in a derelict warehouse, but before long they find themselves cast out and enter into a nightmarish and surreal underworld through which they embark upon confused and often terrifying journeys. Josephine Leask (1999: 74) has observed how 'shots of the performers running down endless corridors and entering dark empty rooms suggested the psychological fear of not belonging anywhere and of being ostracized by society', and there is perhaps an obvious psychological symbolism to be found in this descent into the nether regions. Only in the final minutes of the piece is the female couple reunited. At the very end the two women find themselves within a company of outsiders, shown posing like sentinels in the spaces opened up by the exploded windows and collapsed walls of a derelict block of flats; the imagery of the conclusion has distinctly post-apocalyptic connotations that are amplified and underlined by doom-laden music.

NEVER AGAIN – A TIMELINE

0'00" - c. 2'28": The camera pans across naked bodies; gender is only gradually revealed.

2'28" – 4'20": The female couple is introduced (Richecoeur and Houston); they dance their first duet.

4'20" – 4'45": The guests at a cocktail party set on high platform are introduced.

4'45" – 6'00": The male/female couple is introduced (Dewey and Charnock); they dance together.

6'00" – 6'27": The action returns to the cocktail party.

6'27": The male duet begins (Newson and Maliphan).

8'04": After the men kiss, a wine glass breaks at their feet and the behaviour of the crowd becomes ever increasingly hostile and fascistic.

8'48": The mob becomes more explicitly Nazi, with Hitler salutes and highly regimented unison movement. Meanwhile, the male duet changes in tone as the two men begin to cling to one another in the face of adversity.

10'41": Richecouer and Houston fall from the platform on which the party was being held; they find themselves in a space in a derelict building, separated from one another by a transparent glass barrier. They attempt to dance together again, but fail.

12'50": The action becomes increasingly surreal, cutting between the three different couples; the men are assaulted from above by the unseen crowd.

14'28": Dewey's solo; she frantically tries to escape from the tin cans which are being thrown at her, struggling to stay upright as she trips and skids on the uneven ground.

15'58": Houston is discovered wandering through underground tunnels and chambers; her movements become increasingly frantic. She encounters Charnock, propelling him down a flight of stairs after a brief struggle.

18'41": Charnock encounters a group of young men, also a female ballerina, posed in the cubicles of an old-fashioned white-tiled public lavatory.

20'24": Charnock enters another room in which bodies are suspended from the ceiling like meat in a cold store.

22'02": After walking through a series of tunnels, Charnock is caught in a trap and finds himself suspended by his feet.

22'15": Richecouer and Houston are discovered together again; Houston smashes the glass that separates them and they walk into a lighter and airier room in which once again they dance together.

23'21": For a brief moment, the two men seamlessly continue the female duet.

24'25": The derelict building in which the two couples find themselves is fully revealed; its broken windows and door frames are inhabited by a curious community of outsiders, and the scene has a mood and atmosphere that is distinctly post-apocalyptic.

Music and action: a detailed commentary

Part 1.

The opening images of *Never Again* suggest an Edenic state: naked bodies slowly and gracefully move over and around each other, and the camera pans across their limbs as if exploring the surfaces of an abstract moving sculpture. The bodies are seen only partially and in close-up, bathed in a warm golden light; gender is revealed only gradually, thereby undermining any preconceptions with regard to gender or sexuality that might be held by the viewer. The world beyond does not exist at this point in the drama, only darkness. The images sometimes seem to evoke natural phenomena such as wind-blown sand in the desert or the movements of animals as much as they do humanity.

This section is immediately followed by a duet for Houston and Richecouer (2'28" – 4'20"); both are clothed, and they dance together in a style that, like much of the choreography in this piece, owes something to contact improvisation. Each of the women takes it in turn to support the other, lifting, rolling over and manipulating their bodies in a continuous flowing sequence of movement; in marked contrast to traditional balletic forms of partnering in which male and female roles are clearly defined, neither woman is presented here as dominant in the relationship.

Musically, the first sections of the piece may be viewed as a single process, paralleling the narrative transition away from the untroubled idyll of the opening moments to a socialized world of prejudice and intolerance in which danger and threat lurk beneath a civilized veneer.

The first sounds to be heard are played on synthesizer using a patch comprised predominantly of string sounds; the textures possess a richness, warmth and sensuality that is unique in this piece, so that when very fleeting and distorted references to these sounds occur later in the work their significance is clear. A timeless quality is achieved partly through the use of long-held chords in which there is no perceptible feeling of pulsation, and partly through the slightly meandering and repetitive form of the music in which a handful of phrases and motifs are repeated and shuffled without any strong sense of organic development or conventional cadence. Example 1 shows this section in

outline; durations and chords are not necessarily an exact record of what is played, but the transcription reflects many of its qualities.

The melodic line is dominated by a descending major second, an interval that Deryck Cooke (1959: 106) associated with an incoming feeling of pleasure. The expressive qualities of different intervals can seem to become more specific and concrete when heard in a dramatic context or allied to a text, and Cooke's characterization of this interval, which here plays such a dominant role, seems most apt. The motif's falling contour has something too of the quality of a sigh, and many composers in history have used this device to achieve precisely that emotional quality; each pair of chords can also be seen as embodying the rhythm and dynamics that characterize the gentle inhalation and exhalation of breath. This same descending

Example 1.

$\text{♩} = 72$

1
6
10
15
20
25



second is in fact heard many times in the course of the piece; one could interpret its use as a kind of leitmotif, its distortions and transformations indicative of the extent to which the fate of the protagonists has departed from the peace and calm of the opening scene, even though its use might have originated as little more than a mannerism of the composer.

Some of the phrases in this section conclude with a descending fourth, a gesture immediately reminiscent to the present writer of the reassuring ‘maman’ which forms the last two chords of Ravel’s *L’enfant et les sortilèges*. These two melodic ideas, both based on descending intervals, alternate with a contrasting motif that rises and then falls back upon itself. The dissonance created at this point makes for the only real element of harmonic tension in this section of the music, and enhances the feeling of melancholy and longing (Cooke uses words like ‘pain’ and ‘anguished longing’ in connection with the descending semitone, and his characterization of the expressive properties of this interval again seem appropriate in this context). The added note chords and pentatonic cluster formations, as well as the manner in which one chord dissolves into the next, here all combine to create the overall mood of tenderness and sensuality.

In this section the music underscores the images; there is no sense that the dancers are responding to these sounds in any way, even though the dynamics of sound and movement are very similar. Whether by accident or design, the rise and fall of the melodic line often seems to shadow the rise and fall of the bodies, and there are several moments when the parallels seem to be almost exact (c.f. bars 10 – 12). This might have been intentional on the part of the composer, but it also might just as easily have been an inevitable by-product arising out of the similarities in the contours of the choreographic and musical materials. It is nevertheless the case that if these kinds of connection between sound and image are noted, they have roots in a way of seeing and hearing that is actually profoundly shaped by the assumptions and conventions of music visualization.

This section also uses for the first time a device much favoured by the composer in which fragments of the music to be heard in the following section are played in a kind of pre-echo. On this occasion short melodic phrases played on electric guitar are heard, their triplet groupings foreshadowing the 9/8 metre of the music for the women's duet. These phrases are also dramatically significant in that they are always synchronized with some new revelation of gender, such as a glimpse of a male eyebrow or bald head, or Dewey's long and distinctly feminine hair; the contrasting timbre of the guitar also hints at other worlds of experience and feeling.

In the film the cut from the opening scene to the start of the women's duet is abrupt, but by allowing the musical material of the two sections to overlap a more gradual transition is achieved, as well as a degree of tension and expectation as the women gradually prepare themselves and move into position for their duet. The music for this section is interesting for several reasons. On one level its hard-edged sound world of electronic percussion, guitars and piano embodies a strength and confidence that informs our understanding of the character and actions of the two women; on another level, the three distinct sections of the music strongly shape our perception of the structure of the duet, which when stripped of sound is less clearly defined in outline. As has been observed, the introductory section (2'28") functions as a transition away from the opening sequence, mixing elements of the music to come with reminiscences of music already heard. The central section (3'10") is stronger and more purposeful, dominated by a repeated piano motif that is gradually overlaid with more extended

melodies and chords played by electric guitars; in the last section (3'58") the pulse speeds up considerably, the dynamics become louder, and as the bar lengths gradually shorten the music drives the choreography to its conclusion; the dancers fall to the floor and the action shifts immediately to the cocktail party.

These sections are perceptible in the movement to some degree when viewed without sound, though the choreography can at times seem more cautious and to flow less spontaneously. With the music restored the dance seems to take on a new energy and purposefulness, and the particular qualities of music and movement seem to infect and inform one another. This can be illustrated particularly in the second section, which begins after Richecouer lowers Houston to the floor and kneels across her stomach; this moment is accompanied by a long-held and electronically distorted chord, in fact the very last of the opening section. As Richecouer rolls forward the main piano riff begins, triggered as always first by a hissing cymbal and two upbeat quavers played on drums. (Ex. 2) The riff has a distinctly pendulum-like quality, its melody rising to a moment of

Example 2

The musical notation for Example 2 consists of two staves. The top staff is labeled 'Percussion' and the bottom staff is labeled 'PIANO'. The Percussion staff begins with a double bar line and a key signature of one flat (B-flat). It features a long-held chord (a whole note) that is electronically distorted. Above the staff, the text 'Cymbal and drums' is written, with a cymbal icon and a drum icon indicating the sounds. The Piano staff begins with a treble clef and a key signature of one flat (B-flat). It features a melody that rises to a moment of suspension and balance before the process is repeated. The melody is composed of eighth notes and quarter notes, with a final measure containing a whole note chord.

suspension and balance before the process is repeated. The dancers tend to move through the beats of the music rather than emphasising them, but the phrasing of the movement does nevertheless seem to correspond with that of the music. The result is that in the mind of the viewer the way which each dancer takes it in turn to manipulate and support the other is given an added clarity and shape that relates directly to the rhythms and phrasing of the score. The choreography organizes itself into the same two-bar units as the music, and each new musical phrase sparks off a new event in the dance. This is an example of the way in which the qualities and attributes of the music can sometimes be transferred across to the perception of the dance, and its melodic

shapes and rhythmic identity acquire an added layer of significance when experienced in relation to the choreography. When musical and choreographic accents do coincide, as when the two women momentarily seize one another by the shoulders and look into each other's eyes, the effect is all the more striking.

Near the end of the duet there is brief hiatus, after which the third section begins; here the dancers move with markedly increased energy and force. (3'58") This is supported by the music, which spirals to its climax by means of a metrical process that begins in 8/8, the main accents of the bar strongly reinforced by the percussion, followed by phrases in which the quavers are grouped into threes and then finally twos. (Ex. 3) This means of generating excitement through shortening bars, and therefore the distance between accents, is also used in the big crowd scene that follows the male duet.

Example 3 (melody line only)



The action then shifts to the cocktail party. (4'20") Included among the guests are the female couple who have just danced together, as well as Charnock and Dewey; the latter glance momentarily at one another before breaking away into the neutral space for an energetic duet in which for the most part the man lifts and supports the woman in a continuous stream of movement. (4'45")

During the party scene, the camera rests briefly upon the faces of various individuals, each shot being accompanied by a short melodic phrase based upon the

guitar melodies of the previous section; there are also random cymbal rolls and drum beats which add to the feeling of tension and unease.

The music for Charnock and Dewey’s duet is characterised by its breathless, surging quality, created by the use of rapid pulsating chords, changing time signatures and repeated melodic motifs. (Ex. 4)

Example 4 - figuration in first four bars continues throughout

Piano

5

8

15

Pno

17

Pno

1

20

Pno

5/4

5/4

5/4

5/4

23

Pno

27

Pno

30

Pno

32

Pno

36

Pno

1

39

Pno

41

Pno

44

Pno

47

Pno

50

Pno

54

Pno

1

57

Pno

60

Pno

63

Pno

In the transcription the music is notated with a mixture of 3/4, 4/4, and 5/4 time signatures. This metrical structure is not, however, perceptible in the movement; indeed it is very hard to locate a clear pulse in the choreography at all: the dancers move constantly and tend to pass through the music rather than attempting to mark its changing accents and metrical shifts. Although the fluidity and rapidity of the movement considerably reduces the likelihood of points of obvious coincidence occurring between music and dance, the shifting accents of the music increase the sense of unpredictability and spontaneity conveyed in this section. Watching the dance without sound, it is possible meaningfully to count the sequence in quick fours or eights, which is quite possibly how the movement was counted in rehearsal (the athleticism and speed of the dance must have required split-second timing). It is surely not insignificant that the music can easily be regrouped into 8 or 16 count phrases (e.g. 5+3; 3+5; 3+3+3+3+4), suggesting the use of a common larger rhythmic structure expressed differently in the music and the movement. The melody is highly repetitive and insistent, mostly based on ostinatos involving the alternation of slowly changing pitch dyads. For the most part the harmonies are fairly static and slow moving, though they are expressed through rapidly repeating chords; beneath the incessant rhythmic surface of the music, the rhythm of harmonic change speeds towards the end of the section, increasing the sense of ardour conveyed by the music. Finally a bass line is introduced as well as sustained string chords in the background, the mode's tonal centre slips down a tone from B flat to A flat for a couple of bars, and a new richness and warmth appears in the texture before the music abruptly breaks off. At one point electronic sounds are briefly superimposed over the piano music, foreshadowing the more angst-ridden central sections of the work.

Part 2.

After Charnock and Dewey's duet, the camera returns briefly to the cocktail party before cutting away to a third duet, this time featuring the two men. (6'27") An increasing air of danger and unease characterizes this section. Up to this point the duets have taken place in a dark neutral space, as if they were pieces of abstract dance performed in a theatre and by implication divorced from the real world, but from now on these interior spaces are swept away and the main protagonists are propelled into a harsher reality. The mood of the cocktail party gradually begins to change and becomes

threatening (8'22"); the guests begin to sway and stamp, and mundane gestures such as the running of fingers through the hair slowly metamorphose into explicit Nazi salutes (8'48" onwards). At this point the men move into another space in the derelict building below the platform on which the party is taking place. The women find themselves driven to the edge of the platform having become increasingly alarmed by the turn in the group's behaviour, and they fall to the space below in which the two men had last been seen; Charnock and Dewey too appear dismayed at this turn of events, but lose themselves in the crowd. The symbolic use of different levels here draws on familiar archetypes and the women's fall could be interpreted as a descent into hell and the start of a nightmarish journey into the underworld.

During the party scene, as the camera focuses in turn on the various groups present, pre-echoes of the music of the next section, a male duet, are once again heard. The music for this duet uses mainly percussion sounds, which at first are overlaid with some erratic bass figures on piano and unpredictable punctuating gestures on drums and synthesizer. (Ex. 5)

Example 5



The piano riffs soon disappear, however, and a long, purely rhythm-based section begins. At first the music is played on a drum kit in a loose jazz-based style and is fast and quite busy, dominated by hi-hat cymbal, with occasional landmark sounds (a bell-like sound on the dome of the cymbal, lightly accented figures played on drums). The descending second considered earlier recurs occasionally, here played on tuned drums and later in electronically distorted forms. At first the men move mostly in unison, turning and spinning, legs outstretched as each man passes gracefully over the other.

When the descending second is heard for the first time it accompanies the moment when one man leaps into the arms of the other, an initially graceful and athletic move that on its reappearances becomes increasingly energetic and violent. This is not the only occasion in this section when a strong gesture in the dance is reinforced by the music. At the same time, however, the lack of obvious larger-scale repeating patterns in the drum music increases the sense of unrest and overhanging threat.

At first the sounds are fairly quiet and distant, and the unpredictability of the music contributes to the feeling of unease and danger; however, following a moment in which the two men embrace, a wine glass breaks upon the floor and energetic electronic drum rhythms reminiscent of techno start up marking the beginning of a new phase in the action. (8'04") The dancers move out of the neutral space in which their duet began into the derelict rooms beneath the platform on which the cocktail party is being staged.

The crowd scene that follows is dominated by a gradually accelerating regular underlying pulse, its militaristic and forceful qualities embodying the coercive power of rhythm to unite people in action whether for good or ill. Towards the end of this sequence the music switches from duple to triple time, the movements becoming ever stronger and more tightly drilled as the section moves towards its climax. (9'46") Richecoeur and Houston edge their way to the balcony and drop down to the derelict space below; there is a telling moment of silence as they fall, though they hit the ground with an audible thump that is followed by a last brief outburst of the crowd's rhythmic onslaught. (10'52")

Part 3.

The two women now find themselves at their lowest point in the drama, separated from one another by a transparent glass wall seems to have a metaphorical significance: here it serves to divide the women, preventing and repressing the intimacy that characterizes their relationship; when Houston finally smashes the glass, they achieve a kind of liberation and once again are able to dance together. They pick themselves up and attempt to dance in a manner similar to that of their earlier duet, but their inability to touch and hold one another leads to repeated collapse and failure. The desolation of this moment is enhanced by the music, which is played on a solo piano

Example 7

The musical score is for a piano piece, marked 'Lento'. It consists of four systems of staves, each labeled 'Piano' or 'Pno'. The first system (measures 1-4) is in 4/4 time, with a key signature of one flat (B-flat). The tempo is 'Lento'. The first system starts with a piano (*p*) dynamic and ends with a mezzo-piano (*mp*) dynamic. The second system (measures 5-8) is marked 'cresc poco a poco'. The third system (measures 9-11) continues the piece. The fourth system (measures 12-14) ends with a mezzo-forte (*mf*) dynamic and a crescendo hairpin. The score features various musical notations including notes, rests, and slurs.

The other two couples are glimpsed in the background from time to time, like ghosts or memories from another time and place. The men are pelted with objects from above and make their escape. (13'35") From this point on the action becomes weirder and more surreal: Richecoeur and one of the men are glimpsed chained to one another with handcuffs, which momentarily fill the screen to the accompaniment of a hollow-sounding electronic drone (13'53"); Dewey, bathed in a curious white light, finds herself

in derelict space being attacked with tin cans which, terrified, she attempts to avoid in a wild and violently physical sequence (14'28" onwards); at the end of this scene Charnock looks on, curiously expressionless. At this point music in the conventional sense of the word is replaced by the amplified sounds of the missiles striking the ground and walls; there is a great deal of echo. The reproduction of different acoustics can imply much about the nature and size of the space in which sounds are made, and the resonance in this sequence creates a very distinct ambience and effectively enhances the feeling of emptiness and dereliction.

Wendy Houston is now seen alone in a dark passageway, its walls jagged and pitted like a torture chamber. (15'58" onwards) Here she encounters Charnock who first embraces her, and then begins to grip her ever more tightly; she breaks free, in the act propelling Charnock down a steep staircase into a dark and mysterious world of derelict underground chambers. (18'25") First he encounters a mysterious community of men occupying an old-fashioned, white-tiled public convenience (18'41"); the single woman is dressed as a ballerina, a role Newson perhaps associates with artificiality and an unnatural use of the body. The setting also seems to allude to the practice of 'cottaging', explored more fully in DV8's *MSM* (1993), in which men seek out other men for anonymous sex in public lavatories. Included are some figures recognizable from the cocktail party, though they are now more casually dressed; they stand, sit or lie in a variety of groupings, among them the pair of ballet dancers who dance together in one of the cubicles. The second chamber Charnock discovers is filled with bodies hung from the ceiling like carcasses of meat in a cold store (20'24"); these gradually begin to move, struggling and gyrating on the ends of ropes.

After the piano music of the women's duet has dropped away, the score becomes dominated by electronically generated and ambient sounds, including those heard in the assault on Dewey mentioned above. Other sounds used include distant voices, particularly a melodic ostinato based around an obsessively oscillating semi-tone, and percussion motifs such as the jazzy cymbal rhythms that accompany Charnock when he meets with Houston, used here once again to convey an air of threat and uncertainty as he moves towards her. (17'20") The music is in fact very carefully organized to reflect the various changes in the action, not only creating a potent sense of atmosphere and of the environment within which the drama takes place but also

regulating the level of emotional tension.

When the two men appear briefly at 13'36", their rhythmic percussion music is briefly recalled, and when they are pelted with broken glass from the high platform three massive distorted quasi- orchestral chords punctuate the action. (13'58") Other sounds evoke factory machinery, and even the rhythms of trains - perhaps an allusion to the trains that transported inmates to the concentration camps.²

At several points long crescendos are used to increase tension: for example, at 15'45" a long sustained pitch begins which gradually increases in volume so as to enhance the emotional impact and power of Houston's ever more frenetic activity. A much longer crescendo starts around 16' 20" constructed from layered electronic drones, harmonic shrieks and distant bells; the slow but relentless build up in volume and density lasts for around a minute and expresses something of the fear and confusion that inhabit the dancer. When that crescendo breaks off suddenly at 17' 33", Houston encounters Charnock; and the stillness, broken only by the cymbal sounds mentioned above, is unnerving. Effectively cornered, she approaches him and enters his embrace, though her arms do not encircle him and her hands remained clenched behind his back. His grip becomes tighter and she struggles to escape, all this accompanied at first by those same casual cymbal rhythms and then by knocking sounds which become faster and louder until she breaks away, in the process propelling Charnock down a staircase.

Melody returns in the music for the sequence in the public convenience, and it consists of a pair of chords sung by female voices that alternate and repeat hypnotically. The melodic line again consists of a descending major second and is slightly reminiscent to the present writer of the eerie, distant female chorus heard at the conclusion of Holst's *The Planets*. On the one hand the music is maybe intended to evoke here the cold and remote qualities of Holst's vision of Neptune; on the other hand the pairs of chords retain the sighing and breathing qualities met with earlier. The voices then acquire a distant accompaniment of fast rock drum machine rhythms,

² This reading is prompted largely by the many references and allusions to fascism and to Hitler's regime that occur throughout *Never Again*. As well as Jews, homosexuals and members of other minority groups were sent to their deaths in the concentration camps. Newson clearly found contemporary parallels in attitudes such as those that resulted either in repressive legislation such Section 28 or in the acts of violence and discrimination still experienced today by many homosexuals and lesbians.

similar to those that earlier accompanied the scenes of mob violence but here sounding more relaxed.

At 19'58" this sequence ends, broken off abruptly by a sharply accented string chord, and a lengthy section ensues lasting nearly 2 ½ minutes in which once again music is replaced by ambient sounds. Charnock wanders through the dark, deserted corridors, until eventually he opens a door and finds himself in what appears to be a cold store for meat, or maybe a kind of torture chamber. It is here that the bodies suspended upside down from the ceiling are encountered; as they begin to writhe, the creaking sounds produced by their movements become wilder and more animated and again evoke the sounds of passing trains mentioned above.

Charnock escapes from this space, but is caught in a trap and ends hanging by a rope from the ceiling at the foot of the stairs, his ankle caught in a noose. (22'02")

Part 4.

At around the time that Charnock's journey through the underworld comes to an end, the fortunes of the male and female couples begin to change and a kind of liberation occurs. During a moment of silence and stillness, Houston emerges from the shadows. A chromatic chord slowly builds up (22'22") but rapidly melts away when she smashes the sheet of glass that had separated her from Richecoeur earlier in the film. She steps into another room whose walls are peeling but which is nevertheless airier, brighter, and less oppressive than that of the underworld (22'28"); a wistful guitar melody accompanies her emergence, marking a distinct change in mood. (Ex. 8)

Example 8

System 1 for synthized strings; systems 2 and 3 for guitar.

The women dance together, and soon after the two men are also seen dancing in the same space. Their movement material derives from their earlier duets, but the feelings of urgency, fear and danger that were present before are gone. Richecoeur goes to a window, followed by Houston. The camera pulls back to reveal a derelict block of flats, populated by young people living among the ruins, perhaps in the aftermath of some catastrophe.

These events are enhanced by some marked changes in the music. As Houston and Richecouer begin to dance together again, a completely new kind of music is heard: flowing ostinato patterns on marimba, soon joined by acoustic guitar, characterize this section. (22'38" onwards) The textures are warm and relaxed, evoking perhaps a tropical idyll and conjuring up references to the music of composers, such as Steve Reich, who have used similar sound worlds. As the music progresses a conch shell is introduced (playing an occasional sustained D flat), and also a piano, which first discretely fills out the texture with middle-register chords, but later becomes more overtly melodic. As with the male-female duet the harmonies are fairly static, and the only feeling of development and contrast comes from movement in the bass line; sometimes a low D flat underpins the ostinati conveying a sense of a radiant D flat major, whereas at other times a low C, B flat or F provides an element of tension. The movement material is essentially the same as that of the women's first duet, yet the very different qualities of

the musical score mean that the choreography is experienced very differently

At this point (24'10") high strings enter, and a rising chromatic melody builds slowly into dissonant clusters, signalling a new development in the drama. The marimba music continues underneath as Richecoeur, followed by Houston, makes her way to the window, actually a gash in the wall of a large, derelict block of flats. The marimba music drops away (23'44") and is replaced by powerful low open fifths on the cellos and basses, which then begin to slide up in parallel motion with the violins above. The camera pulls back to reveal the whole facade of the building and pans up its central tower before focussing on the various groups of people who inhabit the building. The final sounds of the piece are a brief snatch of distant footsteps. Curiously enough the doom-laden quality of these images is largely a function of the music; the dissonant string clusters, with their strongly expressionist overtones, have an apocalyptic air, which is carried over into the viewers' perception of the images. The derelict state of the building might suggest that some kind of catastrophe has taken place, but there are other aspects to this scene: for example, this is the first time that the action has moves outdoors into daylight and sunshine and the contrast with the subterranean nightmares of the preceding scenes is obvious. There is little here, other than the rather stern expressions of the building's inhabitants, which might have prevented the successful substitution of a very different score communicating a more optimistic conclusion to the work.

Conclusion

In some dance works, an important function of the music is its ability to enhance and intensify the meaning and emotional significance of the drama, underscoring the action in ways that are often very similar to those of music in film. The score of *Never Again* is an example of such a work, and its musical materials and gestures speak directly to a contemporary audience in part because they have acquired a measure of familiarity and shared association through our repeated encounters with the kinds of devices it exploits. Regardless of how one is - or is not - moved personally by the music, it is nevertheless easy enough to recognise its musical signs for what they are and to infer what might be intended by their use. In these respects the piece is not so very different from other works mentioned here: Horst's score for *Frontier* makes references to hymn tunes and

marches played on fife and drum in order to provide a fuller context for the dance; *La Fille Mal Gardée* uses common musical devices from the early nineteenth century to inform an audience's understanding of the motivation and underlying nature of its characters. Even though the musical language of those pieces is very different to that of *Never Again*, one might still argue that the underlying principles are very similar. For example, in both *La Fille* and *Never Again* there are associations made between particular types of musical instrument and different situations: in *Fille* strings and harp for romance, or instruments of extreme tessitura for comic effects (at one point Alain dances a solo to the accompaniment of a melody played on the tuba, emphasising his ungainliness). In *La Fille* too, basic elements of musical language, such as tempo, mode, melodic contour, harmony and tonality, are all made to work towards expressive ends whose meaning and significance is partly a function of the intrinsic qualities of the music itself, but perhaps more so a product of the way in which these parameters are experienced in relation to both movement and narrative.

Musical meaning, in these pieces at least, is partly to be found in its references to other musics that use similar devices. As was noted in Chapter Three, Tagg has taken as the starting point for his model of analysis the baroque theory of the affects by which different moods and emotions could be conveyed through the use of various stereotyped musical devices, and it is possible to view the music of some dance works, not least *Never Again*, as operating in a not dissimilar fashion. Tagg's checklist of musical parameters demands consideration of many facets of a musical composition, including its orchestration, tempo, tonality, rhythm, textures, dynamics, as well as aspects of time. If one considers Sinclair's score from these points of view, a number of patterns begin to emerge.

The score for *Never Again* draws upon aspects of the language and conventions of TV and film music of the time during which it was composed, and on its first showing these factors may well have contributed to the powerful impression made by the work. If one were able to spend many hours in film archives researching musical scores of the 1980s, as Tagg's method demands, it would no doubt be possible to cite many instances of the devices of this score being exploited elsewhere to similar ends: for example, the lonely piano notes heard after the women fall from the platform is a musical cliché often drawn upon to underscore moments of desolation and melancholy;

the gesture embodied by the percussion music of the men's duet too has sometimes been exploited to denote the start of a journey into fear and danger. Musical devices such as these are, however, constantly being renewed as what was once new and fresh soon becomes cheap and formulaic. With the passing of time, the score for *Never Again* has increasingly come to be seen by some viewers as something of a period piece. In recent years, a younger generation of dance students shown sections of the work has dismissed its music as 'too eighties' or as merely 'cheesy'; its sounds and language have lost their original impact, and their one-time capability to sway the emotions has been diminished through recognition of the transparency of its strategies.

To begin with, there is the association of different kinds of sounds, textures and rhythmic devices with particular aspects of the drama. The mix of voices and strings at the start has qualities of warmth that contrast strongly with the more hard-edged sounds of the men's and women's duets. In general, sections using strongly pulsed rhythms or purely percussion music are associated with aggression or with male energy. The score distinguishes between acoustic, jazz-based rhythms, associated mostly with feelings of unease and fear, and electronically sequenced patterns that are related variously to social conformity as well as heightened levels of energy and violence. At its most extreme, the use of repetitive and regular rhythms to coordinate the gestures of the crowd as it gradually transforms itself into an overtly Nazi mob reflects the powers of music to regiment and unite people to both positive and negative ends. Stockhausen (1989: 13 – 14) has said that his aversion to regular rhythms such as these can be related to his memories of being exposed to military music during his childhood in Nazi Germany when he came to hate the ability of such devices to compel people into conformity and subservience; the tattoo-like qualities of the rhythms in *Never Again* have a similar force and function. In the opening scene, however, the rhythms are fluid and more unpredictable, and it gradually becomes possible to see a pattern emerge by which different rhythmic qualities become associated with different states of mind. The jazz drumming of the male duet has a more human element than the sequenced and electronically produced rhythms that succeed it, and evokes the prospect of danger through musical textures that are enhanced also by the unpredictability of the piano riffs and other superimposed sounds. When the electronic drum rhythms do enter, the music takes on a much more overtly aggressive aspect that derives partly from the technological and machine-like qualities of rhythmic patterns. By contrast, Charnock

and Dewey's duet is notable for its rhythmic freedom, expressed in the fluid and continuously unfolding qualities of the movement, and through the constantly shifting accents of the music. In the women's duet, the sounds of piano, percussion and electric guitars imbue the movement with an added quality of strength and determination; its metre is regular, but the rhythms are not so regimented and their swinging character and momentum is more relaxed.

If rhythm and metre have a metaphoric aspect here, then so too do the melodies and harmonies. If the drama can be broadly characterized as a journey, starting out from a state of peace and innocence (there is nothing that is overtly sexual or pornographic about the opening images of naked bodies: this is no orgy), followed by the descent into a world of nightmares and surreal imagery, finally arriving at some kind of emotional or social liberation, then this is reflected in music that moves from the consonant harmonies and modal melodies of the opening scenes through a world of processed sounds and electronic effects in the central sections, reached via sections of pure percussive rhythm unadorned by melody, the music finally returning to a world of tonality that is contradicted only by the final atonal clusters that accompany the closing images.

Melodic contour also plays a role in the music: the parallels between the rise and fall of the melody and of the bodies in the opening scene has already been commented upon; the rising melody in the scene with the two women either side of the glass is another moment where melodic contour is used to reflect the increasing effort expended by the dancers as they struggle to make contact. The descending second that runs throughout the work and is arguably associated with ideas relating to breath or to a sigh is another example of how a simple element of musical language can take on significance in a dramatic context.

The interval of the descending second functions somewhat like a leitmotif though the work, its transformations embodying the distance travelled from the state of the opening scenes. Even the most fleeting of references to a warm string sound can evoke memories of the scene. Other sounds can take on a similar function, not least the brief bursts of percussion that are heard from time to time. Music is also used to look forward and back through its use in the many transitions that contain references to

music that has already been, or is about to be, heard.

The qualities of different intervallic tensions can also be imbued with additional expressive power through their use in particular human and dramatic situations. This can be noted if one contrasts the affective qualities of the descending seconds and fourths of the opening music with the wider intervals of the melancholy piano solo.

If one considers the relationship between sound and movement, it is also clear that there are sections where music and dance move alongside one another without obvious connections rooted in pulse or metre - the music essentially regulating emotional tension and dramatic pacing - and sections in which the relationship between the two is much tighter rhythmically. The extent to which this derives entirely from the way that the composer has related his timings to the action varies, given that it appears that much of the dancing was filmed without its accompanying music; but whatever the case, the music does influence, modify or enhance the perception of the rhythmic qualities of the movement. There are also several points where a synchronized punctuating chord emphasises an important moment; for instance, at the end of the scene where the bodies are shown hanging like carcasses of meat a short sharp string chord abruptly ends this section and introduces the next which has no musical accompaniment

The music also serves to provide elements of continuity between shots and scenes and sometimes takes on a vectorial function, to use Chion's terminology. The long electronic build-up that accompanies Houston's scene alone underground, between the fifteenth and seventeenth minutes of the film, is a case in point; the frantic quality of her movements is obvious enough, but the gradual crescendo in the music created a gradated increase in tension over a long period of time and bound together the various shots and actions into a single trajectory.

And yet, as with *Fille*, the fact remains that if one were to listen to the music alone it might well be capable of a much wider range of readings and interpretations. Its juxtaposition of different styles would probably be experienced as unmotivated and mysterious, its continuity from a purely musical standpoint quite unsatisfactory. Its proportions, like those Cage deplored in the dances of the 1930s and 1940s, derive

entirely from the drama and make no sense apart from it; there are several sections which seem either over-extended or to mark time while a film shot is brought to a conclusion, such as the slightly doodling quality of the opening scene; and there are other sections, including perhaps the female duet, which might have been amenable to more sustained musical development. Like the scores that Mary Wigman used, this is music that makes little sense apart from its place in the film, and it derives its more concrete emotional significance and meaning from its relationship to the drama.

This is all in marked contrast to the music of John Cage, which for the most part lacks shared associations or meanings of the same order or potency. Even when pieces draw upon existing musics, as is the case with those pieces Cage produced in the 1970s and 1980s that incorporate elements of Irish traditional music, those materials were deconstructed or transformed in ways that radically diminished or even obliterated their original cultural associations, social function and musical grammar. When people have experienced difficulties approaching Cage's music, it is perhaps because they do not know how they are expected to respond emotionally or intellectually: Roland Barthes' memorable phrase about 'the terror of uncertain signs' comes to mind, and the critical reception of Cage's scores for Cunningham often tends to confirm the likelihood that Barthes' theory was correct. (Barthes cited Gorbman 1987: 58)

The following chapter contains a study of *Points in Space*, an abstract work of dance that has no narrative or political aspect and whose score is almost unprecedented in its combinations of sounds and its non-developmental character. If *Never Again* uses familiar musical devices to support and inform the meaning of the action, then this cannot be said to be the case here. And yet if abstract qualities of texture, rhythm, structure and instrumentation can operate as they do in *Never Again*, the question remains whether such factors have been completely alienated and disabled by Cage and Cunningham or whether they can still play some role, however oblique and non-specific.

CHAPTER FIVE

POINTS IN SPACE

It used to be said (often still is) that a dance 'must' respond to music. That it must have a formal beginning and ending. That it must depict a subject matter. That it must convey a meaning. That it must express the personality of the choreographer. That it must recognize that stage space is a finite area with 'strong' and 'weak' areas. That it must be based upon the differences between the sexes. That it must reveal sexuality. That it must address matters of socio-political importance. But not so chez Cunningham. To each of these assumptions his work has said 'It ain't necessarily so'. (Macaulay 2000)

The principle focus of this chapter is the place of music in Merce Cunningham's dance *Points in Space* (1986). This piece was originally created as a dance film for television, and is accompanied by a specially commissioned score by John Cage. Detailed discussions of the choreography and visual design in their own right have been pursued here only in as much as they relate to the central topic.

Cage and Cunningham's collaborative work raises unique and fascinating questions. At its heart are principles of chance and a complete absence of intentional relationships between sound and movement. Given dance works with a strong narrative element (e.g. *La Fille Mal Gardée* or *Never Again*), there was a clear rationale for attempting to explore the ways in which music supported and enhanced the dramatic action; with other forms and genres of dance – both social and theatrical - in which music is an important source of inspiration, there is much that can be said relating to the ways in which music and dance interrelate and inform one another on structural, affective, conceptual or kinetic levels. These kinds of perspective are, however, arguably quite irrelevant to Cage and

Cunningham's work, certainly since the early 1950s with the introduction of chance and varying degrees of indeterminacy in performance. Cage's approach to composition changed at this time in far-reaching and radical new ways. In particular, he sought to purge his music of both intentional continuities and any attempt to express or communicate personal emotion, throwing into question many basic assumptions regarding the function and purpose of music in Western post-Renaissance society, not to mention almost every received notion as to how music and dance can or should interrelate.

The nature of this new aesthetic has created unique problems for commentators on Cage's work, considered both in its own right and in conjunction with Cunningham's choreography. As a consequence, rather than attempt to make value judgements or subjective appraisals of the experiences afforded by Cage's music, most writers have tended either to focus upon the *poietic* aspects of his art (e.g. the use of chance techniques and unusual notations), or upon his artistic philosophy as expounded in his many writings and interviews. These topics are fundamental to an understanding of his work and are given due consideration here, but there are other issues that need to be addressed if the work of Cage and Cunningham is not to be set apart from all other forms of music and dance, a special case insulated from ordinary critical comment by the self-contained nature of its thought and premises.¹ Inspiring this account of *Points in Space* are questions concerning how the sound and movement in practice work together in this piece, and what conditions allowed Cage and Cunningham to collaborate as they did, when such an approach – at least in its most radical and uncompromising form – would be unviable for most other kinds of dance.

¹ Adrian Jack once wrote of Cage that his reported interviews reminded him of no one so much as Christ and the Pharisees, with Cage managing never to put a foot wrong with his carefully crafted replies. (Jack 1972: 66) Although Cage was tireless and always polite when explaining his work to those who questioned him, sometimes quoting passages from his books almost *verbatim*, he avoided arguing with his detractors and disliked being asked to make value judgements about the work of others.

Although this chapter includes a detailed account of the making of Cage's music for this dance, as well as some description of the choreography, lighting and design, the most important issues addressed are those relating to the ways in which the music might influence the spectator's understanding and experience of Cunningham's choreography, and the manner in which the dance might affect the perception of Cage's music.

The choice of *Points in Space* for detailed consideration was largely determined by its availability on video, allowing for repeated viewing. That decision in itself however raises certain issues that need to be addressed at the outset. The decisions made by a film director with regard both to camera work and the editing together of different shots will affect how a dance is experienced and understood. The speeds at which different images are edited and cut will add additional rhythmic layers to those already inherent in the sound and movement, modifying the ways in which time is experienced. Additionally, the camera cannot help but direct the eye towards particular events, and the use of long-shots or close-ups can transform the ways in which a dance originally made for the theatre is perceived on the small screen. In the early stages of researching this chapter, attention was directed almost entirely towards examining the relationships between sound and movement, and the work's identity as a dance conceived for television was regarded as of comparatively little importance. With repeated viewings however, awareness increased of the filmic aspects of the piece, and as a result several striking moments and features in the video are referred to in the detailed account of the work included here. Nevertheless, despite the important role played by the camera, it should be understood that these remarks are secondary to the main argument.² Similarly, although many

² Cunningham was an early pioneer of dance on film, carefully rethinking his choreography with the eye of the camera in mind. Macaulay (1987: 1050) has remarked on how Cunningham has sought always to find an individual film style for each of his dance films, and compares *Points in Space* to a 'wildlife documentary, with the camera sometimes still as if afraid to disturb the estuary birds who come and go before its lens, sometimes roaming as if filming herds from a safari jeep'.

references are made to the details of the choreography and its dynamic and rhythmic qualities, these essentially descriptive remarks are intended only to amplify and clarify the points relating to the perception of the music and dance and their synergetic relationship in this work.

It should also be remembered that this is but a single version of a work that, following its creation in the studio, has gone on to receive many live performances in theatres around the world and therefore has a life and identity that extends beyond that of its original incarnation on video. Its sound-movement relationships are in no way intended to be fixed in the form in which they occur on the video, which represents just one possible realization of this material; instead these relationships are variable, changing in their detail from one performance to another.

Lastly, *Points in Space* is but one example of Cage and Cunningham's work, dating from a comparatively late period in their artistic partnership, and reflecting their individual creative preoccupations of the time: it cannot therefore be said to stand alone as representative of their large and varied output. Despite these limitations however, the examination of a single performance does not in itself preclude the possibility of reflecting more generally upon the conditions that inform their work, as well as upon the principles underlying other pieces by these artists. Accordingly, an attempt has been made at the end of this chapter to consider certain of the conclusions reached in relation to *Points in Space* through reference to other Cunningham dances.

Points in Space was created in response to a commission from BBC television in 1986. Although originally conceived as a dance for video, it was subsequently reworked quite extensively for the stage, with the choreographer making necessary changes in structure, movements, spacing, entrances and exits; consequently the work exists in two slightly different versions, though the

present account is concerned only with the film.³ Its title is taken from a quotation of Albert Einstein, 'there are no fixed points in space', to which Cunningham has referred on many occasions when speaking of one important aspect of his choreographic aesthetic, namely the belief that every point in the space where a dance is presented is of equal importance. There are clear parallels with Cage's determination and belief that each sound have its own centre and never be dependent upon its relationship to other sounds for its meaning and significance. Cunningham's approach is in marked contrast to the more obviously hierarchical approach to space found in traditional theatre practice where certain areas of the stage were considered as being better suited to particular kinds of action.⁴

The work is typical of Cunningham in as much as music and dance were created independently of each other and only brought together once the final edit of the video was complete. The dancers heard nothing of the music when they performed, so the sounds can have exerted no influence upon the dynamics or any other aspect of their performance. Merrett (1987: 782), who attended the recording of the dance, particularly noted the 'intense silence' and atmosphere of concentration generated by the dancers, 'broken only by the padding of bare feet', sounds which were recorded for inclusion in the final soundtrack of the video.

The influence of sound upon the dancers in performances of Cunningham's choreography is a frequent topic of discussion and requires brief consideration here. By the time a work receives its first performance, its dancers will have been extremely well drilled in every aspect of the dance, including its

³ Macaulay (1987: 1051) found the two versions utterly different, commenting particularly on the changes made in some of the duets, prompted by recasting decisions after some of the dancers who had participated in the video left the company.

⁴ Copeland (2004: 178-180) has written informatively about these issues, comparing Cunningham's approach with the diametrically opposed attitudes of Doris Humphrey and Alexander Dean, author of a standard textbook on stage direction.

timing and dynamics; since the dancers never rehearse with the music, it may well be necessary for them to make a very determined effort not to be thrown by the sounds emanating from the loudspeakers. This requires a very different kind of musicality to that of classical ballet, in which the dancer's response to the music's dynamics, rhythm and phrasing is very important. Nevertheless, the situation may not always be as straightforward as this might appear, particularly in regard to Cunningham himself. Douglas Dunn has said:

One of the things that I observed about Merce (which seemed perfectly natural, but contradicts somewhat the usual idea about the simultaneity of the music and the dance and the separation of the two at the same time) is that he clearly listens to the music. Whatever his counts or whatever the structure of his dance, he is listening. I could see, once I left the company, that he was dancing to the music – in a different way from dancing to the rhythm of the music, perhaps, but he was making it part of the landscape that he was dancing in. I didn't find the music distracting at all. If I found it distracting, I just tuned it out. And to the extent that I *could* listen, I *did*, and fed off it.' (Dunn in Kostelanetz 1992: 120)

Elsewhere, in the course of a discussion involving some of Cunningham's most experienced dancers, Marianne Prager Simon spoke of the way that the dancers found cues in even the sparsest music, and Gus Solomons recalled how once they had been moving with some very loud music, grouped in a tight knot, and that when the sound suddenly stopped they all fell forward together: he remarks that although they had not been particularly aware of the sound up to that point, they had in fact all had been quite literally pushing against it. On another occasion, he reports, the dancers actually felt physically sick from the high decibel level of the sound. (Kostelanetz 1992: 120)

These experiences illustrate the powerful effect of sound on the human body, as well as the dangers of dismissing the music in Cunningham's dances as being of no relevance to the dancers, merely something to be ignored or overcome, a potential hindrance or obstacle in a demanding situation.

Lighting and design

Although the main emphasis of this chapter is on the place of music in Cunningham's work, it is important also to consider the element of design and its place within the work as a whole. The same independence which exists between music and dance is also extended to the lighting schemes and costuming, thereby allowing Cunningham's other collaborators maximum freedom to pursue their own ideas untrammelled by external demands. The decisions made by the costume and lighting designers, as much as those of the composer, can contribute quite powerfully to the ways in which a spectator may perceive a work, and to change any one of these elements might modify quite considerably the character of a piece considered as a whole.⁵

Cunningham has worked with many important artists and designers, among them Isamu Noguchi, Jasper Johns, Robert Rauschenberg, and Andy Warhol, and their interests and preoccupations are inevitably reflected in the 'look' of Cunningham's work. If there are backdrops, they are normally abstract and non-representational; if there are props on stage, they tend to be sculptural objects that contribute to the environment within which the dance unfolds, though late in his performing career Cunningham sometimes used a chair or portable *barre* as a support. Well-known examples of sets created for

⁵ Although not a work created with Cunningham, Cage's *Europora 5* offers an example of how chance procedures might be applied to lighting schemes. Its score contains detailed instructions regarding the placing and angling of the lanterns, the intensity of their brightness, and the times at which they are turned on and off; all of these parameters were determined by the same kinds of *I Ching*-derived chance operations that Cage employed in his purely musical compositions. (information from Dave Ryan, who organized a performance of this work at the Cochrane Theatre in London)

Cunningham include the reproduction of Duchamp's *The Bride Stripped Bare by her Bachelors, Even (The Large Glass)*, which is taken apart and reassembled in *Walkaround Time* (1968), and Warhol's floating silver pillows in *Rainforest* (1968). Cunningham's attitude towards décor is sometimes very unconventional, and he has even been known to allow objects on the stage to mask the activities of the dancers, thus modifying or partially obscuring the audience's perception of the movement.⁶

Although Cunningham refuses to limit or restrict his collaborators in any way, he does sometimes make suggestions to his design teams, and some of these remarks have been made public. Once aware of Cunningham's suggestion to the set designer for *Points in Space* that he 'think of the weather', it is hard for many people not to allow that knowledge to influence - at least to a degree - their general perception of the piece (and by extension, for many people, also Cage's music).

The set for *Points in Space* was designed by Bill Anastasi, and consists of a huge panoramic backcloth that gently curves around the entire dance space. According to David Vaughan, the design has three sections, and was based on drawings made by the artist in the 1970s (Vaughan 1997: 232). Abstract lines, scribbles and other shapes are inscribed upon the screen, and its different sectors are marked out by vivid swathes of colour - white, blue, red and yellow - that strongly characterize the mood and climate of the environment within which the choreography is danced.⁷ These sectors, which do not appear to be separate on the video, but rather to merge into one another seamlessly in a single continuous design, are introduced at the very start of the film, before the dancers are revealed. The images can loosely be distinguished as follows: in the first shot the

⁶ *Tread* (1970), with décor by Bruce Nauman, is a case in point. Ten large electric fans were placed at the foot of the stage, so that the audience's vision of the dancers was sometimes modified or disturbed by the effect of the whirling blades. (Copeland 2004: 32)

⁷ In the theatre version, space dictated that only a portion of the backdrop could be used. Macaulay (1987: 1051) complained that the stage set seemed 'far less poetic' than on the video, and lamented that 'the most claustrophobic' of the sections had been chosen.

left of the screen is shaded blue, the right a creamy white; the second image is lit deep red to the right of the screen, while there is a heavy black scribble to the left of the screen; the third image is a brilliant yellow with dark markings streaking diagonally across from the top down; the final image includes dark brown shadings in the centre of the screen, surrounded by deep reds (an upturned omega, or maybe a horseshoe, lies tilted to one side at the foot of the backdrop, like a piece of debris).

These images are quite abstract and strongly contrasted, but their shapes and colouring could be interpreted as obliquely evocative of different landscapes or emotional qualities; for example, the final image of the four described above might suggest icy, mountainous crevices. Macaulay (1987: 1050) referred to 'Turner skies', while Merrett (1987: 782) suggested that:

True to the "weather" directive, parts [of the set] look like an approaching storm – the colours disturbed with greys and blacks like rain-slashed skies; a burst of crimson suggests a sunset; a splash of blue – some clear sky searched for on a showery day; the white – some snow-covered ground. More precise forms take the shape of wedges, a horseshoe of black, scribbles of colour like a test-pad for ball-point pens.

There have been many different theories ascribing particular emotional qualities to colours, often discussed fairly informally nowadays in relation to clothing, domestic décor, or therapeutic and healing activities. Zelanski and Fisher (1989: 35-42) considered the psychological effects of colour, distinguishing between warm and cool colours, and noting the ways in which different shades can be used to influence ambience and mood. They also noted the ways in which colours can take on symbolic functions (the association of black with death in Western cultures is one obvious example), though such associations are more often than not culture specific. Eisenstein (1943) also discussed the psychological and symbolic meanings of colours, focusing

primarily on yellow, and setting out a huge inventory of instances of this colour's use or presence in painting, literature, mythology and history. It is clear from Eisenstein that although colours possess powerful evocative powers, their meanings are dependent on context and shared cultural background, so that the same shade can evoke diametrically opposed emotions and ideas in different times and places. He warns too against dogmatic systematizing, which in his view can only lead to madness and absurdity.

It is interesting to consider the evocative character of the colour schemes in the set and costumes of *Points in Space* from these points of view: for example, the brilliant, warm yellow which floods the screen from time to time might be seen as evoking the sun, or other brilliant light sources, with all their attendant emotional qualities and associations, whereas the blues and whites might call to mind the sea and/or sky; in contrast, the reds are warmer and darker, perhaps suggestive of glowing coals, anger, danger, or a dark sensuality. These colours, considered in conjunction with the lighting, might also be seen as subtly evocative of such general phenomena as night and day, or heat and cold.

The costumes for *Points in Space* were designed by Dove Bradshaw and also contribute vitally to the identity of the piece as a whole. Since in Cunningham's work the dancers are never required to act out the roles of characters in a story or represent anyone (or anything) other than themselves, there is no requirement that they be dressed appropriately to any role. Cunningham's dancers in this piece - as in the majority of his pieces - are dressed practically in tight-fitting unitards that allow their whole bodies to be seen clearly; Cunningham himself appears in rather looser fitting practice clothes. According to Merrett (1987: 781), Cunningham had asked that the costumes be 'divided into two groups: leopard spots and tonal stripes', although the ways in which the dancers are dressed do not appear to bear any particular significance in relation to the structure of the choreography. Some unitards have a dappled quality, covered in speckled patterns, comparable perhaps to the markings of an

exotic animal, and painted onto a variety of foundation colours (white, pink etc). Other unitards are characterized by a two-tone design: for example, in one the legs are dyed a pale green, the torso black; in another the legs are dyed red, with the top once again black, the colours in both leotards shading into one another around the midriff. Although the choices of colour appear to have no dramatic intent or rationale, it is possible that a viewer might allow such schemes to affect – however subtly, or unconsciously – their perception of the choreography and the characteristic qualities of the individual dancers.

The lighting design too, with its contrasts between brilliantly lit and darker, more shadowy sections, whether or not arrived at independently of Cunningham's overall conception, can also be considered as superimposing an additional dimension upon the work, influencing a spectator's perception of the moods and structure of the work as a whole. For example, the outer sections of the work are predominantly quite bright and direct in their lighting, while the central slow section of the piece is dimly lit, with lengthening shadows, implying perhaps the passage of time between night and day, or a change in environment or climate.

John Cage's sound score

The music for *Points in Space*, entitled *Voiceless Essay*, makes sophisticated and unusual use of computer software originally designed for the analysis and synthesis of speech. In some respects the score is uncharacteristic of Cage's work for Cunningham: firstly, there is only a small element of indeterminacy in performance; secondly, none of the sounds are created during a performance, but instead all were pre-recorded in studios at Brooklyn College, New York, and Synesthetics Inc. Each of the four company musicians is given a cassette tape to play. The sounds are not processed in any way during the performance, but the tape operators are required to mute the sounds from time to time 'for varying durations of between thirty seconds and two minutes'. (Vaughan 1997: 232) Each

tape lasts 16'49" and the video of the dance lasts around twenty-seven minutes, with sound rarely absent for any length of time (with the exception of an extended passage of around two minutes duration in the middle of the work, which is danced in almost complete silence); the precise times at which the tapes are started and paused can vary from one performance to the next, but in all other respects the music is fixed and allows no other provision for the performers to intervene in its presentation.

Voiceless Essay is derived from a much larger work called *Essay*, whose title is shortened from *Writings through the Essay: On the Duty of Civil Disobedience* (Henry David Thoreau). According to David Miller⁸, the original intention had been to use *Essay* itself for *Points in Space*, but that work was rejected on the grounds that it was 'apparently too dense'; consequently only four of *Essay*'s tracks were used. Pritchett (1993: 180) has described the sound of *Essay* as an 'almost impenetrable wall of sound', contrasting it with *Voiceless Essay* which he characterizes as 'much lighter, sparse, airy'. If this is indeed the case, it tends to support the hypothesis that Cage might have considered some of his works as intrinsically more suitable for use with dance than others, a notion that was, however, strongly resisted by Takehisa Kosugi when questioned during a panel discussion at the Place Theatre, London in September 2002.

There are eighteen writings altogether, and these provide the raw material for *Essay*. 'Writings' was a term used by Cage in later life to describe his practice of manipulating existing texts to generate mesostics (for example, the first four of the five 'writings through' James Joyce's *Finnegans Wake*, created between 1976 and 1980). Cage's introductions to the published versions of these texts explain his approach in these texts, the most extended account being that which prefaces *Writing for the Second Time through Finnegans Wake*. (Cage 1980: 133 – 136) A mesostic is a close relative of the acrostic, but in a mesostic the words around

⁸ In a communication sent to the Silence List on Sun, 20 Jul 1997 12:49:22 -0400 (EDT). Silence is an internet forum dedicated to the discussion of Cage's work.

which the poem or text is constructed will be found written in capitals down the centre of the text with other words arranged on either side, rather than at the beginning of each line as in an acrostic (Cage often wrote mesostics as presents for friends, using their names for the central spine). The principle rule is that 'a given letter capitalized does not occur between it and the preceding capitalized letter'. (Cage 1973: 1)

Cage described the processes by which the texts used in *Essay* were made as follows:

All the words that are used in a single writing through are removed from the source text for a subsequent writing through. Thus the series of writings through tends towards shorter and shorter texts. The series was continued until the nineteenth which being incomplete brought it to an end. It is one part of a collection of materials, some of them musical, most of them literary, called *The First Meeting of the Satie Society*. (Cage 1993: 195)

The writings have been published in text form, including reportedly a deluxe limited edition with illustrations by Jasper Johns, Robert Rauschenberg, Cy Twombly and Cage among others.⁹ These writings also provided the raw material from which *Essay* was created. As Cage has explained:

⁹ It is unclear to what extent this publication was fully achieved. It clearly caused Cage a great deal of stress and worry, as he experienced, for a while at least, a rather difficult relationship with the book's intended publisher, and he was also concerned - unnecessarily, as it turned out - that Jasper Johns was unhappy at the quality of the reproduction of his work. (Retallack 1996: 147, 150) Cage's idea was to make a 'transparent book'. He said that if all the sections of *The First Meeting of the Satie Society* were to be 'printed on handmade, heavy paper, you'd have to have pushcarts to push it around. That led us to very light paper, and the transparency is leading us to finding a way of printing where you'll be able to look through the book. And it fits the kind of writing, because the writing is non-syntactical, so when you see the words not making ordinary sense, but floating so to speak, in space.' According to Retallack, the project exists in three forms: 'a bound set in a glass and metal valise, designed by Cage as a homage to Marcel Duchamp; a loose set, for exhibition in galleries; and an electronic text on the Internet.' (Retallack 1996: 78) Cage planned an edition of 25 copies, but according to Retallack, by the summer of 1994, only two copies existed. (Retallack 1996: 149) The Osiris Press, New York, published the text in book form in 1985.

Essay was made in two forms, one unstratified, and one stratified. For both forms readings giving nine seconds to each stanza of all eighteen writings through were superimposed. For the unstratified form the voice pitch was kept constant by compressing or expanding a single writing through to a common chance-determined time-length, 16'49". (The time-lengths varied from 36" to 20'42".) For the stratified form (14'04") the different writings through were broadcast by chance operations to points in a two-octave range of which the center was the pitch of the unstratified form. For both forms each reading was given its own stereophonic position. (Cage 1993: 195)

The work does not appear ever to have been presented as a concert work, and at the time of writing only a brief extract from *Voiceless Essay* has been issued on CD¹⁰; instead *Essay* has been most often been heard in the context of art installations, and in at least one of these presentations the work was arranged by Cage so that it could be played over extremely long periods of time if required:

The 1990 installation for the Espai Poblenu, designed by Andrew Culver, used 36 loudspeakers and 24 lights placed in the ceiling cavities according to chance operations. Thirty-six auto-reverse tape players and a light computer are used to make a performance that continues without any repeated relations between sound and light, or between any two sound tapes, for four months. Six chairs are positioned in new locations and directions each day. (Cage 1998: 66)

In its use of texts *Voiceless Essay* is typical of many of Cage's later works. Increasingly since the 1960s, he had applied chance techniques in the making of his writings, often using texts by people whom he particularly admired (e.g. Joyce, Thoreau) as material to be manipulated and deconstructed by means

¹⁰ The extract was included on a disc produced in 1998 to accompany *Leonardo Music Journal*, no 8.

of chance techniques. Many of the resulting texts – some of which seem to occupy a curious hinterland somewhere between poetry and music - were performed by Cage himself in his own highly idiosyncratic manner, aptly described by James Pritchett as ‘a sort of enhanced or musical form of recitation...bordering on singing’, and often in the context of the simultaneous performance of others of his works. (Pritchett 1993: 178-179) These writings are in effect a kind of sound poetry, purged of any kind of clearly formulated syntactical meaning but containing passing allusions and fragmentary references to other texts. Cage had expressed a wish ‘to find a way of writing which though coming from ideas is not about them, or is not about ideas but produces them’. (Cage quoted in Pritchett 1993: 178) In the Foreword to *M* (1973) he wrote of his attempts at ‘demilitarizing language’, a metaphoric turn of phrase inspired by Norman O. Brown’s observation that the Greek word ‘syntax’ refers to the arrangement of the ranks of an army. In these respects Cage’s use of texts in *Voicemail Essay* is not untypical of much of his work as both writer and performer from the 1960s onwards. From the years immediately preceding *Voicemail Essay* there are a number of vocal settings of mesostics, among them the *Eight Whiskus*, *Mirakus*², *Selkus*² (1984) and *Sonnekus*² (1985), all for unaccompanied solo voice and intended to be sung in a folk-like style. Several pieces written for Cunningham had also incorporated Cage’s vocalizations. *Letter to Erik Satie*, composed for Cunningham’s piece *Tango* (1978), began with Cage sounding the individual letters of Satie’s name; *Dialogue*, as performed by Cage and Cunningham at Goldsmiths College in 1981, also included readings from recent chance-composed writings.

The starting point for *Voicemail Essay* was a set of mesostics based around the title of Satie’s *Messe des Pauvres*, which Cage had conceived as a present to Satie from Henry David Thoreau. Phrases from Thoreau’s *Essay on the Duty of Civil Disobedience* were chosen by computer to create these mesostics using chance techniques designed in accordance with the particular set of rules regarding the repetition of letters which govern Cage’s process for the

making of mesostics.¹¹

The raw acoustic material employed to make *Voiceless Essay* was the sound of Cage's voice reading these texts; the sounds were digitally recorded and then manipulated and transformed by computer until - arguably - everything that might have been recognizably personal and characteristic about Cage's voice was completely obliterated. In particular, Cage requested that the computer be programmed to remove all the vowel sounds, leaving only the sound of the consonants – the 'unvoiced' vocal sounds:

Since the computer separated vowels and consonants, it was possible for the purpose of dance accompaniment to make *Voiceless Essay* without any vowels, just the noise-like consonants of the four writings through (IV, IX, XV, and XVI), the last of which follows.

Man will
usEful
man will not Submit
to leaSt
throughout thE

world
hE who
himSelf entirely

Put through
And
with retUrn

¹¹ Once the software had been written, Cage almost always made use of a specially created computer program called MESOLIST to write mesostics. This was designed to 'follow the Mink rule for a pure (100%) mesostic', namely that between any two capitalized letters forming the central spine of the mesostic neither of those letters should appear again.

priVate feelings
foR
thE
proportion aS

(Cage 1998: 66)

The rhythm of the sounds heard in *Voiceless Essay* originates in the reading of the texts, though the sounds have been stretched and/or compressed in time, as well as being layered, to such an extent that their source is totally obscured. Clearly this is a score that could only have been realized using specialized computer technology, but despite the lack of precedent it does not seem improbable that Cage was able to anticipate the kinds of sounds that would emerge from the process, even if the details of the end result would always have been quite unpredictable. As David Nicholls (2004:46) has pointed out, ‘Cage always had a very clear (and precise) idea of the particular aural world he wished to create in each new piece’.

The sound world of *Voiceless Essay* could loosely be described as an endless hissing and spluttering, with all manner of breath and air sounds heard alongside a variety of more explosive, percussive consonants. At a superficial level the music might seem unvaried, in that there are no major contrasts, changes of mood or texture, or significant dynamic variations from start to finish. However, if the listener pays closer attention, a wealth of sonic detail is revealed, and it is in this that the main interest of *Voiceless Essay* is likely to be found. Two principal kinds of sounds predominate: short percussive consonants (t, d, p, ch etc), sometimes heard singly and sometimes in short rhythmic bursts, and a wide array of breath sounds, including extended hisses, inhalations and exhalations, as well as unvoiced air sounds, all of which can vary considerably in duration. The different sounds are sometimes superimposed upon each other and are sometimes heard alone; they also blend comfortably with the sounds created by the dancers themselves, including their breathing and footsteps. The music defies transcription on account of the difficulty of accurately describing its

sounds and rhythms, though a waveform display of a recording made from the sound track of the video clearly showed the timings and relative amplitude of the sounds. In fact, Cage quite deliberately and consciously turned his back on conventionally measurable parameters such as pitch and rhythm, maintaining that music needed to be free of such constraints if it were to progress into new fields of activity. (Kostelanetz 2003: 210)

Cage never offered any explanation as to why he offered this particular piece for use in *Points in Space*, and it is possible that the major factors influencing his decision were practical and economic. *Voiceless Essay* clearly relates to other projects on which he was working in the mid-1980s, and it could be considered an off-cut from his other activities, a means of saving time at a point in his life when he had many other commissions to fulfil; it is also comparatively easy to perform, requiring only a sound system and the assistance of the small pool of musicians normally employed by the Cunningham dance company.¹²

In Cage's own note on the piece he claims that 'the structure of the music is analogous to that of the dance, having the same number of parts, but their lengths, being chance determined, are different'. (Cage 1993: 196) He does not however make any attempt to explain precisely what he means by this. The presence of different sections in the music is not obvious to the listener, and it is unclear whether Cage is referring to the number of sections, layers of sound, or even number of tapes employed, although the silence occurring between roughly the tenth and twelfth minutes – however arrived at – has the effect of seeming to divide the music into two halves, in this particular performance at least.

In marked contrast, the choreography breaks down much more clearly

¹² Although occasionally funds have been raised for large-scale performances such as *Ocean* (1994), such projects have been rare. Comparatively few musical works composed for Cunningham's dances have required more than a handful of players.

into a sequence of overlapping sections, each set for different combinations of dancers, though defining the number of these sections is once again not a straightforward matter. According to David Vaughan (1997: 232) there are seven parts, alternating fast and slow, but other ways of dividing up the dance seem possible too. Groupings alternate rapidly, and some of the solos seem to continue while other shorter sequences are performed simultaneously in other parts of the stage. The impression left is one of separately created phrases occurring simultaneously or being cross-cut with one another, rather than of more contrapuntally worked textures for larger groupings of dancers. To produce a timeline comparable to that included within the discussion of *Never Again* would certainly be an extremely demanding and complex task.

Far from being considered as sectional, Cage's music might better be understood as functioning as a constant, providing a thread of continuity throughout the piece and an essentially unchanging point of reference in relation to which to the considerably more varied choreography is danced. Some commentators, including Noel Goodwin and Peter Brinson, have described the music in Cunningham's work as acting essentially as a form of 'aural décor', and up to a point such a view can be sustained in relation to this work: the music characterizes the piece as strongly and memorably as its costuming and set, creating a distinct and unique atmosphere. Nevertheless, more detailed observation of how sounds and movements interact suggests that the sound-movement relationships in this piece are somewhat richer than such a generalized description might imply.

Sound-movement relationships

Although Cage and Cunningham may have rejected conventional, fixed and intentional relationships between sound and movement, it would be absurd to argue that no relationships whatsoever can be found. Earlier sections of this thesis examined the kinds of uses for music that Cage and Cunningham rejected,

including: (i) music to highlight and underscore the ‘meaning’ of the dance: (ii) music to provide a foundation upon which to base choreographic structure (or vice-versa); (iii) music as a source of kinetic energy; (iv) music used to reinforce or emphasize particular aspects of the dance, be they structural or dramatic; (v) music as something to be interpreted by the choreographer on the level of feeling. Instead Cage and Cunningham contrived a situation in which relationships between sound and movement were neither fixed nor planned in advance. In practice however, the effect of their new methods was to create not so much a *non-relationship* between dance and music as a *multiplicity* of potential relationships. In their works the perception of a given dance may be endlessly renewed through the changing detail of its music, perhaps even uncovering aspects of which its creators may have been previously unaware. Far from seeing Cage and Cunningham as indifferent to music-dance relationships, one might better imagine them as constantly surprised and delighted by the results thrown up by their chance procedures – an enjoyment analogous perhaps to that which may be derived from observing the ways in which the identity of a natural landscape is transformed by changes in light or weather conditions. Cunningham (1999) himself acknowledged the power of sound and movement together when he related the concept of the co-existence of music and dance to Fuller’s concept of “synergy”, in which two quite separate energies come together to produce something that no one realized was going to happen.

The relationship between music and dance in Cage and Cunningham’s work may be explored from a variety of contrasting perspectives. Although it is possible to consider music and dance apart from one another, applying purely musicological or choreological techniques of analysis to explore matters of style and structure, in order to examine music-dance *relationships* there are other issues that need to be considered, among them: (i) the aesthetic preferences of composer and choreographer; (ii) the associative aspects of the music, including comparisons with other pieces using similar sounds or technologies, and the potential meanings which might emerge as a result of these observations; (iii) the

structural aspects of the work (music, choreography, lighting and design, considered in their interrelationships). Underlying all these approaches, however, are questions about how the music and dance work together in the mind of the spectator, the one influencing and modifying the perception of the other.

(i) Aesthetic preferences

Although there was clearly a social and political element to Cage's quest for musical independence when writing for dance, another factor was undoubtedly his strong antipathy to choreography that was overly dependent upon, or "Mickey Moused", the music:

I've noticed when I've seen dance that was not supported by the music, the dance immediately looks physically strong and rhythmic in its own right. Each movement looks like a rhythm in a way that it never does if it's going with the music. Now I simply can't enjoy that, two things happening in unison. It just drives me berserk. (Cage 2003: 208)

Cunningham has expressed similar views (the following quotation retains his original punctuation and use of lower case letters):

it is hard for many people to accept that dancing has nothing in common with music other than the element of time and division of time.

The mind can say how beautiful as the music hints at, or strikes out with colour.

but the other extreme can be seen & heard in the music accompanying the movements of the wild animals in Disney films, it robs them of their instinctual rhythms, and leaves them as caricatures. true, it is man-made, arrangement, but what isn't? (Cunningham, 1998: 91)

Implicit in these views is the possibility of arguing that some approaches to musical accompaniment can actually work against a spectator fully experiencing the rhythmic life of a dance by directing the attention in too narrowly focussed a manner, emphasizing particular moments in the continuity while detracting attention from the transitions between those points wherein may be located a major part of that dance's vitality. Sometimes, in such instances, it can even appear as if the dancer is being manipulated by the music, which seemingly begins to function as an invisible controlling presence. There may well be reasons why such an approach is desirable in some kinds of more dramatic work (for example, certain pieces of Martha Graham), but Cunningham's aims are very different, and the musical approach he favours arguably works instead to heighten one's awareness of the choreography's rhythms and phrasing, as well as increasing sensitivity to the subtleties of the dancers' interpretation of their material.

The absence of pulse or cadence in *Voiceless Essay*, or indeed anything remotely resembling a conventional musical phrase, eliminates the possibility of the music's imposing, or even implying, a particular reading of the phrase structure of the choreography. One might even argue that the music occasionally functions as a kind of smoke screen, distracting attention from the more regularly pulsed and squarely phrased sequences that occur from time to time in this and other of Cunningham's dances, emphasizing instead the more seamless and ongoing aspects of the choreographic continuity.

Connected to this aspect of the music are issues relating to tempo and its perception. The choreography is highly varied in this respect, encompassing sections of considerable rhythmic energy and vitality and also sections characterized by great stillness and calm. More often than not it is fairly easy to identify an underlying pulse, made visible in the movement. Defining the tempo of *Voiceless Essay* is a far less straightforward matter, though the durations of the sounds can be measured (they vary from a fraction of a second to ten seconds or

more), as can their frequency and density. At times the sounds are few and sparse, at other moments much denser and occurring in more rapid succession, but the way in which the flow of sounds constantly changes makes it hard to characterize this music in simple terms as either fast or slow. Attempts to define musical tempo in this piece were in fact more often influenced by the choreography, so that depending on how one chose to focus the attention, the sounds might either be considered as energized or animated by the movements that they occurred alongside, or experienced as a kind of rhythmic ground, unifying the faster and slower gestures of the dance. An analogy might be made with the musical variations of a chaconne, which may be spacious or highly elaborate and decorated, but always refer back to the same underlying harmonic rhythm and tempo. But whereas the musical hierarchy of a chaconne is normally fairly straightforward, interrelationships between sound and movement in Cunningham's work are much less easy to define, partly because of the difference in media (sound, movement), and partly because of the absence of a clearly defined point of departure, either musical or choreographic. For this viewer, the contrasts in the choreography, as well as its often strongly pulsed nature, became much more obvious when separated from the music: experiencing the dance with and without sound has the effect both of enhancing and of obscuring particular details, though given the general openness achieved by composer and choreographer, the location of these moments will vary from one viewing to another.

(ii) Associative aspects

It might be argued that, whatever the means by which the sounds for this piece and their ordering were arrived at, they can be heard as what they are, as *just sounds*. But the extent to which we can hear anything as 'just sounds', as if in a cultural vacuum, is debatable. Not only are the sounds of *Voiceless Essay* presented here in a human and a social context, but it is also possible to identify

in their intrinsic physical and acoustic nature particular properties that link them to other sounds in life and in art.

Many attempts have been made to explain the emotional content and significance of different musical compositions and genres. Tagg (2000) finds meaning in his analytical objects by seeking instances where similar sounds and musical characteristics are found, and it might be asked here whether Cage's music is susceptible to such an approach. It is perhaps possible to argue that the sounds of his music, however new and unusual, can be related to other sounds found in life and art, even if the similarities identified may be sometimes superficial or obscure. Cage's work may indeed require a radically different set of expectations from those brought by the informed listener to most mainstream forms of music, and its sounds and structures do not have the kind of history of use through which they might have begun to acquire additional layers of potential meaning and resonance such as were observed in relation to *La Fille Mal Gardée*. Arguably, however, this is largely due to the absence of easily perceptible structures, particularly when one considers that the kinds of approach to sound production with which Cage experimented have also been used in intentionally expressive ways by other musicians with very different creative ends in mind and who have sometimes reached much larger audiences.

Voiceless Essay uses as its raw material the sound of the human voice, although the compositional process has systematically removed all traces of both the distinctive sound of Cage's voice and the source texts that he reads; the origin of the sounds in human speech is perceptible, if not perhaps immediately obvious to the uninformed listener. The sounds might be described as embodying a kind of inarticulate (or pre-articulate) utterance in which the basic components of language are present but have yet to find form and structure, an interpretation strengthened by the possibly ironic title. Tagg's approach requires comparisons with moments in other pieces of music, and even with a piece as unconventional as *Voiceless Essay* it is possible to find not entirely dissimilar examples of this

kind of approach to text and the human voice, comparison with which serves also to highlight the unique and special nature of Cage's conception.

For example, the opening scene of Harrison Birtwistle's opera *The Mask of Orpheus* (1986) represents the birth of song, and this music too draws to an extent on the raw materials of speech, mixing fragments of recognizable text with fragmented vowels and consonants (these are notated using letters from the phonetic alphabet, and a proportional - but essentially precise - rhythmic notation). However, whereas in Birtwistle's opera there is a powerful sense of struggle in the enunciation and articulation of these sounds, enhanced by atmospheric washes of electronic sound and an orchestral commentary, there is no such dramatic or expressive intent in Cage's music, whose 'voice' could perhaps be described as embodying a kind of innocence, a state of being which is unaware and quite content in its inarticulacy.

Many other composers of the twentieth century have made use of the raw materials of speech, as well as a wide range of new and unusual vocal sounds. Berio's *Visage* - which mixes electronically synthesized sounds with recordings of the voice of his then wife Cathy Berberian - and *Sequenza III* for solo voice are notable examples, both emotionally intense and highly expressive, as are Ligeti's more surreal and rhythmically taut *Aventures*, along with pieces by Stockhausen including *Carré*, *Momente*, and *Gesang der Jünglinge*. Trevor Wishart's *Vox I-VI* and *Anticredos* use the human voice in ways analogous to the oscillators and filters of the electronic music studio, and Kirk Nurock's improvisational *Natural Sound* compositions deliberately exploit the emotional connotations of vocally produced sounds, as do singers like Meredith Monk and Diamanda Galas, including screams, laughter and sighs. In addition, the sound poetry of Kurt Schwitters, Jackson MacClow and Bob Cobbing exemplifies the essentially musical use of the voice in a literary context. These examples, however, differ markedly from *Voiceless Essay* inasmuch as they all set out to

shape and structure their materials towards some kind of expressive intention, although this may not necessarily be easily or straightforwardly elucidated.

To consider the variety of ways of working with these kinds of vocal material is to throw into relief the very particular and highly unusual nature of Cage's aesthetic and technique. Whereas some composers might perhaps have exploited these sounds to explore extreme states of mind or emotions such as the claustrophobic, humorous, bizarre, or insane, Cage allows the sounds that emerge from his complex processes to be 'just sounds', and he does not intervene in their presentation or shape them to any definable end whatsoever.

Links to other styles of contemporary music may also be made at technological and acoustical levels, particularly given the widespread use of computer software nowadays to sample, edit and process sounds. In the documentary which accompanies the video of *Points in Space*, Cage is shown listening to the sounds created through the use of time-stretching, a computer-enabled means for allowing digitally recorded sounds to be slowed to many times their original duration without at the same time transposing them down in pitch. The immediate effect of this is to make one more aware of the pitch content of apparently unpitched sounds, vowels here being transformed into sustained, if somewhat unstable, pitched notes, giving rise to some strange and unusual harmonies (this particular sound transformation was not used in the final version of *Voiceless Essay*). Steve Reich explored similar territory in his piece *Slow Motion Sound* (1967), which required that a recorded sound to be very gradually slowed to many times its original length without its pitch or timbre being altered in any way.¹³ Such techniques allow one to examine a sound through a kind of sonic microscope, as it were, and raise the listener's awareness not only of the many tiny details within a sound that are usually imperceptible or unnoticed, but also of the physical makeup of those sounds.

¹³ In 1967 this was effectively a conceptual piece, and only recently has the technology been developed to allow its realization.

It is this fundamental acoustic level that links the sounds of Cage's music with sounds found in daily life. The 's's, 'h's, and 'f's of Cage's text, sounds rich in noise elements, are composed from the same physical materials as the sounds of the sea, of breath, of escaping air, of steam engines, and other kinds of industrial machinery. These allusions in *Voiceless Essay* to sounds from realities other than those of Cunningham's dance can become more concrete in a danced and therefore human context, not least when sounds and gestures coincide: for example, those moments at which a dancer rises from deep *plié* simultaneously with a sharp exhalation or intake of breath have put many viewers in mind of the pistons of a steam engine. These are of course no more than *moments of potential allusion* (there need be no consensus as to their significance), and not being a part of any expressive intention on Cage or Cunningham's part, should not be over-emphasized. Such moments do however illustrate and embody certain of the ways in which sound and movement can potentially colour their mutual perception and understanding.

A consideration of the associative aspects of sound is but one approach to exploring the possible meanings of the sounds in this piece. Other approaches might start from the observation that many viewers actively seek to make connections between what they see and what they hear, connections which tend to be rooted in a search for *similarity*. Those moments in a Cunningham dance when sounds and gestures fuse, where textures and energies in movement and music seem momentarily to parallel one another, or when a new sound marks the start of a new phase in the choreography, are often remarked upon (though one might argue that such ways of looking are too much rooted in old ways of seeing/hearing and the kinds of assumptions that are found at their most unbending in classic music visualization technique). For example, Dunning (2002) has written of how 'one of the very minor pleasures of a Cunningham evening used to be the sight of his once-solemn dancers trying not to laugh at

fortuitous events like an electronic groan coinciding with a leg rising slowly and heavily into the air’.

Another approach might be to note the essentially intimate nature of the sounds of Cage’s music: the general dynamic level of *Voiceless Essay* is low, and to become aware of another person’s breathing in the kind of way that is contained within this music one needs to be in very close proximity. There is a striking contrast between the size of the space within which the dance is performed and the intimate, even private, nature of the sounds that reach throughout the whole auditorium in live performance. This is a different kind of relationship of the voice to its audience from that found in a song recital or in the opera house, but it is common in radio drama and film where it can be used to communicate with the listener in very particular ways - direct, intimate, confiding, personal, inward, or private.¹⁴

For many listeners however, Cage’s refusal to shape and refine his musical structures creates real barriers in their appreciation of his music. Not everyone shares either the associations or musical frames of reference outlined above, not that such awareness is necessary for the comprehension of Cage’s sounds assuming that one simply opens one’s ears in the spirit that he would have wished. Responses to the musical accompaniments for Cunningham’s works have therefore elicited a complete spectrum of critical response, from the enthusiastic and intrigued to the hostile and dismissive, and it is not hard to find spectators complaining bitterly about the obstacles that the music creates in their appreciation of Cunningham’s choreography.

¹⁴ If one wished to become even more fanciful, one might invoke notions such as the ‘breath of life’ (Tippett uses amplified breathing at the start of his Fourth Symphony, whose opening pages symbolize birth and the giving of life), or the ‘breath of a creator God’ (as in the hymn ‘Breath on me, breath of God’), or the breath sounds which conclude Stockhausen’s *Hymnen*; one might also cite the amplified breathing which gives Samuel Beckett’s brief and enigmatic play *Breath* (1969) its title.

The music for *Points in Space* was no exception, and even some normally sympathetic commentators admitted to a sense of disappointment: indeed the austere and uncompromising *Voiceless Essay* does maybe lack the more immediate qualities of some other of Cage's scores for Cunningham.¹⁵ For British critics reviewing the first performances of *Points in Space*, *Voiceless Essay* inspired quite varied responses, some comparatively neutral, others facetious, trivializing, abusive, or merely baffled. The most overtly hostile remarks came from Alastair Macaulay, who has expressed the opinion that the music used by Cunningham is often of a much lower level of achievement than the choreography. He described Cage's contribution to *Points in Space* as 'dismal', writing that: '*Voiceless Essay* sounds like heavy breathing; grunts; the long-drawn sighs of a man asleep; and indigestion. It is a soundtrack to be ashamed of.' (Macaulay 1987: 1051) In fact, Macaulay is very knowledgeable about Cunningham's work and his written perceptively and enthusiastically about his dances; unfortunately these comments seem to betray little understanding or sympathy for Cage's music or philosophy.

(iii) Structural aspects

The main issues to be considered in this section include the following: (a) musical and choreographic structures, considered both independently and in relation to one another; (b) rhythm in both music and dance, including tempo, pulse and metre; (c) movement and sound vocabularies; (d) dynamics; (e) the

¹⁵ According to Cunningham, the BBC actually wanted to change Cage's music for *Points in Space*, but the composer refused to allow this and even threatened to withdraw his name from the project. Recalling this episode some years later, Cunningham expressed despair at how television people 'always go back to this sentimental music', with one thing supporting the other: 'yes, and awful choices of music. If they got composers who know how to deal with this, the whole musical thing would pick up enormously.' (Kuhn 1999: 94)

presence of synch points and other points of apparent similarity between sound and movement.

To spend time cataloguing detailed conjunctions of sound and movement would probably be a waste of effort, given the essential looseness and variability of Cage and Cunningham's pieces; rather, an attempt has been made here to deduce the kinds of relationship which will arise inevitably in any performance of this work given the general characteristics of both its dance and music. For Cage (1968a: 259): 'structure is not put into a work, but comes up in the person who perceives it in himself. There is therefore no problem of understanding, but the possibility of awareness'. He then went on to address one problem endemic to any attempt to describe relationships between sounds in his music, and implicitly by extension between sounds and movements, namely dangers of oversimplification:

Everything is articulated. We don't have to do it. In fact, the sharpness increases as we lay hands off. There are temptations for us to stop what we're doing and make a connection that will be overwhelming. Well, perhaps it is. I haven't seen yet. I've seen some. *But I'm losing my ability to make connections because the ones I do make so belittle the natural complexity.* [my italics] (Cage 1968: 249-50)

Nevertheless an attempt will be made to discuss aspects of the relationship between music and dance in this work. The account is intended primarily to convey something of the variety of Cunningham's choreographic invention and the shaping of the piece as a whole, as well as something of the ways in which the dance interrelates with the music, design and lighting.

The choreography of *Points in Space* is constructed from a continuous sequence of short, frequently overlapping sections performed by constantly varying combinations of dancers – mostly solos, duets, trios, quartets and

quintets. These sections can be loosely grouped into three main parts, the outer two being dominated by lively and mostly vigorous movement, and the central section built around a sequence of slower, sustained duets; interpolated before the last of these three principal sections is a brief solo, danced by Cunningham himself. In certain respects this overview oversimplifies the sheer diversity of this piece, but in broad outline it holds good.

As with all Cunningham's work, the choreography is characterized by its coolness and objectivity, its rhythmic clarity, and the absence of overt emotional display. From time to time the dancers group around one another in differing formations, and there is also much unison movement, but the dramatic impact of such moments is never emphasized. There are several extended duets in which the men partner and support the women in an almost conventionally balletic manner, but there is nothing romantic - or even emphatically gendered - about the ways in which the dancers relate to one another. There is an extended male solo whose character and predominant moves seem to evoke a whole genre of classical male solos through its powerful jumps and turns; one might even argue that this sequence is a not too distant a relative of Colas's solos in *La Fille Mal Gardée*, but in Cunningham's work there is a measure of detachment and objectivity that distances such moments from traditional models. The dancers are essentially bodies moving in space for the sheer pleasure of so doing, flesh and blood kinetic sculptures whose underlying motivations and relationships are mysterious and unexplained. Watching this dance – as is so often the case with Cunningham – might instructively be compared to the experience of watching the movements of animals and birds, or people going about their business in the city, inasmuch as one might be ignorant of their motives and purposes yet intrigued and curious at their actions.

The opening of the film (0'00" – 0'25") introduces the four most commonly visited segments of the backdrop, as discussed above (in order of revelation, the predominant colours are as follows: (i) blue and white; (ii) red and

black; (iii) yellow; (iv) reddish brown and black), and the work's title is superimposed upon this sequence of images. The first sounds are heard at 0'17" (an exhalation, begun with a faint whistle, followed by a brief spray of short, sharp consonants, like a form of indistinct muttering), all set against the brilliant yellow sector of the cyclorama. The camera then pulls back to reveal a group of three dancers in formation who begin to move at 0'33", their first gestural impulse accompanied by a gently accented 'tssh' sound. As the dancers raise their legs to the side into attitude at 0'38" (a gesture that is a particular feature of this work), an exhalation with a sharp attack is heard on the soundtrack, and an in-breath as they turn (though the sound continues beyond the movement): these are the first obvious synch points of the piece.

The trio moves in unison, joined shortly by a man who enters from the rear of the arena travelling quickly downstage weaving between the other dancers. He has been present on stage from the start of the piece, kneeling motionlessly to one side: the presence of motionless figures glimpsed in sculptural poses towards the back of the stage, waiting to burst into life, is another recurrent feature of the dance, suggesting perhaps the existence of other layers of activity happening simultaneously, but concealed from the viewer. At one point the male soloist reaches forward with his arms, pulling back his stomach into an arched curve, before continuing with his stepping pattern; an accented hiss coincides with the forward reach and continues through the subsequent steps, providing a moment of dynamic continuity and shaping to the dance phrase. At 0'50" an unvoiced wind sound accompanies a series of turns, and another sharply defined consonant echoes the abrupt drop of the dancer's head.

Much of the movement material presented here returns throughout the work, albeit sometimes at different tempi, including brisk stepping patterns, *grand battements* into attitude, arabesques, spins, and jumps of many kinds. The dancers move in strongly pulsed rhythms (in the opening section at a tempo of

approximately 112 beats per minute), with moments both of stillness and sharper, more accented gestures (deep *pliés*, the sharp downward movement of the head mentioned above) indicating downbeats (by implication at least). For the most part, the choreography can be counted without too much difficulty, the dancers expressing a regular pulse through their movements, though the tempi fluctuate from section to section.¹⁶

In general terms at least, the kinds of relationship described between music and dance recur in myriad forms throughout the work. The choreography in the first ten minutes or so of the piece consists of a rapidly alternating sequence of short episodes, some overlapping, others following on directly. It would be possible to list numerous moments when sounds and movements come together in meaningful ways if one watches with a particular kind and quality of attention, but to describe these moments clearly and precisely is not easy; one also runs the risk of trivializing the music, and in some respects it is better that viewers explore these connections for themselves.

Nevertheless what follows includes a highly selective attempt to illustrate some the functions that the sounds here may be considered to serve. For example, sustained sounds can often seem to bind together a sequence of movements into a larger continuity. In the moments immediately preceding 1'10" all but two dancers leave the stage, and this transition, like several others in the piece, is covered by long hiss. At 2'00" a group of dancers abruptly drop their heads to one side coincident with another noisy breath sound, and this is immediately followed

¹⁶ Valda Setterfield (in Kostelanetz 1992: 107) once remarked on how 'the rhythms were always so incredibly strong' in Cunningham's work, and her comment is a useful reminder that there are different ways to experience a dance, as there are too for a piece of music: from the perspectives of its makers, its performers, and its spectators, each vantage point bringing a different kind of knowledge and understanding. This account of *Points in Space* is primarily concerned with the perspectives of audience and composer, but the dancers who experience the work through their bodies must surely have understood the work in very different ways. The sheer physical energy of the work, not the mention the huge demands upon strength, control, stamina and virtuosity made of the dancers, seem at odds with the more contemplative frame of mind induced in the mind of many viewers.

by another transitional passage in which they move first to the back of the stage, then travel quickly forward, accompanied by an energizing spray of consonants and longer, more sustained hisses.

There are livelier moments too, some characterized by fast stepping patterns or by legs being rapidly thrown into *arabesque*, and these are sometimes marked by sharp, accented consonants in the soundtrack. But it is every bit as likely that on another occasion such gestures might also be performed in moments of silence.

There are times too when the sounds seem almost to breathe with the dancers to an extraordinary degree, each gesture being easily enough related to a corresponding sound. A breath sound will sometimes coincide with the beginning or end of a movement or be sustained over its whole duration. In such moments, the spaciousness of the sound is emphasised, as opposed to its dynamic qualities. Changes in the kinds of sounds heard can also seem to take on a transitional quality. In one sequence, occasional gulped consonants energize the movement, but as the sequence ends, airier breath sounds take over, as if marking a transition to a new place.

The kinds of sound-movement relationship noted this far are all fleeting and momentary, and the rapidity with which the sections of the dance follow one another gives the whole a kaleidoscopic, multi-layered quality. However, at around 10'10" a long slow central section begins with two simultaneous duets. The lights are dimmer than before, enhancing a sense of this as the still centre of the work, perhaps night in contrast to the daylight of the outer sections of the work. The movement of these *adages* can be counted in slow fours, with changes of direction as movements are completed often falling on the downbeat, but as the dancers tend to move through the beats rather than clearly marking them the pulse is not especially obvious or visible in the dancers' bodies. This part of the dance begins in silence, emphasising the sense of stillness. After about two

minutes during which any sounds played are so quiet as to be essentially inaudible, at around 12'38" gentle sounds like deep breathing return, their rhythm almost paralleling that of the dancers. The stage becomes darker still, with lengthening shadows, and at around 12'30" the dancers are seen almost as silhouettes against the dark yellow glow of the cyclorama.

At around 12'54" the trios break up, and all the dancers spin out to form a circle; they hold hands, then lean back and forth, looking out over their shoulders into the space that surrounds them. The sound is sparse, just occasional breath sounds with long silences in between, essentially an aspect of the environment within which the action unfolds.

At 13'10" there is a sharp intake of breath on the soundtrack as arms are raised and then lowered. At 13'22" there is sudden brief burst of energy; the dancers return to their circle formation, and then rapidly spin out into new tableaux. The stage picture becomes more complex for a moment; then the dancers slowly and purposefully move until at 14'15" they come together in a symmetrical tableau, a moment accompanied by gentle breathing on the soundtrack.

At 14'35" the lights rapidly come up, and the dancers find themselves in the blue and white sector – a striking if apparently unmotivated change which nevertheless could be seen as marking a return to daylight, the setting now evocative perhaps of blue sky with white cloud. The pair travel back, and the camera follows, moving in and watching them from different perspectives as if it has come on stage to inspect the action more closely.

At 16'08" the camera closes in on the upper halves of the bodies of the two dancers who suddenly fill the screen; a slow duet for this pair follows, with long, sustained and tender movements predominating. As the woman leans back,

and her movements gently rise and fall, soft breathing is heard, seemingly again reflecting something of the dynamic qualities of the movement.

At around 16'30" another duet is revealed at the rear of the stage, danced by a man in blue and a woman in blue and black. This duet fills the screen, to the extent that their bodies obscure everything else that might be taking place on stage. The unhurried spaciousness of the long drawn exhalations here enhances the sense of stillness and concentration. At 17'10" a second duet comes into view, the sense of separation between the two duets emphasized by the one taking place in the yellow sector and the other in the red sector. At 17'35" the girl in the red leotard rises to the sound of an in-breath, and each of the subsequent breath sounds in this sequence can again be linked to a gesture or change in the relationships between the dancers. At 18'07", following an extended section dominated by breath sound, the consonants return, giving a new energy to the sound which becomes more layered and busy, although the duets on stage carry on much as before. The choreography here is very slow and still, and the general effect is one of contemplation and of quiet absorption in action. The camera moves around the stage, passing through different sectors and focusing on various different actions taking place in the different parts of the arena. The camera eventually comes to focus on one couple in particular, but as the man gradually lowers the woman's body the figure of Merce Cunningham himself is revealed in the gap created by the movement of their bodies.

Cunningham's solo begins in silence, the stillness and lack of aural distraction emphasizing the special nature of this moment. Not only is this the first glimpse of the work's creator, but also the physical contrast between the elderly but charismatic choreographer and his young dancers is inescapable. Cunningham moves rapidly through the different sectors of the backdrop (red/black – sky blue – white). Whereas a sense of pulse is strong in Cunningham's solo, the unpredictability of its phrasing minimizes any feeling of clear metrical structure and the movement has an edgy, ambiguous quality. He

throws his arms forward and back as if pushing away an unseen presence, sometimes accompanied by the sounds of consonants, but sometimes too in silence; his solo is dominated by constantly moving and restless stepping patterns. Briefly he is framed by the camera against the girl's back, curving beautifully, almost like a piece of abstract sculpture (this way of filming Cunningham, revealed through the sensuous shapes created by the still bodies of his dancers, is characteristic of the camera's approach to his solo); subsequently he is seen framed against the torso and arm of the girls in red and in blue. His limbs seem to fly out, arms and hands outstretched in strange semaphore-like gestures. He spins back, briefly strikes a pose, after which he is momentarily joined by two women and a man who surround him and then disappear; Cunningham now stands at the back of the stage and the camera cuts to a new view of the arena; Cunningham disappears from view.

At this point the third of the principal sections begins, and its rapid alternation of sequences seem to recapitulate much of what has gone before. In this section there is a strong sense of actions taking place simultaneously off-screen, but not revealed by the camera.

At around 21'35" a trio of dancers come on, moving quickly and in unison, stepping from side to side much as at the opening of the dance. The trio becomes a duet, the dancers moving with small steps, their hips twisting from side to side. At 22'14" the camera cuts to another duet, characterized by its energetic stepping patterns and jumps, which can also be counted in fast fours.

A woman runs on in a large arc, joining the two men to form a trio. They move in unison, with jumps and leaps and the sharp dropping movement of the head seen earlier, characteristic of their movement. Here the spluttering and hissing on the soundtrack is busier and becomes almost energized by the movement. The trio then becomes a quartet, then a quintet, and lastly a sextet as the stage becomes fuller and busier still. At about 23'50" there is a lively duet in

duple time, and these dancers are soon joined by two other duets, a slower duet seen to the rear of stage and a lively duet at the front of the stage. The stage now rapidly fills again with dancers performing fast unison movement. At 25'10" the red and green duo suddenly and briefly fills the screen, performing a slow adage duet. The lights are by now being lowered again, and the shadows are strong. As the duos move to the rear of the stage, the camera pulls back, offering a wider and more distant perspective on the whole arena. The dancers are seen in a large pool of light surrounded by the darker extremities of the stage; many different kinds of movement from earlier in the work can be seen taking place simultaneously, but now seen from afar rather than in close-up, with many long shadows cast onto the floor.

The very last moments of the work could be said to constitute one of Cunningham's 'whirligig' finales, to borrow a phrase used by Earle Brown to describe the closing sections of several of Cunningham's dances in the 1950s. (Brown quoted Vaughan, p. 108) A series of duets in rapid turn take centre stage, almost like a curtain call, the camera moving in closely on each; even Cunningham himself makes a brief appearance. At the very end the camera pulls away from the dancers and focuses on the backdrop, showing once again those same images that introduced the dance and coming to rest on the darkly radiant yellow sector. The music, which began before the dancers became visible, continues to the very last image, long after the camera has turned towards those last images of the backdrop. This gives the film as a whole a remarkable sense of closure, rarely present in Cunningham's staged performances: the final lowering of the curtain, determined by the agreed duration of the piece, can seem random and arbitrary, abruptly concealing a busy and unresolved stage image. Presumably the intention is to give the impression that the dance is something that was going on before the performance began and continues after. Indeed, Cage too liked to blur an audience's perception of the precise moment of a performance's beginning, with the intention of breaking down further those

barriers between art and life which in so many traditional concert performances are quite deliberately emphasized by moments of stillness and silence.

In some ways to describe the sound-movement relationships in this piece in these kinds of terms is an eccentric exercise. Viewers do often comment on the kinds of sound-movement connections highlighted here, but laborious accounts of particular moments inevitably fail to capture the speed and subtlety of these relationships. This account has tended to focus in on the same quasi-synaesthetic relationships derived from music visualization that were discussed earlier, despite its inadequacy to the task. In truth, sound and movement in this piece could not be less alike or share fewer qualities; the score perhaps might be thought of as unobtrusively complementing the qualities of the movement, but if one inverts the relationship and thinks of the choreography as a response to the sound then an almost unbridgeable chasm between the two is revealed. It would also be true to say that it is those very differences between the music and dance which enable a much richer perceptual experience from Cunningham's work than from pieces like *Never Again* in which the attention is so much more strongly focussed, the music never adding a counterpoint but only serving to reinforce the action and dramatic narrative. *Voiceless Essay* provides an essential if enigmatic dimension of *Points in Space* and in the conclusion to this chapter further attempts are made to understand the nature of this relationship.

Conclusion

Voiceless Essay operates on a number of different levels within *Points in Space*. Most immediately, its hissing and spluttering vocal sounds contribute to the identity of the work in a unique and immediately recognizable fashion. Similar observations may be made with regard to many other of Cunningham's works: for example, the dense polyrhythmic drumming of *Duets* (1980), the trickle of rain sticks in *Beach Birds* (1991), the collage of bird-song and telephone messages in *Travelogue* (1977), the gentle gurgling of water-filled conch shells

in *Inlets* (1977), and the dense wall of recorded sounds and Irish traditional music in *Roaratorio: an Irish Circus on Finnegans Wake* (1983), all works that have memorable and strongly characterized sound worlds.

The musical qualities of each score can be seen as powerfully and distinctively colouring the emotional climate of each piece. Cunningham's dances, despite their high degree of abstraction, do possess quite distinct moods and identities, and one contributory factor is undoubtedly the kinds of sounds found in each. It is surely significant that when Cunningham looked back on some of his earlier dances, he would often refer to the particular qualities that characterized the music. For example, speaking of *Inventions* (1989), the music for which was Cage's *Sculptures musicales*, he spoke of 'very sharp sounds that come in, and then disappear, dying away of their own accord, the sounds being separated by huge amounts of stillness and stillness'. In the brief extract from this dance included in Eliot Kaplan's film about Cage and Cunningham, it is striking how powerfully each sound colours the movement it accompanies: at first a high, bubbling electronic drone is heard, complementing a lively sequence with runs and leaps across the whole stage; then, after a period of silence, a deep resonant sound is heard, as if recorded in a wind tunnel, and immediately the whole ambience of the dance seems to alter. The abrupt shift in musical sound and quality might seem to imply the beginning of a new section in the dance, whether or not this is actually the case; if the sounds had continued without changing, it is quite likely that the choreographic divisions might have appeared much less obvious. This contrasts with the greater consistency of a piece like *Voiceless Essay* whose sounds and textures are maintained throughout without significant contrasts or variation, and which therefore enhance the *continuity* of the dance as opposed to its sectional nature.

Although theoretically it might be considered legitimate to use any piece of music - assuming an appropriate style - for one of Cunningham's dances, his musicians are not in the habit of substituting scores and therefore undermining

the contribution the music makes to the work's identity. The only occasions when sections from dances are seen with different musical accompaniments are in the context of an *Event*: Cunningham's *Event for Television* contains excerpts from nine different dances, but only two pieces of music are used – Cage's *Branches* and Tudor's *RainForest*, which accompanies the eponymous dance, as well as a new piece which follows on from that piece at the end of the video. The experience of an *Event* can be instructive, and people who have been familiar with the original choreographic sequences included have commented on how very different a dance can appear with alternative music. A telling example of this is *Winterbranch* (1964), a dance which Cunningham typically described as being about the physical action of falling but which, perhaps on account of its music and lighting, had been widely seen as one the choreographer's most powerful and emotional pieces. Those same falls were, however, found comic when seen out of their original context, and with different sound and lighting, even provoking laughter; divorced from LaMonte Young's notorious score, *Winterbranch* apparently came across as a much more relaxed and even comic piece. (Vaughan 1997: 137)

Winterbranch clearly possessed strong emotional connotations and resonance, and Cunningham has commented on how in every country in the world in which it was performed people found different meanings:

In Sweden they said it was about race riots; in Germany they thought of concentration camps; in London they spoke of bombed cities; in Tokyo they said it was the atom bomb...the wife of a sea captain said it looked like a shipwreck to her. (Cunningham 1991: 105)

Cunningham's description of the dance is of a piece about falling typically focused on the objective nature of the movement material rather than any implicit expressive quality or intention:

I have a tendency to deal with what I call facts in dancing. In *Winterbranch*, what was involved was the fact of falling . . . that is going off the balance of two feet onto the ground. Falling – unless one wants to stay there – presumes the act of rising; that is getting up onto the two feet again. So that *Winterbranch* began with the physical fact of a human being falling and rising. Other factors, visual and sound factors, entered later . . . not to change the original fact but to add to it. (Vaughan 1997: 135)

Cunningham's idea for the lighting was that it should attempt to create an impression similar to that made by artificial light, with the quality of street lights or the headlights of oncoming cars during long night drives. The music, by LaMonte Young, was an extremely loud and persistent piece called *Two Sounds*, the title aptly describing the music's structure. Vaughan speaks of 'the sound of ashtrays scraped against a mirror' and 'pieces of wood being rubbed against a Chinese gong', amplified up to and perhaps beyond the limit of human endurance.' (p. 137) The music reminded some people of a scream of pain, or of a dentist's drill. Cornelius Cardew once quoted a description of the work given to him by one of the managers of the dance company when *Winterbranch* was performed in London in 1964:

The composer had provided two separate tapes, to be started at different points during the ballet. When the first sound starts you cannot imagine that any more horrible sound exists in the whole world. Then the second sound comes in and you have to admit that you were wrong...Actually of course, any two sounds could constitute the composition, even two very beautiful ones. (Cardew 1966: 960)

The music for Cunningham's dances can also be considered in relation to its more localised, incidental detail. For example, it is perhaps inevitable that from time to time synch points of various kinds will occur and that occasionally

new sections or events in the dance will coincide with the introduction of new musical textures. Although in a series of performances of a particular piece it is unlikely that such coincidences of sound and movement would repeat themselves, this is perhaps immaterial: *similar* phenomena would occur in any performance, and the kinds of meeting between dance and music likely to arise can often be predicted in general, if not specific terms. *Voiceless Essay* might loosely be characterized as consisting of short percussive consonants, heard either singly or in rapid rhythmic sprays of sound, set against or contrasted with all manner of sustained breath sounds, some short, others quite long drawn out. The choreography too encompasses movements with sharp accents and impulses, alongside slower and more sustained movements in which the dancers tend to move through the beats rather than emphasizing them. Statistically, the likelihood that similar qualities in sound and movement will momentarily converge must be high, with the sharper, faster changing sounds energizing or emphasising movements with analogous qualities. Drown (1997:21) described *Voiceless Essay* as ‘a collage of whispering voices [that] sometimes accentuates movement and sometimes stillness – either of which becomes appropriate without being predictable’. This, then, is music with the potential for great flexibility to interact with a range of different movement qualities.

The marked differences in approach to time and rhythm favoured by Cage and Cunningham are also very striking here. Over the years Cunningham has explored many different approaches to timing: sometimes pulse-based and metrical, other times based on duration measured with a stopwatch; some of his works allow the performers a degree of freedom in their timing, while others are fairly fixed and inflexible. The presence of periodic pulse-based rhythms in Cunningham’s choreography has led some people to suggest that his work is not as advanced as that of Cage. Cage’s indeterminate works – with only a handful of exceptions – avoid the presence of any kind of perceptible regular pulsation, a stopwatch being preferred to the metronome for fixing timings when necessary. The rhythmic aspect of Cunningham’s choreographic language is, however,

rooted within unique properties of the human body itself. Cage has spoken of 'the nature of dancing, this two-legged business, which is dependent, for instance, on periodic rhythms - the mere action of walking or running is an old-fashioned notion which cannot in any way simulate the aperiodic rhythms of modern music.' (Cage 1989: 192) He has also described dancing as 'an acceptance of physical constraints, a response to them and an enjoyment of them'. (Kostelanetz 2003: 207)

The two things that music is now able to free itself from, as I see it, are pitches and rhythms [...] Now in dance, if you give up things that correspond to pitches and rhythms – namely, movement on two legs, what do you have? [...] And no matter how electronic our culture becomes, we will still have the question of two feet on the earth, and that very fact is going to produce dancers. There is nothing about scales and periodic rhythm in the art of music that makes them so eternally necessary... But in the very nature of the dance are such questions as balance, muscle-control, left-right, left-right etc. (Cage 1989: 198)

Cunningham's choreography demands considerable physical virtuosity and athleticism, quite different in kind to the skills needed to perform Cage's music. Where Cage and Cunningham are alike however is in their insistence on working within the physical nature of their material and chosen medium.

In *Points in Space* a strong sense of pulse and metrical accentuation is perceptible almost throughout. Tempi change frequently from section to section, but these changes are rooted in a purely choreographic logic, allowing for movements to achieve their preferred speed and dynamics rather than having to make adjustments and compromises so as to fit with an externally imposed musical pulse. Any attempt by a composer to create a score that faithfully followed and underlined these changes would be highly problematic and the results possibly even absurd given their lack of a truly musical logic. Such a

score would also create many difficulties for the musicians; they would need to find ways to internalise accurately the tempi of the dance, although handicapped by the lack of a direct physical knowledge of the movement such as informs the dancers' performances. Cage's score, however, has no underlying pulse, so there is never any conflict or tension with the dancers' pulses.

One might argue that one of the factors that marks out Cage's scores for Cunningham is an essential *gestural simplicity*. It is hard to imagine music by composers as diverse as Mozart, Beethoven, Schoenberg or Elliott Carter ever being used in a performance by Cunningham's company. This is not only a matter of the obvious incompatibility of aesthetic but also related to the sheer complexity of the musical structures found in these composers' music: their scores are restless, constantly developing and changing, dramatic and highly emotional. The inevitable tensions with the choreography, with its own quite distinct approach to structure, would most likely result in a complete mismatch. Cage's music, however dense or rich, is usually much less directed and changeable, and indeed can sometimes be perceived as a single gesture, whatever the complexity and multi-layered nature of its detail. For example, the superimposed drums of Cunningham's piece *Duets* produce some fascinating resultant rhythmic patterns that interact with the dance in a variety of ways, but the music actually develops slowly, with a monolithic quality that never disturbs the unfolding of the dance. Similar observations can be made in relation both to austere and sparse pieces, like the scores for *Inlets* and *Beach Birds*, and to much wilder and denser pieces like *Roaratorio* and *Variations V*. In this respect Cage could even be seen as following in the steps of people like Louis Horst, whose views of music for dance as like a frame through which the dance might be better seen, as well as his warnings against the use of overly complex scores, were considered in Chapter One.

Cage is especially noted for his interest in silence, and many of his scores for Cunningham can include lengthy periods of time when there are no sounds

heard that are made by the musicians who are realizing his instructions. There are moments in *Voiceless Essay* where the sounds fall away almost completely, and as the general dynamic of the music is quiet and its sounds blend easily with the sounds made by the dancers, it is possible for the music to withdraw and return almost imperceptibly. Yet the absence of music does serve to mark out these moments as special: the central slow section begins in silence, increasing the sense of stillness, and Cunningham also begins his solo during a moment of silence, providing a subtle emphasis to this moment. Cage's silences are always filled with activity, not only the choreography, which occupies the eyes, but also the sounds of the environment. But there is another potentially expressive aspect to the use of silence, or of sounds that verge on silence, and in several pieces it is the very stillness and concentration of the musicians themselves that can be so powerful an influence upon the quality of an audience's concentration. Cage's performance of *Child of Tree*, which accompanies the first half of the *Event for TV* (1977), with its gently random patterns reminiscent of the idly plucked keys of a kalimba, is one example; the solo cello composition *One*⁸, used for *Interscape* (2000) another.

Finally, there is the question of what may or may not be a natural urge on the part of many people to try to find meaning in Cage and Cunningham's work. That their work might once have been problematic is not surprising, given the originality of their conception; today, in an age in which non-narrative forms and new kinds of continuity are common, audiences are much better attuned and informed. Rather than seek out hidden meanings, perhaps instead we should look to the effect of their work and the nature of the experience it offers. Cage has said that he is most interested in art which changes his mind and the way he looks at the world, and Cage and Cunningham's works can indeed change the ways in which one experiences not only other dance works but life itself. If Cage's so-called 'silent piece', *4'33"*, can enhance our appreciation and awareness of environmental sound, and his *0'00"* encourage one to see mundane actions in a new light, so too can Cunningham's dance change the ways in which one

experiences life, movement and nature. Many people have said that after spending time with Cunningham's work, more conventionally expressive work can sometimes seem crudely manipulative, the transparency of its ploys having been revealed for what they are. Cunningham and Cage offer lessons in how better to enjoy and appreciate life, and the experience of their work has changed the lives and outlooks of many who have come into contact with it.

Afterword

The ways in which sound, lighting, decor and costume influence one's perception of the choreography and structure of this work became particularly clear when Garry Lambert mounted an *Event* based on *Points in Space* with second-year students at Laban in January 2004. Since sequences and phrases drawn from Cunningham's original movement material were all that remained of the original work, it is inevitable that one speaks here of the choreography being the central focus of attention whose perception is modified by other media. Images, groupings, steps, sequences and gestures from *Points in Space* were easily recognizable to an audience familiar with Cunningham's work, though nothing of the structure of the original remained, and specially devised chance procedures had been used to reorder the material. Yet the overall impression left by the work – its mood and identity – was very different. Newly created music by Oli Newman replaced *Voiceless Essay*. Newman composed a score clearly informed by an awareness of Cage's original music, in that it too was based on a recording of Cage's voice, in this instance speaking clearly and entertainingly about the compositional process for 4'33". At first the speech was presented without any modification, but subsequently it was increasingly subjected to various computer-aided distortions and transformations. These manipulations were not determined by chance procedures and were perhaps more spontaneous and intuitively improvisatory than Cage himself might have approved. The dancers were all dressed in black leotards, contrasting strongly with the varied colours of the original production. There was no brightly lit cyclorama: instead the back of the

stage was lit in a dark shade of blue, and the lighting was generally low and subdued throughout. The chemistry between the aural and visual was different to that of the original work, though it is not possible (or even advisable) to attempt to sum up the differences in simple terms (mood, emotion, narrative). Rather the example serves to underline the provisional nature of the decisions made in any Cage-Cunningham performance: here, far from there being a fixed end product in which every element, step or sound finds itself a pre-determined place within a larger structure and design, is work whose identity - like a Calder mobile, or a landscape, its perception endlessly modified by the effects of light and of climate - is constantly variable. Identifiable forces and processes may have created the forms and patterns of nature, but they are also possessed of an unpredictability and absence of conscious intention that epitomize certain of the qualities to which Cage and Cunningham aspired in their work. In this, 'art imitates nature in its manner of operation', to cite once again the words of A.K. Coomeraswamy that so influenced Cage and in turn Cunningham.¹⁷ In nature above all may be found models for their processes and a means for understanding of the kind of *experience* that their work can offer a receptive audience.

Another opportunity to test many of the assumptions of this thesis arose shortly after the completion of this chapter. In 2003 Cunningham used two scores created by the art-rock groups Radiohead and Sigur Ros for his work *Split Sides*. In some respects this marked his most radical departure from the musical aesthetic of Cage and Tudor, and at the time some people complained, albeit rather cynically, that it was a move most probably intended just to attract a broader and younger audience. Cunningham admitted that he had not been familiar with either group before it was suggested that he work with them, but that when he heard their work he was attracted by the experimental sounds that they were using. Bishop (2004) even wrote that Cunningham seemed 'fairly vague' about his musical choices and 'not altogether interested', regarding them

¹⁷ See Chapter Two for a fuller discussion of the influence of Hindu philosophy upon Cage's thinking.

as primarily the province of his musical director, Takehisa Kosugi, just as in the past Cage had 'figured out what music we might use'.

The work was notable because of the way in which its presentation made a special feature of the elements of chance. Before each performance dice were thrown on stage, usually by a small group of art-world celebrities, to decide the order in which the two sections of the dance, the two pieces of music, the two backdrops, lighting designs, and sets of costumes would be performed. In theory, *Split Sides* could be performed in any one of thirty-two different versions. This ritual at the start of each evening directed the audience's attention in a very special and effective manner that was widely commented upon. The different design and music elements were strongly contrasting, and the result was that people's awareness of the role they play in the identity of a Cunningham performance was raised; people also commented upon how each combination of elements seemed satisfying in its own right and how music and dance seemed to work together in ways that appeared inevitable and considered.

Radiohead and Sigur Ros could be described as art-rock groups, and they incorporate melodic, tonal and rhythmic material alongside more radical noise-based electronic sounds, samples and, in the case of Sigur Ros's contribution, some homemade instruments. The more extreme moments in their music might easily have been drawn from a Tudor or Cage electronic score. Where they differ from Cage and Tudor is in the essentially dramatic and expressive ways in which they use their materials; by juxtaposing these sounds with more conventional materials, the music can seem to embody emotional qualities associated with tension, neurosis, angst, violence and aggression in a far less ambiguous manner. Both scores for *Split Sides* are sectional in structure: each section is strongly characterized and there is usually some kind of transition from one section to the next; some of the music is not obviously pulse-based, but other sections, notably one passage built up from samples of speech in the Radiohead music, had terrific rhythmic drive and energy. The music could be described as an emotional

journey, and this characteristic of both scores was inevitably carried over into the perception of the choreography. Although on the face of it many of the factors observed earlier as facilitating the integration of Cage's sounds in *Points in Space* are absent, the contrasts are in fact instructive. In one of the possible permutations a highly rhythmic and pulsed section of choreography collided with a similar section in Radiohead's music, and many observers commented on how the dancers seemed to be dancing *to* the music and riding on its energy and dynamic characteristics. That same section of the dance could as easily have worked with a more sustained and peaceful or violently disruptive section of music: each would have resulted in a different environment, context and set of relationships. The possibility of this happening is surely facilitated by the openness of the choreographic structure, but whatever other factors are at work, the multitude of possibilities thrown up by the relationships between the elements remain fascinating and rich in potential, with the power to lead to the discovery of new music-dance relationships that transcend conventional and habitual ways of thinking and making.

CONCLUSION

Although the deep-rooted links that by tradition have bound together many styles and genres of dance to music may have been weakened in the last hundred years or so, at least in certain forms of contemporary dance, most dance performances nevertheless remain multi-media events in which music, lighting, décor and costume are essential elements that all contributing to something which is usually experienced as an artistic whole. Dance may have aspired to the status of an independent art form and increasingly found ways to develop and structure its material in ways that owe little if anything to musical models, but music/sound is still valued as an essential element by most dancers and their audiences. Even Cunningham rarely dispenses with the services of his musicians, although music is not necessary to an understanding of his choreography and is never a consideration during his creative processes. Even when Cunningham has billed Cage's so-called silent piece, *4' 33''*, as the music for a performance (it was in fact included in an *Event* in 1994), the very sounds occurring within the environment of the performance inescapably become the score.

It is true that many extra-musical factors may contribute to the experience of music heard at a concert, and opera too is clearly a multi-media form, but whereas concert music and opera are usually perfectly viable, occasionally even preferable, when the music is heard alone in recordings and broadcasts, this cannot be the case with dance. Even if DVDs were to be sold of a dance presented in the most neutral of settings and stripped of music and design as far as was possible, the absence of sound or décor could not help but make a statement in its own right: whether a dancer wears an elaborate costume, or dance practice clothes, or even appears naked, that decision inescapably reflects an attitude and influences the way in which the dance is received and understood.

The collaborative nature of dance, as well as the way in which it brings together the contributions of many specialists, has meant that many people have felt ill equipped to explore the relationships between the different elements; indeed, few people have the expertise to analyse both music and dance in any real depth. In that respect, the present writer is no exception: as a musician who has worked extensively with dancers, much knowledge and practical experience has been acquired over the years, but inevitably dance is here approached from a primarily musical perspective and with priorities that are not necessarily those of a dance specialist. Rather than abandon the attempt to say anything at all about music-dance relationships, however, it has been argued that a dance performance can actually be approached from many different perspectives, albeit in the full awareness that these may be partial, biased or incomplete. Choreographers with little technical understanding of music are able to respond to and work with a musical score in sometimes quite sophisticated ways; elements of musical structure may well be reflected in their work, though they might not be especially aware of this or even able to analyse the score except in the most rudimentary fashion. If this is the case, it is partly because when necessary dancers do listen very closely to the music and come to know it intimately, and partly because a composer gives music shape and form precisely because without these aspects it cannot communicate clearly (*pace* John Cage). Several instances have been noted here of a musician praising a piece of choreography on the grounds that it has revealed aspects of the music, either structural or affective, of which s/he was previously unaware. Similarly there is no reason why musicians should not bring their own insights and technical understanding of music to bear upon a dance performance.

If most attempts to deal with music-dance relationships have tended to focus upon structural relationships or on socio-cultural and historical research, it seems also important to try to understand better the nature of the extraordinary chemistry that can emerge from the conjunction of music and movement in the mind of the spectator. Arguably, structural relationships are not expressively

neutral: a raised arm or leg may have been motivated in the first instance by the simple desire to visualize an ascending melodic motif, but neither of these gestures, the musical or the choreographic, is entirely empty of meaning, even though that meaning cannot be absolute and is a function of context. The adoption of chance techniques by Cage and Cunningham may have served to weaken the power of such contextual relationships in their work and enabled new forms of continuity, but this is not to deny the expressive qualities of their work. 'The activity of movement, sound, and light, we believe, *is* expressive, but what it expresses is determined by each of you – who is right, as Pirandello's title has it, if he thinks he is.' (Cage 1968a: 95)

Contemporary dance owes much to the other arts, not least cinema, and it has been suggested here that lessons can be learnt from applying methods and approaches borrowed from film music studies to the analysis of the role of music in a dance work. Tagg (2000) has explored the affective qualities of music in the context of old film, focussing on popular television dramas like *Kojak* and music in advertising; if his method is too cumbersome and labour intensive for many to apply with the same degree of rigour that he demonstrates in his thesis, nevertheless there are aspects of his method which may usefully be applied in a dance context. Chion (1994) and Cohen (2001) have both dealt with perceptual issues: Chion's concept of the synch point refers to something discovered widely in music-dance relationships, including Cunningham's work, while Cohen has examined the conditions under which transference of attributes might be enabled in a multi-media situation. Cook (1998), through his questioning of the adequacy of traditional language based on notions of counterpoint and parallelism, has prepared the ground for a new methodology and language that deals with these relationships in a much richer and more complex manner.

Many problems remain to be resolved, not least those of language since personal experience and perception of an artwork is difficult to describe clearly and objectively. The value and strength of Jordan's work is found not least in her

detailed documentation of music-dance relationships in the works she has chosen to study, but the relevance of these approaches when the relationship of sound and movement is not fixed, or is much looser and more open, is debateable. By comparison with Jordan, Hodgins' case studies too often read like rather generalised appreciations of the works in question; the main features of the music are described and particular moments in the relationship of sound and movement are highlighted, but the depth of analysis implied by his paradigm is not fulfilled. It may be that the case studies here fall into that same trap, but there still seems value in what has been attempted. The account of *Never Again* set out to explore in a conjectural manner the nature of creative decisions made by the composer and to show how music and images work together to convey dimensions of meaning not present in either sound or movement when considered in isolation. The study of *Points in Space* takes a slightly different approach in considering the qualities in the music that enable it to exist alongside the choreography without subverting or obliterating the intrinsic qualities of the dance. In both works it can be seen that alternative musical choices might have focussed the attention very differently, and that, at least in the view of some observers, the music can even detract from rather than enhance the experience of the dance.

In the end, one can only look at individual works: the sheer complexity of the relationships thrown up between music and dance mean that it would be impossible, were it even to be desirable, to set out a series of principles that a composer or choreographer might follow to achieve a particular effect. That way of working may succeed for a while, particularly - but not exclusively - in commercial music and dance, but such devices soon wear thin and become stale and clichéd. Instead, the languages and technology of music and dance are constantly evolving, opening up pathways into new worlds of experience and thought. Artists learn from and steal from the past, but must also renew it; similarly, in thinking about music-dance relationships it is essential always to remain open to new developments and to question old assumptions.

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