Understanding Children's Music

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DECLARATION

ABSTRACT OF THESIS

The thesis draws on the writings of Langer, Small and others in order to describe a way of looking at the nature of children's musical experience when they compose, and of the teacher's musical experience when he/she attends to and responds to their music.

It seeks to establish the plausibility, coherence and educational relevance of thinking about children's music in this way by elaborating it in regard to a range of examples by 11 to 14-year-old school pupils.

It presents evidence that when pupils make up music they create whole structures of complex relationships of sound: they articulate insight into consciousness-time.

It argues that the heart of children's musical achievement is unpredictable in principle; that musical decision-making may proceed in advance of its articulation in words or notation; that relationships of sound other than those highlighted in most theories of the Western classical tradition play a significant part in pupils' music; that creation and skill-learning are closely related; that young people's music-making transcends the distinction between composing and performing.

It suggests that if such a way of thinking is considered to be plausible and coherent, then there are implications for our approach to children's musical work which have not yet been generally accepted into practice. In particular, it proposes that we give somewhat greater attention to the middle of the learning process than we have; that the teacher's response must be based on insight into the unique wholeness of the work presented; that assessment in music education is principally provisional and interactive.
INTRODUCTION

Among the most frequently noted developments in school music in recent years has been the spread of interest in children's compositions.

Paynter & Aston (1970, p.3) drew attention to the role in general education that the creation of music could play, as a way of making us "alive to what is happening around us and aware of our potential as human beings", and they outlined deeply musical and educational reasons for the primacy of working "at first-hand with the materials of music" (p.13). Since then, many publications have suggested ways of initiating composing projects in school. See, for example, Paynter, 1972; Dennis, 1975; Paynter, 1976; Tillman, 1976; Walker, 1976; Meyer-Denkmann, 1977; Paynter, 1978; Winters, 1978; Gilbert, 1981; Sturman, 1982; Swanwick & Taylor, 1982; Davies, 1985; Fletcher, 1987. And there has been some analysis of outcomes. See, for example, Glynne-Jones (1974); Spencer (1976); Paynter (1980); Spencer (1982); Davies (1986); Swanwick & Tillman (1986).

The Schools Council Project Music in the Secondary School Curriculum promoted widespread discussion, and while eschewing the promulgation of a 'method', published a review of practice and opinions (Paynter, 1982), developed a set of "guiding principles" (ibid., p.xiii), set up regional dissemination centres (p.235), and produced audio-visual aids (p.237). Perhaps its greatest achievement, however, lies not on paper nor even on tape or film, but in the network of contacts between teachers which it enabled, and which in turn has enabled a continuing development in thought and practice.

This is not the place to evaluate all the consequences of the introduction in England and Wales of the GCSE National Criteria for Music (Department of Education and Science & Welsh Office, 1985). Preston (1985) gives some of the flavour of the debate, and I shall consider some criticisms below (see 8.5 and 8.6). Nor is it the place for detailed comment on the HMI discussion document Music from 5 to 16 (Department of Education and Science, 1985). However, what should be said here is that these documents have placed composing firmly on the 'official' agenda of the secondary school.
Meanwhile, a Calouste Gulbenkian Foundation report (1982, p.28), in the context of a broad debate on the purposes of schooling, reaffirmed that the arts "are important ways of knowing the world and of interpreting our experiences in it. Their inclusion in the school curriculum is an obligation of general education." There have been similar developments in other countries (see Paynter, 1985).

Much of this published work, along with the unacclaimed work of teachers in many schools, celebrates and nurtures the originality and creative power of the human spirit in music. However, the link has perhaps yet to be demonstrated in depth between the nature of musical import and the products of composing in the ordinary classroom.

And while some of the texts cited above have important things to say about how the teacher is to help pupils develop their work once it is under way, perhaps that middle of the learning and teaching process has yet to be explored in detail. Glynne-Jones (1985, p.101) may have pointed the way here when she argued that teaching should be recognized as fundamentally:

"a listening activity, involving keen observation and analysis of individual pupil's musical utterances in composing and performing, and the same attentive open-earedness that new music and new interpretations require of their listeners."

It is many years since Holbrook (1964a, p.3) demonstrated in regard to writing that "the 'unseen' elements of sympathetic respect for the creature, and the imaginative-creative element in teaching, are the most important and efficient means to develop the child's capacities." In doing so, he convinced many that there is a deeply human significance in children's poems and stories. But he also demonstrated that sympathetic respect and imaginative creation on the part of the teacher are in no way woolly or 'subjective', but are rather characterized by the greatest precision of perception and rigour of analysis (1964a, 1964b, 1967).

The present thesis is very much inspired by this approach; in giving detailed attention to the products of young people's composing, and to what those products seem to signify, it aims to
give substantial support to the claims often made for the intrinsic value to children of the act of musical creation. And it aims in that light to make explicit some of the 'dynamic of practice' by which teachers today are deepening and broadening their ways of understanding pupils' music, and their ways of helping pupils to progress as composers.
CHAPTER ONE

Insight in Children's Music

1.1 Real time and virtual time

We live in time.

We are born, we die. We wake, sleep, wake, sleep, wake, sleep, wake ...

We hunger, we thirst, we may be satisfied. Our loves rise and fall, and sometimes endure. We question, we learn, we question again. Thought strikes out in new directions, becoming enriched and vigorous, or perhaps infertile and fixed.

In a new context of other persons, identity strives to endure, to assert permanence in adaptation. There are daily, weekly, yearly and other cycles of action and quiescence. Historical movements sweep us along or pass us by. Today our work bears fruit, but tomorrow the same effort seems wasted and barren. Illness and age impair our powers; but in those whom we conceive and nurture we welcome renewed life, renewed thought, renewed love.

Change and permanence, growth and decay, succession and survival are aspects of human experience far from merely incidental. In a sense, all we do, all we feel, all we think is experience of the passing of time. Time in that sense - time as experienced by human consciousness - is something incalculably richer and more complex than time as measured by clocks. Indeed, one might go so far as to say that time-as-experienced is in no way distinct from the consciousness which experiences it. One might speak of 'consciousness-time' as of one reality. We have several ways of articulating our awareness of consciousness-time, and our perception of its significance; making music is one such way.

Musical experience is part of consciousness-time, certainly, but in a sense it also stands apart from it. For the ebbs and flows of music create an illusion of consciousness-time; an imaginary or virtual consciousness-time whose likeness to but
separation from real consciousness-time makes it inexhaustibly absorbing; a human activity universally valued as significant experience. Child in the classroom or composer in the studio: each creates in music a speculative image of how consciousness-time might be.

"Musical duration is an image of what might be termed 'lived' or 'experienced' time - the passage of life that we feel as expectations become 'now', and 'now' turns into unalterable fact. ... The semblance of this vital, experiential time is the primary illusion of music. All music creates an order of virtual time." (Langer, 1953, p.109)

Music's likeness to real time is rooted in its sensuousness. The sound of music impinges on us directly, perhaps because we move a hand or an arm, or we move air in and out of ourselves, in order to create it. Or because we move our bodies in dance as part of it. Or because we participate imaginatively in those ways, even when we seem to be still and silent listeners. Thus Langer (1942/1957, p.238-239), while suggesting that music reflects not particular feelings but "only the morphology of feeling" (see 1.4 below), nevertheless rejected the "explanation of music as a high abstraction, and [of] musical experience as a purely logical revelation".

Music's separation from real time is rooted in our control over it; decision and choice always play a part in musical experience. Small's suggestion that we use the word 'music' as a verb reflects an important insight into music as principally an activity rather than a thing, something we do rather than something we have or something we undergo.

We know that children need to explore and structure their physical surroundings; it seems reasonable to suppose that their need to explore and structure their 'internal' world, their experience of consciousness-time, is at least as urgent. Perhaps something like this is at the heart of what they are about when they become deeply involved in the making of music, and perhaps we will only truly understand that music-making, and so discover how best to help them at it, if we understand the heart of it.
1.2 Is music a 'symbol'?

The challenge, then, is to unfold our understanding of children's music in a way that will be adequate to the core of what they do. To meet this challenge, we must face up to the difficulties of elaborating a theory of musical experience; and it is important to do this in a way that will put music in the mainstream of human thought and awareness. One approach to this task is to be found in Langer's theory (1967, p.xix) that "art ... is the making of virtual forms, symbolic of the elusive forms of feeling".

While her view has proved attractive to many musicians and teachers, others have queried the application of the concept 'symbol' to music. For example, Meyer (1956, p.33) assumed that symbols must be "designative", must have an agreed and determined meaning; and he concluded that music as such cannot be symbolic. However, his more general concept of 'meaning' as anything which "refers to something beyond itself, so that its full nature points to and is revealed in that connection" (p.34) seems close to what Langer intended by 'symbol', so that the difference may be principally in the choice of words. More problematically, he seems to suggest at one point (p.35) that the 'meaning' of a musical event lies solely in the fact that it refers to other musical events. The trouble with this as a complete account of the matter would be that only parts of music, in so far as they refer to each other, could be said to have 'meaning'. There could be no 'meaning' in "the work as a single sound term or gesture." (p.47)

Kivy (1980, p.61) suggested that the extra condition which must be fulfilled before an 'isomorphism' can be considered a 'symbol', is that it must "function, by some sort of agreement, in some sort of system, as a sample, as an exemplification ..." It is difficult to accept that all instances of what we usually call 'symbols' can be called samples; a flag is surely not a 'sample' of the nation it symbolizes. And it seems that music does fulfill the other part of Kivy's condition; for the 'meaning' of music is surely located not in a structure of sounds in the abstract, but rather in music's 'use', in music sounding bodily within a "system" of experiences and expectations shared by those involved.
The 'virtual time' created by the making of music has a common shape or pattern with the 'real time' of consciousness, a hugely complex ebbing and flowing of tensions. But it is also the means by which those involved grasp and structure their experience of time. So for present purposes I think it is plausible to adopt the view that the act of making music is a 'symbolic' act; but, since music comprises a totality of sensuously apprehended relationships between sounds, the logic of musical symbols is presumably very different from that of everyday designative language.

Historically speaking, it may be that this constitutes an extension of the meaning of the concept 'symbol' beyond that of its usual literal use. This extension of meaning need pose no dangers, provided that one does not lose sight of what differentiates the first species of 'symbol' from the second (see 1.5 - 1.8). And it has the important advantage of locating music as a central though distinctive part of human thought.

1.3 What is music a symbol of? Feeling not just affects

If one accepts that the significance of music lies in some sort of symbolic pointing beyond itself, the question immediately arises: to what exactly does it point, and how?

Meyer (1956, p.22) assumed that "... the law of affect, which states that emotion is evoked when a tendency to respond is inhibited, is a general proposition relevant to human psychology in all realms of experience." So he explained music as working by means of "deviations" which are "emotional or affective stimuli" (p.32). His analyses have proved illuminating to many readers. But Elliott (1984, p.74) has found grounds to challenge the applicability of his view to traditions other than "Western European 'classical'", and proposes instead a two-fold view of "embeddedness-affects ... resulting from inhibited expectations" (p.77) and "activity-affects ... [associated with] uninhibited activities" (p.78). He goes on to claim that at the root of music is "the universal experience of oneness-separateness, and the concomitant ambiguity" (ibid.), and sees this as founding "a more
I am not convinced that replacing Meyer's theory of 'affects stimulated by inhibition' with a different theory about affects gets us to the heart of the matter. Moreover, it is difficult to accept that Elliott has established his case that the difference between these two psychological theories of emotion (respectively supported as far as I know by psychologists as authoritative as each other) would make the difference between an ethnocentric philosophy and a global philosophy. Nevertheless, it is important that he has reminded us of the dangers of too ready a universalization of a particular psychological theory.

Langer, as we have seen, considered the object of art symbols to be the "forms of feeling", but she meant far more by 'feeling' than emotion or affects only: "Feeling includes the sensibility of very low animals and the whole realm of human awareness and thought, the sense of absurdity, the sense of justice, the perception of meaning, as well as emotion and sensation." (1967, p.55) Reid (1983, p.22) has also argued a holistic view of 'feeling' as "... the immediate awareness of the whole content of one's conscious experience ... an indwelling in it."

While evidence for the universal applicability of a particular theory about affects may be hard to come by, one may be more secure in attributing to all a life of 'feeling' in this sense, a common experience of consciousness as time, and it seems reasonable to follow Langer in identifying this as the object of musical imagery.

She draws an important distinction between the forms of feeling symbolized in the music, and the feelings one may experience directly as a result of contemplating or creating that music; the latter springs from the intellectual triumph of achieving insight into the former (Langer, 1942/57, p.259). This distinction allows discussion to steer clear of the difficulties that must arise from any idea that children's emotions or feelings are typically 'expressed' in music as though in a smile or in a slamming of doors. As Kivy (1980, p.46) put it, "music is expressive rather than expression".
1.4 What is music a symbol of? The morphology of feeling not particular feelings

Kivy (1980, p.60) differentiates his position from that of Langer by asserting:

"that music is expressive of individual, specifiable emotions, at least within certain limits, whereas she denies this, claiming only that music is a symbol of the emotive life as a whole, and cannot be symbolic ... of the individual emotions."

While Kivy demonstrates with great subtlety that specifiable emotions can sometimes have to do with our experience of music, I am not convinced that his phrase 'the emotive life as a whole' gives an adequate account of the uniqueness of what Langer considered was conveyed by each piece of music.

Budd (1985) has offered a critique of a crucial element in Langer's view (1942/57, p.238), namely that music symbolizes not particular feelings, but "only the morphology of feeling", the way in which feeling rises, falls, interacts, and so on. I think he is mistaken in taking this to be what Langer intended by the phrase 'unconsummated symbol', which she defined as "without conventional significance" (p.241); a fixed conventional meaning might point to a particular morphology, just as to a particular feeling.

However, the substance of his critique of Langer does not hinge on the correctness of his account of her terminology. He defines 'emotions' as each "a form of pain or pleasure which is experienced on account of a certain kind of thought" (p.5). But he admits that there are "other kinds of mental event" (p.1) which are not emotions. So he sets off by considering only certain parts of (or only certain aspects of) conscious life. Moreover, these are parts or aspects which he decrees from the outset to be individuated and definable in words, and his critique of Langer relies on the assumption that she used 'feeling' as a synonym for 'emotion' in that sense. While it might be argued that Philosophy in a New Key (1942/57) could bear this interpretation, we have seen that in Mind (1967) the broader import of Langer's concept of 'feeling' is clear.
As long as Budd restricts his discussion to music representing those aspects of consciousness which could be reasonably designated as 'a feeling', or even as a namable morphology of 'a feeling', then of course it is plausible that words might do the trick as well. His suggestion that "there is no thought which has a content that cannot be represented in language ... the nature of our feelings is not something that in principle resists representation in language" (p.112) would be incontrovertible.

However, one might reply that the crucial difference is not that between a named feeling (eg 'joy', 'sorrow') and a namable morphology of feeling (eg 'rising suddenly, then receding in diminishing waves'). Both the word 'joy' and the phrase 'rising suddenly, then receding in diminishing waves' use discursive language to indicate an aspect of subjective life; if one wished, one could invent a single word to stand for the latter set of seven words. What is at stake is the way in which either form of words loses the 'wholeness', the 'complexity' the "dynamism" (Langer, 1953, p.32) of the experience it indicates. I think it is precisely what is lost in any such discursive form of words, that Langer considered to be the symbolic content of music; she used the phrase 'morphology of feeling' to refer to a particular but unnamable (in language) structure of feeling. "Music articulates forms which language cannot set forth" (1942/57, p.233).

1.5 What sort of a symbol is music? Non-discursive

We must now ask what are the important differences between the way music functions as a symbol, and the familiar symbolism of everyday language.

I have suggested adopting the view that music is in some way a symbol of the morphologies of feeling, the otherwise unnamable structures of consciousness-time. If so, then it cannot have the one-to-one symbolic structure of ordinary, discursive language. Whereas the one word 'pencil' stands for the one thing 'pencil', no single element in music stands for anything at all.
In the next three sections, I shall try to unfold the implications of assuming that music comprises a whole set of complex relationships between sounds.

Cassirer and Langer called the distinctive symbolic function of art 'non-discursive'. It is true that in later work (1967, p.104) Langer expressed doubts about this terminology:

"So far I have always called its [art's] characteristic symbolic mode simply 'non-discursive', but there are other non-discursive symbols, such as maps or plans, which have not the organic structure or the implicit significance of art. One might call a work of art a metaphorical symbol."

However, it seems to me that the whole context of Langer's writing gives a content to the concept 'non-discursive' which does not include maps or plans, and that the proposed substitution of the word 'metaphorical' would raise far more problems than it would solve. I am content in this thesis, then, to follow her earlier usage in this regard.

1.6 Relationships of sound

Firstly, I assume that music consists of a set of relationships between sounds; in fact that all music's reality is relatedness. The timbre of a singer's vowel sound slowly narrows then suddenly broadens; this pattern of notes is an intensification of that pattern; this section reminds us of something that went before; and so on. The image of the fluxing continuum of consciousness-time can arise only in a network of identity, likeness, change, and difference.

At first glance, this view might appear culturally biased and limited. Thus Small (1977, p.104) claimed that "the classical tradition was interested not in the actual sounds themselves but in the relationship between them ... [whereas] Debussy ... loved sound for its own sake." However, Small's claim may be partly metaphorical; in the same book, he suggested that the peculiarity of post-Renaissance music is its basis in "relationships in the abstract rather than of sounds themselves" (p.19) It seems reasonable to describe the difference in question as a difference in
the *type* of relationship between sounds involved, perhaps between comparatively long-term and describable relationships on the one hand, and comparatively short-term and inflectional relationships on the other. The sounds that Debussy delighted in were often chords, and a chord is certainly one sort of 'relationship between sounds'. If someone presented just one note as a piece of music, then even were the note wholly uninflected, there would be still be the set of relationships between overtones which constitutes timbre, and a relationship with preceding and ensuing silence.

In general, perhaps, just as there can be no such thing as 'matter without form', so there can be no such thing as sound without relationships of sound, and no such thing as musically intended sound without complex relationships of sound. To meet Small's point, however, it may be important to stress that we are talking not principally about abstracted, named or notated relationships, but rather about relationships between sounds as sensuously experienced in a continuum of possibilities.

1.7 Wholeness

In the second place, I assume that the import of music is located in the *wholeness* of a complex totality of such relationships, that in general there are no significant parts in music. Thus Langer (1967, p.84) argued that:

"a work of art is a single symbol, not a system of significant elements which may be variously compounded. Its elements have no symbolic values in isolation. They take their expressive character from their functions in the perceptual whole."

But in focussing our attention on the 'wholeness' of a total set of relationships of sound, we must avoid the assumption that this can only take the form of a 'work', clearly bound in time by a beginning and an end. Small (1977, p.26) pointed out that being "left in no possible doubt of the temporal extent of the musical work, no doubt of when is the music and when not ...[is] a sign of the special isolated position of art in post-Renaissance Europe", and he gave an instance of African music where "A performance may go on for several hours or all night, and will have
no formal beginning or end; rather, it will take some time to gather momentum and probably just fizzle out at the end when the musicians run out of energy or enthusiasm." (p.55)

Meyer (1956, p.47), while not challenging the assumption that music always consists of a 'work', nevertheless suggested that

"While the meaning of a musical work as a whole, as a single sound term, is not simply the sum of the meanings of its parts, neither is the entire meaning of the work solely that of its highest architechtonic level. The lower levels are both means to an end and ends in themselves. The entire meaning of a work ... includes both the meanings of the several parts and the meaning of the work as a single sound term or gesture."

One crucial difficulty with limiting the concept of 'wholeness' in musical experience to apprehension of an entire 'work' is that musical insight could occur only when the piece was over. While the 'final moment' may be of special importance in our experience of music (perhaps particularly of Western classical music), it is difficult to avoid the feeling that whatever is essential in musical experience should be immanent in the whole of our involved experience of that music. It seems to me that Witkin (1982, p.72), writing about dance, has given a clue to the solution of this difficulty. He suggested that "in and through the changes that constitute the work we sense a continuity, a relatedness or invariance ... The relatedness of the whole is thus present at each instant." (my emphasis)

Perhaps there are as many 'wholenesses' in musical experience, as there are moments of insight while we listen to it, whether as makers or as audience. Some of these will involve short-term memory and anticipation, others will involve longer-term memory and anticipation. Measured time is divided into parts which are mutually exclusive and strictly serial, so that 'wholeness' can only arise by juxtaposition; on the other hand, consciousness-time (and therefore its image, virtual time) has 'parts' or aspects which refer to each other, and which therefore intersect and interpenetrate, and form 'wholenesses' in many ways. At any moment of our attentiveness to music, the 'real time' past is gone and the 'real time' future is to come; but in 'virtual time' we are simultaneously present to sounds past, present, and future. Langer
(1953, p.109) suggested that the "virtual time" we experience in music is "radically different from the time in which our public and practical life proceeds." If so, then it may not be too surprising if the virtual time of musical experience includes a 'multiplicity of wholenesses', which would be inconceivable in measured time.

It may be argued that the 'wholeness' of music consists principally of the relationships of sound (and perhaps movement) actually present here and now, or in immediate memory and anticipation. And some evidence exists that musical meaning is not principally conventional, but rooted in the physics of sound. Nevertheless, part of the network of relatedness may lie in the totality of the social situation in which the sounds occur, and in the totality of previous musical experience in which they occur. Thus Vulliamy and Shepherd, while rejecting the view that music is 'socially determined', argued that music takes on meaning only in and from its particular social contexts. (See Swanwick, 1982, p.136; Vulliamy & Shepherd, 1983, p.189, and 1984, p.247).

Walker (1966, p.38) refers to Schoenberg's view (1947/1975, p.165) of 'unity': "A real composer's musical conception, like the physical, is one single act, comprising the totality of the product ... thus a real composition is not composed but conceived." He also invokes Newman's demonstration (1927, p.120-121) that Beethoven's "mind did not proceed from the particular to the whole, but began, in some curious way, with the whole and then worked back to the particular ... the movement possessed him as a whole before he began to think out the details." However, unfortunately for the generality which Walker alleges for this model, Newman goes on to say (p.121) that "this was not Mozart's way. With Mozart the themes are the first things to be thought of; the composer invents these for their own sake, and then manipulates them ..." He even suggests (p.142) that Beethoven's practice of moving from the whole to the parts is particular to the composition of his first movements, and instances a revision of the whole in view of the parts, in the scherzo of the Eroica. So, it seems difficult to sustain the view that the musical priority of whole over parts must always take the form of a chronological priority; the whole may not be 'held' during the process of composition, but rather continually re-created as the implications of the materials unfold.
1.8 Complexity

In the third place, I assume that this total set of relationships between sounds is of enormous complexity, and that this complexity is indispensable to music's ability to be a non-discursive symbol of consciousness-time. Langer (1967, p.84) held that "it is largely by virtue of its complexity that it [the relational structure of art] can present us with images of our own even more complex subjective activity."

It is important to clarify that I am not referring principally to a high complexity of notatable relationships, such as the intricate motivic working of Brahms or Schoenberg. Rather, it is in the way that music "enters into our experience as a concrete reality" (Wishart, 1985, p.313), in the very sensuous quality of sounds, in the continuum of their microscopic inflections as they impinge on us, that the roots of this complexity are located. A discursive symbol may be independent of its physical mode; for example a sentence heard on the radio, seen in print, or felt in Braille has the same essential meaning. But the complexity of music, and therefore its import, would be lost, if it were not embodied in sensuous reality.

Because consciousness-time is so vastly complex - Teilhard de Chardin (1955/70, pp.328-338) speculated that complexity actually is consciousness - new aspects of time to be articulated are inexhaustible. So much of our being-in-time slips past and is lost; so little of what we might be is articulated and realized. The inexhaustible particularity of musical creation allows an inexhaustible particularity of new exploration of consciousness-time, so that it need come as no surprise if we find examples of young children's music being quite new. There is so much to be known about consciousness-time, that any person involved in the making of music may reveal something never known before.

Indeed, like other art, music may be typically speculative, articulating not so much how time is, but rather how time might be. Perhaps sometimes music even 'freezes' or idealizes time, creating the illusion of a special sort of time in which the relentlessness of decay is overcome, as it were in an image of eternity.
The intrinsic complexity of music also implies that musical significance will typically transcend any verbal account that might be given of it; the primary reference of music cannot be named (see 1.10 and 3.2).

1.9 Representation in music

So it seems that music primarily refers to unnamable aspects of the fluxing continuum of consciousness-time. But the existence of programme music, and the existence of emotive descriptions of music, remind us that this may not be the whole story. There is a tension between what might be called the 'unassignedness' of the heart of music's meaning on the one hand, and its attractiveness to definite, assigned meanings on the other.

It is as though the general forms of feeling imaged in music sometimes remind us strongly of particular, namable occasions on which those forms might be manifest. Or it is as though we attribute representation of the namable particular to what is 'really' an image of the unnamable general.

Kivy (1984, p.28) has offered a "typology of musical illustrations", giving examples of
- "instances that can unproblematically be described in terms of the 'sounds like' relation" (ibid.),
- representation dependent on notation (p.59),
- "representations by conventional association" (eg chorales, national anthems) (p.51),
- "internal representations" (leit-motifs) (p.52), and
- representation dependent on "cross-modal description" (eg both the sun and the major triad are described as 'bright') (p.44).

However, while aiming to answer the charge that music can never be a representational art, he stresses that he does not argue that music is "essentially, primarily or even importantly representational." (p.216)
When we come to examine examples of children's compositions below, it may be helpful to uncover ways in which the music refers either music-maker or audience to particular experiences in the everyday world. But it will be at least as important to look for the ways in which the music also points beyond that world, ways in which its significance transcends the verbally stated intention of its makers.

1.10 Music as insight

If children create 'virtual time' when they make music by deciding about sounds, then it seems plausible to say that they are coming to know about consciousness-time in the image they make of it. And this knowledge exists not only or principally by deduction or extraction from the music; it exists directly in the acts of musical attention and decision themselves. If so, then one may say that making music by listening and choice is always "thinking in sound" (Gamble, 1984, p.16); one may call it 'non-discursive insight'.

If one sees this musical 'knowing' as important, then one must see it as distinct from any verbal knowledge that may or may not accompany it. This point will be absolutely crucial in the discussion of children's music to follow; for in general it must not be a condition of asserting that music means something, that the musicians concerned are able to indicate that meaning also in words, nor still less that the musicians know that what they are doing might be described as symbolizing or knowing.

Of course, none of this is to deny that musical decision-making may include verbal thinking, nor that this may be important. We often discuss musical decisions with fellow-musicians, and sometimes we think to ourselves about music in words; Kivy (1980, p.10) has shown how emotive descriptions of music may be "intellectually respectable". However, music as non-discursive insight is not limited to verbally expressed knowing, and its heart is not verbally expressed.
Above all, we must not lay down as a condition for pupils 'knowing what they are doing' musically, that they can name or describe what they are doing. If we value music intrinsically as an independent mode of thought, then we will look first for children's musical insight as embodied in sounds; it may or may not be also embodied in words.

Thus Reid (1983, p.26) rejected what he called "the culturally dominant view of 'knowledge', that it is knowledge-that, or -about, and can be stated in propositional form", and reminded us of the inseparability of the cognitive content of art from the art experience itself: "The artist does not know, except dimly and schematically perhaps, what he is going to create before he creates. ... He comes to know in the occurrent act of creating." (p.38) Similarly, Ross (1984, p.21) argued that "... form itself embodies meaning rather than referring to or conveying it."

It seems to me that there has been some confusion on this crucial point. For example, Walker (1966, p.5) claims on the one hand that "criticism is the rationalization of intuitive, musical experience", and on the other that "An act of criticism is not an act of intelligence: it is an act of intuition" (p.106) Similarly, Reimer (1970, p.60) makes a large number of distinctions to separate art from non-art, for example (respectively) insight and information, expressiveness and communication, creating and making, import and knowledge. Yet elsewhere he asserts that "... the art of music is a basic way of 'knowing' about reality." (p.9) The reader is left puzzled as to whether music really has to do with knowing or not.

However, if "music has all the earmarks of a true symbolism, except one: the existence of an assigned connotation" (Langer, 1942/57, p.240), then it seems sensible to express that one difference in just one verbal distinction. So 'discursive meaning', 'discursive insight' and 'discursive knowing' are features of ordinary language, while 'non-discursive meaning', 'non-discursive insight' and 'non-discursive knowing' will be found in music. If this account is broadly correct, then the difference between musical experience and music criticism has nothing at all to do with the difference between intuition and reason; rather it exemplifies the
difference between non-discursive reason and intuition on the one hand, and discursive reason and intuition on the other.

"... intelligence is a slippery customer; if one door is closed to it, it finds, or even breaks, another entrance to the world. If one symbolism is inadequate, it seizes another; there is no eternal decree over its means and methods. So I will go with the logicians and linguists as far as they like, but do not promise to go no further. For there is an unexplored possibility of genuine semantic beyond the limits of discursive language." (Langer, 1942/57, p.86)

1.11 Musical 'knowing' is principally active not passive

It seems, then, that we can sensibly approach children's musical decision-making as an important species of insight, as fully a part of the mainstream of human thought, as an act of intelligence.

Piaget (1970, p.29) brought forcefully to our attention that

"... intelligence, at all levels, is an assimilation of the datum into structures of transformations ... these structurations consist in an organization of reality, whether in act or thought, and not in simply making a copy of it."

One way to apply this to 'musical intelligence', would be to say that when we make music we actively structure and organize time, rather than passively copy it. In that light, it seems sensible to attribute musical meaning principally to the human act of making (or re-making) the sounds, rather than to the sounds considered as objects in the air. "Elements in art have not the character of things, but of acts." (Langer, 1967, p.202)

On the other hand, although Meyer (1956, p.33) wrote that "Meaning ... is not in either the stimulus, or what it points to, or the observer. Rather it arises out of ... the 'triadic' relationship between [them]", his theory is based on assuming that music is firstly something that stimulates. At one point, he makes almost explicit the corollary (directly contrary to the view outlined in this thesis) that listening in audience is logically
prior to music-making: "It is because the composer is also a listener that he is able to control his inspiration with reference to the listener ... The performer too is continually 'taking the attitude of the other' - of the listener." (p.41)

Much writing in the last few years has assumed on the contrary that the prime analogue of musical experience, the instance in terms of which the rest may best be understood, is the making of music. Thus Elliott (1984, p.75) proposes to consider music as "behaviour", rather than as a "contemplative perceptual attitude" (among other things) (p.74). I think I would want to use the word 'act' rather than the word 'behaviour', principally to affirm the cognitive nature of musical experience, and to avoid suggesting that it can be fully known by detached observation, and also afterwards to defend the priority of interactive assessment (see 8.5). But in investigating the examples of children's compositions in Chapters Four to Six, I shall follow Elliott in seeing music as something we do, prior to it being something we receive.
CHAPTER TWO

Creation and Learning in Children's Music

2.1 The act of creation

When children take musical decisions and embody them in sound, something new comes into existence; this music owes its being to these children. Had they not made this particular instance of virtual time, then the world would never have had this particular aspect of possible consciousness-time reflected to itself.

To a mechanistic way of thinking, there is something paradoxical about the notion of bringing something new into being. The laws of conservation of matter and energy might incline one to suppose that no really new being can come into existence, at least not under human intervention. All that may arise is some new configuration of being that already exists. But if, as scholastic philosophers thought, 'there is no real distinction between relationship and being', then a new configuration is a new thing. Three matchsticks forming a triangle has more being than just three matchsticks. Of course, this is not a point on which the present thesis can be dogmatic; if the reader accepts something like the mediaeval view, then the concept of 'creation' may be taken quite literally throughout the thesis. If not, then it must be taken more or less metaphorically.

At the very least, in articulating something which she/he has not previously grasped, an individual alters her/his relationship with that reality. "A relationship between the knower and the known" (Small, 1977, p.106) exists now, which did not exist before, and the individual has manifested "the ability to bring something new into existence" (Barron, 1965, p.3). So it would be no idle figure of speech to use the word 'creation' even in the case (were it possible) of a child faithfully reproducing music which was already fully composed in every detail. At least the music, and therefore the insight, is "new to him [sic]" (Storr, 1972, p.xi).

But this can not be the whole story. If it is the whole set of complex relationships between sounds which constitutes the
music (see 1.5 – 1.8), then we need not be surprised if that wholeness turns out to be quite new, even when many sub-structures of the whole pattern existed before. However many 'elements' in a child's composition may be derived from elsewhere, it is in the new whole set of sensuously embodied relationships that we may look for the musical achievement. I suggested in 1.8 above that consciousness-time is so enormously complex that there will always be new aspects of it to be embodied in sound and brought to our attention; the inexhaustible particularity of musical creation allows an inexhaustible particularity of new exploration of consciousness-time.

If this is so, then music, to the extent that it succeeds as music, is always created anew, not just 'new to him', but 'new altogether'.

However, difficulties would arise if one designated all musical activities as equally or identically 'creative'. Thus Gamble (1984, p.15) has argued that extending the concept 'creativity' to performance or interpretation "is stretching the concept beyond its normal application". While he accepts that 'imagination' is a feature of performance, and indeed of audition, he claims that 'creativity' and 'imagination' are not co-extensive, and in sum "By creative activities in music ... I mean composition and improvisation". I think Gamble does not take into account the extent of the range of decisions that may be sensibly called 'composing'; at least in non-Western musics, decision-taking about note inflections may be just as central as decision-taking about which notes to play, and the array of possible decisions across the whole field of what we call composing, improvising and performing has no clear boundaries. Gamble does not convince me that some of this range of musical decision-taking should be excluded from the general concept of 'creative', and typified rather as 'imaginative'. Nevertheless, he does demonstrate that there are distinctions to be drawn between possible classroom activities, and that it may be uniquely important (at least for children in 'our' culture) to experience creation of particular kinds.

Jones (1986, p.63) defined creativity as having to do with "outstanding works", and concluded that "Only in the most
exceptional circumstances could creativity, in this sense, be attributed to children when they produce works of high quality at an early age". It is difficult to accept that his narrow definition of 'creativity' should determine planning of the curriculum for all, and Jones produces no evidence to support his dismissal of the products of "the so-called 'creative activities' espoused by proponents of recent models of music education" as offering only "immediate success at a low level of artistic endeavor" and denying to children "the necessary foundation of skills to develop the craft of composition" (pp.73-77); I think this thesis, and much previous work, provides counter-evidence. See, for example, Addison (1967); Paynter & Aston (1970); Glynne-Jones (1974); Spencer (1976); Paynter (1980); Gamble (1984); Loane (1984b); Davies (1986). However, Jones is right to remind us that there exists a small but important class of musical acts, whose originality appears so extraordinary, that we commonly acclaim them as 'creative' in a qualitatively different sense of the word.

The solution to these difficulties may lie in an 'analogous' or sliding concept of creation. If we attach to the word 'creation' a range of related meanings, then different musical activities may manifest different aspects of newness, and the concept of 'creation' need not be an all-or-none concept. One must be either pregnant or not-pregnant, but perhaps one is never simply creative nor simply not-creative. There are as many different types of creativity as there are things about which creative decisions can be made.

Adopting this view of 'creation' will have important consequences. For if it broadens the idea of creation in order to include activities some would regard as insufficiently 'original', it also allows that different activities may display more or fewer aspects of creativity.

For example, the mere matching of finger position on the keyboard to written symbols would represent creation, if at all, in a very restricted sense; we might not want to call such a thing 'musical performance' at all. Paynter (1982, p.120) reminded us that "The performer ... too must match outward expression to inward perception", and he urged that "We must try ... to provide
opportunities for interpretative decision-taking even at the most elementary level." (p.123) This sort of decision-taking is what one could recognize as 'creation' in performing. One might go on to say that if a pupil makes up a tune, the music is 'new' and 'creation' has been demonstrated in a further but related sense of the word. And if a pupil composes some music in which even the style is strikingly original, then yet another, but always related, type of 'newness' and 'creation' has been shown.

It remains to make clear that the notion of a range of related meanings for 'creation' does not imply the possibility of quantitative measurement, nor of rank ordering on a scale of importance. There may be more or fewer aspects of creativity displayed in different activities, and we may find it important to attach particular value to particular aspects, but the various aspects are incommensurable one with another, and a simple count of aspects would have little meaning (see 8.5).

2.2 'Creation' and 'creativity'

Paynter (1970, p.5), in arguing that "we should place slightly more emphasis on creative music in schools than we have been doing", saw creative work as arising "from a profound response to life itself", and as related to the child's "awareness of himself and his world". This thesis shares his concern with the sort of 'creativity' which is the preserve of all, "the ordinary everyday inventiveness which grows from a combination of necessity, awareness and imagination." (1980, p.8)

Paynter later expressed doubts about the continued value of the concept 'creative music' (1982, pp.124-125, 136-137), because misunderstanding had sometimes resulted in a dichotomy between one area of the music curriculum labelled 'creative', and the rest - presumably 'uncreative'. He argued on the contrary that "all musical activity - listening, composing and performing - is essentially creative" (pp.93-137).

Swanwick (1979, p.91) observed that certain assumptions were often linked to the advocacy of 'creativity': "... in music
education the concept of creativity current in the 1970s ... at least in practice ... [assumed] ... a premium on imaginative activities, an emphasis on children making up their own music, sympathy with the techniques of the avant garde, an urge to integrate". It would be hard to disagree with Swanwick's proposal to delete all but the first of these as universal conditions for the manifestation of musical creation. For example, Spencer (1976, pp.97-122; 1982) has demonstrated some of the possibilities of pupils' creativity while working in 'pop' style.

There have been several studies which seek to define and measure 'creativity' as a variable quality, held in different degrees by different persons (see Hargreaves, 1986, pp.143-178), although the Calouste Gulbenkian Foundation report (1982, p.31) has challenged the assumption that 'creativity' should be seen as a separate mental faculty whose "absence or presence in a person can therefore be measured."

In this thesis, I propose to investigate what happens when children create music, rather than any differential capacities for potential creative achievements, which may or may not exist. So I shall be concerned with 'creation' rather than with 'creativity', with the process or act rather than with the potential.

An important question remains: should we say that the making of a piece of music involves one act of 'creation' or many? Certainly, there seem to be many moments at which creative decisions are taken, as a composer tries different ideas, discards one, modifies another, extends a third. But always the ideas are related to the imagined whole of which they are to form part, and this strongly suggests that the musical whole is the product of just one act of creation. Perhaps a solution of the difficulty will emerge if we recall that the decision-moments are very far from being isolated events; in virtual time, past present and future are simultaneously present (see 1.7). So each 'momentary' act of creation is a decision which links a whole structure of other decisions, confirming some, modifying others, but above all generating an overall musical idea, which is the single outcome of the whole process.
2.3 The act of learning

If it seems sensible to call each moment of musical decision an act of creation, albeit infinitely varied, then perhaps we may also call each musical decision an act of learning. For in creating a new image of time, the musician learns something new about the possibilities of time (see 1.8 and 1.10).

Of course, 'learning' in this sense is embodied in the wholeness of sensuous musical sound, not in words; and some might consider the concept of 'learning' to be inappropriate for this reason. Once the music has finished sounding, whatever insight it embodied seems to have vanished, and whatever was 'learned' seems to be lost. Thus Budd (1985, p.115), while rightly asserting that "the value of music is intrinsic, not merely instrumental", claims that on Langer's theory there is "no reason why we should value the experience of music intrinsically, rather than merely instrumentally ... And no reason why we should listen repeatedly to music we know well." (p.116) To support this, he assumes that if music is cognitive, then the knowledge must be "extracted and retained ..." (ibid., my emphasis), as though the cognitive content of the music, what there is to be learned in it, must be able to exist apart from the musical sounds which embody it.

However, we only ever recall what we know by rehearsing it in some way, for example by audibly or internally repeating the words in which we conceive what we have been told, and it is difficult to see that music need be essentially different from words in this respect. It is true that discursive learning and non-discursive learning differ in that, while words may be repeated in different ways without losing their cognitive content (for example silently or very fast, or in equivalent visual imagery), the meaning of music is carried in its whole embodiment in sound. It may be possible to re-create very simple music in imaginative memory, but I think it would be difficult to argue that silent recall of music is a normal mode of recapturing the full content of musical significance. Usually, this requires a return to the creation of the sounds themselves.
I assume, then, that musical learning is principally learning about consciousness-time in music. Therefore, in view of what I said about complexity above, it seems sensible to anticipate that musical learning in its principal sense will be ever new, that children will tread paths which are unpredictable not because of gaps in research, but in principle.

2.4 Other aspects of learning in music

If musical learning is principally learning about consciousness-time in music, this is not to deny the existence and importance of learning how 'to music' or learning about music. And if musical learning in its principal sense is unpredictable and ever new, this is not to deny the existence and importance of other aspects of musical learning, which may be relatively predictable.

However, one central assumption which I shall carry into the investigation that follows is that in this context not only the predictable is of research interest. In order to get to the heart of the matter, I propose to attend at least as carefully to what is unique to each piece, as to any patterns or similarities which may emerge. I shall return to this as a methodological point in 7.2 and 8.8 below.

Perhaps the act of creation and the process of skill learning are not as distinct as we sometimes supposed. Thus Small (1977, p.201) suggested that "... the best way to acquire the techniques of composition is to start using them ... techniques and creative purposes grow together by mutual stimulation." Indeed, one wonders whether the act of creation and the process of learning are ultimately identical, as it were the cross-section and plan-section respectively of the same cognitive-sensuous reality.

If so, then we might expect creation and learning to intersect in at least three respects. Firstly, there is the learning of musical sub-structures, 'powerful musical ideas' (see Papert, 1980) which may be incorporated into the higher structure which constitutes each musical 'wholeness'. These may come from musical activities of many kinds, previous composing, performing
other people's music, being in audience, and so on. (Incidentally, there are grounds for believing the above order to be that of developmental priority. See 2.5) This will include the learning of vernaculars and other conventions. It is possible for a convention to arise in the musical practice of any community of users, including a class of children; once a 7-year-old girl told me: "We always play the cymbal at the end sometimes." (Bessemer Grange Junior School, Dulwich, 30/4/87)

While it may be of interest to uncover some of the influences and past experiences that contribute as sub-structures to the unity of a composition, there is no 'primitive' musical act, and it will be impossible in principle to reach all the roots of any musical act. Nor do the sub-structures account for the heart of the matter, which is the unique wholeness of the present creation.

Secondly, there is the learning of supportive procedures and ways of interacting, including learning about music, and learning vocabulary. Of course interactive procedures too may be counted as 'powerful musical ideas' in their own right. Verbal concept development will have an important impact here, as children become more able to use words to abstract musical ideas and communicate them to one another.

Thirdly, the primarily embodied nature of music implies the existence of performance skill learning, as repeated use and practice develops physical co-ordination and fluency.

2.5 Theories of developmental growth

It seems sensible to assume that what any child can do in music draws on, indeed depends on, previous learning experiences. If so, then it must be important for the teacher to understand the ways in which one musical action may grow from another, and the ways in which musical difficulties can arise from the earlier absence of specifiable types of experience. But as long ago as 1948, Mursell (p.4) warned against concentrating on the incidental, more easily observable, aspects of this development: "The developmental approach means that in anything we are trying to teach, we should pick out
and emphasize the inner, living essence in the first place, rather than the external manifestations."

Glynne-Jones (1974, p.10) considered the "relationship between children's intellectual development and their musical functioning", in the first place the impact on musical thinking of the development of verbally explicit thinking as studied by Piaget, for example the development from a focus on "action and general product" at six years old, to the "intentional" use of simple but specific ideas at seven or eight (p.116). She pointed to the significance of this development for the growth of co-operative procedures:— "When children begin to think operationally, i.e. with definite ideas in mind which are capable of analysis, they begin to discuss the music they made up ..." (p.18) "As children's activity becomes less egocentric, and they start to see the world from a viewpoint other than their own, they can begin to co-operate; this has not been intellectually possible before." (p.16) And to its significance for the growth of explicit decision-making:— "[some ten- and eleven-year-olds who had listed fifteen ways to develop a theme] ... were able to weigh the advantages and disadvantages of different ideas, and make judgements about their relevance in certain musical situations. They had reached the stage of abstract thinking." (p.68) Her detailed studies also identified structures of developmental dependence within purely musical thinking, for example the need of a nine-year-old boy to hear a whole piece with the addition of a glissando he had suggested, as he could not yet hear it in imagination (p.61), and she demonstrated convincingly the developmental priority at several levels of children's own creation:

"It also becomes clear that playing other people's music initially does not meet the needs of children if they are to develop musically. Making music, improvising and composing, are essential in building the foundations of an understanding of music, activities in which the children themselves make the decisions. This is the heart of the matter." (p.143)

But she did not claim that these developmental structures can be summarized in stages of musical development distinct from Piaget's stages of intellectual development.
On the other hand, Swanwick & Tillman (1986) have proposed a sequence of eight "developmental modes" in the composition of music, passed through in order, with each lower mode swept up and revisited in any higher. The authors admit that, because most of the compositions presented as evidence were collected in one school, "it would be unwise to be too dogmatic about identifying broad developmental changes to a fairly standard timetable." (p.306) Indeed, the fifty-five examples, "typical of what the children involved in this study produced" (p.339), may seem a little elementary when compared with work by children of comparable ages quoted in publications cited in 2.1 above. Although these other authors selected their examples on criteria other than exemplifying the typical, another part of the explanation may lie in the way Swanwick & Tillman's examples were collected: the compositions were not worked on, perhaps in collaboration with other pupils and with the teacher, but created almost impromptu during a formal interview. The authors see it as an "advantage" that they observe "relatively undirected musical processes rather than the products of polished performances, directly influenced by teachers and peers." (p.311) But collaboration in music-making, and the processes of trial, refinement, and decision, do not merely facilitate or influence music which would otherwise be similar in kind. They are central to the way music is usually made, and they are crucial elements in the development of musical thinking, as Glynne-Jones indicated. Their systematic exclusion from Swanwick & Tillman's research leaves the general relevance of the findings in doubt.

It is interesting that Witkin found the problem of development "something of an embarrassment" for arts teachers (1982, p.69), and suggested that

"Piaget's theory offers nothing of direct assistance to the arts precisely because his idea of development takes thought further and further away from the sensuous and sensory world in which the artist is interested. Indeed, the artist's thought moves in the opposite direction, taking him deeper and deeper into the sensuous aspect of experience." (p.71)

Ross (1984, p.129) proposes a model with four stages: "1.Displacement, 2.Improvisation, 3.Convention, 4.Composition". But he does so with great reservations about its relevance to planning: "I doubt very much whether any model will do more than suggest ways
in which we might be able to compensate for the breakdown of what ought, under normal circumstances, to be spontaneous, organic growth." (p.131)

I wonder if Witkin's embarrassment might be resolved in Gardner's "unexpected conclusion" (1973, p.vi) that "the child of 7 or 8 has, in most respects, become a participant in the artistic process and he need not pass through any further qualitative reorganisations." "It is only in the realm of criticism that a further qualitative change, brought about by the advent of formal-logical operations, would seem essential." (p.168) Gardner's schematization of aesthetic development is as follows: "1. Presymbolic period: Sensorimotor Development (ages 0 to 1) ... 2. Period of Symbol Use (ages 2 to 7) ... 3. Later Artistic Development (age 8 on)." (p.233) If Gardner is right, then the sequence of development of mental operations needed for musical composition may be complete by age 8, and subsequent development would be code-specific and essentially unpredictable. So, for a teacher of older children, the significance of a scheme of musical development would be essentially remedial, as Ross has suggested. Unfortunately, this intriguing idea is beyond the scope of the present investigation.
CHAPTER THREE

Insight into Children's Music

3.1 The audience-listener

Having explored some working assumptions about the nature of children's musical experience when they compose, it is time to give consideration to the nature of the teacher's or researcher's musical experience when he/she attends to and responds to their music.

Of course, there are many ways of achieving insight into music, of which the first is surely by direct participation in the music. So the teacher might ask to join in with the pupils' playing, or to take turns with one of them. I think this may have greater importance in teaching than has always been recognized, and I shall refer to it below (see 4.9.3 and 5.5), but full consideration is beyond the scope of this thesis.

For now, I assume that the teacher's response is based on listening in audience to the pupils' work, and so it is necessary to consider the nature of this experience. I use the hyphenated expression 'audience-listener', where many would simply say 'listener', in order to emphasise that composing and performing are also species of listening (see Loane, 1984a, and 8.6 below).

I suggested adopting the view that musical experience is principally active, consisting of decision and choice, rather than essentially a matter of 'receiving a message' (see 1.11). This model works well enough for music-making, but does it make sense to apply the same thinking to the case of audience-listening?

I think a suggestion by Walker (1966, p.90) may be useful here: "... the ordinary musical listener ... is, as it were, a dumb composer who makes music by proxy ... whenever he hears the work in question, it is as if he himself were creating it." If so, then one may consider the audience-listener's experience as a sort of abstracted version of the listening-deciding involved in actually making the music. The audience-listener is projected into the place..."
of the composers or performers, almost imagining herself/himself to be making the music.

Of course, in suggesting the primacy of an imaginative projection from audience to maker, I do not deny that there may also be an imaginative projection from maker to audience, particularly where the roles of composer and audience are as they are in the Western concert hall (see Meyer, 1956, p.33, quoted in 1.11 above). There will be contexts in which that special-case way of thinking is quite adequate, but I suggest that to take the concert hall experience as the paradigm, to generalize it to all music, may be unhelpful.

So audience-listening as an involvement in the articulation of virtual time, may be considered to be one sort of insight into music. In imagination, the teacher participates in the children's musical decisions, re-creating their music as it sounds; and so grasps with them the structure of virtual time they are creating.

I assume that, if I am to understand anything important about children's compositions, I must begin with insight of this sort; I must begin with what amounts to a musical experience of my own.

Of course, this is not to deny the possibility and value of other species of insight into children's music. For example, we may decide to categorize musical behaviours and outcomes from a psychological or sociological point of view. But it looks as though those sorts of insight, while important in their own way, cannot in principle reach the heart of the matter, because they cannot reach the unpredictable wholeness of musical experience itself.

3.2 The semantic of audience-listening

If audience-listening is a species of musical experience, namely music-making in the imagination, then it is natural to assume that audience-listening is non-discursive, that its meaning resides in the wholeness of complex structures of sound.
The overall implications of this are identical in regard to the audience-listening experience as in regard to the music-making experience (see 1.5 - 1.8). In particular, memory and anticipation make the whole past and future of the music 'present' at each moment, so that the final moment of attending to a piece is not the only point at which musical understanding can be said to take place. Of course the 'final moment' may have a distinct importance in our total grasp of the music, since only then is anticipation entirely displaced by memory. Indeed, the 'final moment' of contemplating the whole may have some extension in time, marked perhaps by a period of applause or of thoughtful silence. Moreover, a repeated hearing of the same music (if music is ever 'the same') may radically alter one's perception of it. But the audience-listener's insightful re-creation of the music-makers' music is immanent in the whole of his/her attention to the performance.

Secondly, we may expect the essential complexity of music to present the audience-listener with ever new speculation about the possibilities of time; the outcomes will be unpredictable in principle. A teacher attending to pupils' music may look for what is unique, for a 'wholeness' that has been created for the first time, and need not look only, or even principally, for features held in common with other music. As Langer (1967, p.81) said, "art has no ready-made symbols or rules of their combination, it is not a symbolism, but forever problematical, every work being a new and, normally, entire expressive form."

Finally, the audience-listening act of insight is logically distinct from any discursive thinking which may accompany it (see 1.8); although, just as verbal thinking can play a role as part of the making of music (see 1.10), so insight expressed in words may arise as part of audience-listening insight. I might think "here comes the recapitulation", "the texture is progressing in complexity", and so on; but then again I might not! In audience, as in composition or performance, musical 'knowing' is not limited to verbally expressed knowing, and its heart is not verbally expressed; principally, one understands other people's music directly in imaginatively sensuous involvement in that music.
While words may point to the existence of musical wholeness, they cannot articulate that wholeness; if they could, then of course there would be no need for music. Souchay asked Mendelssohn the meanings of some of his *Songs Without Words*. His reply (1863, p.298-300) may be worth quoting at length:

"... There is so much talk about music, and yet so little really said. For my part I believe that words do not suffice for such a purpose, and if I found they did suffice, then I certainly would have nothing more to do with music. People often complain that music is ambiguous, that their ideas on the subject always seem so vague, whereas everyone understands words; with me it is exactly the reverse; not merely with regard to entire sentences, but also as to individual words; these, too, seem to me so ambiguous, so vague, so unintelligible when compared with genuine music, which fills the soul with a thousand things better than words. What the music I love expresses to me, is not thought too indefinite to be put into words, but, on the contrary too definite. I therefore consider every effort to express such thoughts commendable, but still there is something unsatisfactory too in them all, and so it is with yours also. This, however, is not your fault, but that of the poetry, which does not enable you to do better. If you ask me what my idea is, I say — just the song as it stands ...

"Will you allow this to serve as an answer to your question? At all events, it is the only one I can give, — although these too are nothing, after all, but ambiguous words!"

3.3 Judgements, words, and the audience-listener

Judgements about what is 'right' and what is 'wrong' certainly arise in the course of music-making. We choose this note and not that note; we decide on just this degree of inflection, no more no less; and so on, always in the light of the whole structure of relationships. Music is a process with successes and failures along the way; each solution is chosen as one possibility, albeit sometimes the only 'right' possibility, among many.

If audience-listening is in the first instance an imaginative form of music-making, then it must consist of imaginary decisions of the same kind. If the teacher is imaginatively making the music with the pupils while it is still being worked, perhaps
even at a stage of early experimentation and trial, then not all the possibilities heard are finally 'right'; the teacher as audience-listener shares the pupils' musical experience as one of emerging choices. These judgements arise in a reference of each musical moment to the emerging whole to which it relates, and so in the first instance they postulate a set of particular successes and failures, rather than one overall success or failure.

It appears that these imaginary decisions may be the principal teaching judgements, the roots of any other that may occur. Since they arise as though the teacher were a participant in the pupils' musical process, they may be logically identical, though not identical in form, to the interaction of the pupil composers among themselves.

We cannot articulate the precision of these non-discursive judgements in words. However, this should not discourage us from using words and talking about the music, provided that the talking does not mis-represent its object. What words can do is refer to parts of the whole non-discursive insight I have been discussing. The principal condition for this truthfulness appears to be that the talk refers to its own inadequacy, more or less explicitly, depending on context. It will become untrue to musical experience if ever it tries to usurp its place.

So we may expect a permanent tension between, on the one hand, the full reality of pupils' musical creation, and the full reality of the teacher's audience-listening understanding of it; and, on the other hand, the inadequacy of words to articulate that fullness.

One might describe talking about music as 'discursive insight into non-discursive insight'. The expression may be clumsy, but I think it is useful in expressing that there is at once a continuity and a discontinuity between musical experience and verbal reflection. Each is a species of cognition, but the semantic of music is 'whole-to-whole' while that of words is 'element-to-element'.
3.4 Value-judgements and the audience-listener

In the last section, I discussed the imaginary judgements which constitute audience-listening insight, and the verbally-embodied insight which may articulate part of them. I propose to assume that these are logically distinct from, although not necessarily separable from, and certainly not chronologically prior to, valuing the music.

According to Walker (1966, p.xi-xii), value-judgements come first, and are logically bound in to understanding the music:

"The practice of criticism boils down to one thing: making value judgements. The theory of criticism, therefore, boils down to one thing also: explaining them. ... a value-judgement is something you must possess before you can even start the critical process."

I am not convinced by this; I suspect that when one is in audience and sympathetic to what one hears, then commitment to the music is very vivid, and so the imaginative musical judgements by which one 're-creates' the wholeness of the music, and one's value-judgements in favour of the music are very closely associated. If so, then that close association may well give rise to an illusion that the two are logically identical.

Of course, an expression of appreciation may be the only way open to someone in audience (for example a teacher in class) to point to the fullness of his/her audience-listening insight (since a verbally-embodied account would be partial). It seems right that applause should precede commentary. It used to be customary not to applaud if a concert of sacred music was given in a church, and that could feel very strange.

But that one thing may be used to point to another ought not to lead us to confuse the two. So I do not think it necessary to treat musical insight itself as though it came within the logical category of value-judgements; nor do I think it necessary to postulate any necessary logical link between the two. At the same time, I do not propose to conceal the existence of value judgements on my part about the pupils' work to be investigated.

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I think there is a further important distinction to be made, between on the one hand describing and valuing musical action in pupils; and on the other hand comparative valuing (or ranking) of pieces, including any succeeds/fails overall judgement, which is a crude ranking. I should like to use the term 'music criticism' by analogy with 'literary criticism' to mean the first of these, although I fear that usage has reserved the term for the second. Certainly I think it important not to allow the second to act as a paradigm for the first.

Aspin (1984, p.8) proposed "The collapsing or at any rate the suspension of [among other dualisms, that between] ... facts and values", but he nevertheless claimed that "being a spectator or part of an audience involves bringing to bear upon a work quite a different sort of apparatus than that called for in the making of the work. That apparatus will be a critical, an interpretive one, rather than constructive or creative." (p.11) He also speaks of "creating, performing and judging" and of "critic, creator or performer" (pp.17-18), as though being in audience was essentially the same as being a critic (in the second sense, I think), and essentially different from being a music-maker.

Small (1977, p.200) wrote of "the terrible ubiquity of masterpieces, those products of the creative process that we value more than the process itself, and which we keep in existence often at the cost of so much time and effort that might be better spent on creation." And in proposing that we abstract appropriate qualities from ways of working in the popular arts, Ross (1984, p.28) has said that "... we have to begin by getting out from beneath the shadow of the Realized Form – the Great Work of Art." Of course, it would be foolish to deny the existence and importance of 'masterpieces' in some musical traditions. It would be equally foolish to deny the existence and importance of judgements about whether each such work is a masterpiece or not. And many believe there is a more universal class of either/or judgements to be made:

"... cutting across all musical barriers ...; cutting across all historical styles; cutting across all shades of opinion, all varieties of taste, there runs a simple line of division. On one side fall those works which express music's timeless, creative principles; on the other fall those which do not." (Walker, 1966, p.4)
In school, too, there exists an important but I think small class of either/or judgements, for example once a month or once a year I might decide that "This piece is outstandingly beautiful", or that "These pupils have just been messing about, and have achieved nothing." More generally, if the music is finished in the eyes of the pupils and projected as a 'work' into the world, then a judgement about its overall success/failure as a work is called for.

But having admitted all that, I still see no evidence that these special classes of either/or judgements constitute a universally valid model, a prime analogue of how we should talk about music with pupils. Neither do they provide a model for music criticism in the broad sense.

3.5 Understanding children's music: an invitation to the reader

It begins to look as though the teacher will not serve pupils best by trying to stand back, observing aspects of their achievement as it were 'objectively' and detached from musical involvement; it begins to look as though we must elaborate ways to grasp the heart, the wholeness, the complexity, the newness of children's music.

Still all this remains to be tested. Is there evidence that children's music in fact deserves such serious attention? Perhaps children's work will prove to be too elementary to qualify in any but a trivial way as virtual time, as the articulation in sound of the forms of feeling, as insight into consciousness? Perhaps there cannot be learning 'in' music, unless children first learn thoroughly 'how to' and 'about'?

It is time to investigate at first hand some examples of classroom compositions. Reflection along lines presented in these case studies has led me to certain strong convictions, summarized in 7.1 below. But just the few examples of children's music which this thesis has space to discuss, could not alone be a sufficient pool of evidence for convincing someone about so thorough-going a set of conclusions. Moreover, in the nature of the case, evidence on tape
and by analysis cannot be exhaustive; it may be that conviction about the value of thinking about children's work in such a way could only arise in months or years of daily thoughtful contact with young composers.

At the heart of this thesis, therefore, lies an invitation to the reader to reflect on her or his own young pupils' compositions, and imaginatively to re-create from the accompanying cassette recording the experience of receiving the music 'live' in a whole teacher-class social context. I invite the reader to explore the 'ways of thinking' always as one possibility among others, always to ask "What other musical relationships do I detect?"; "How differently might I have worked this material?"; "What else would I say to these pupils?" I do not anticipate identical answers at all, but I look for a measure of agreement on the more general conclusions. This is the sort of 'replication of results' which seems appropriate to the field of enquiry (see 7.2 and 8.8).

All the pieces in Chapters Four to Six were made by pupils aged between 11 and 14 at Boldon Comprehensive School, where I taught from 1976 to 1984. Unless otherwise stated, each was the product of three or four normal weekly lessons of about seventy minutes. After some initial discussion with the teacher, the class was divided into groups of four, five or six, which worked in a small 'practice room', or in a corner of a larger room. The teacher circulated, listened, discussed. At the end of the project, the pieces were recorded on tape. In each case (except 5.4, q.v.), the teacher directly involved in the project was myself, although some of the pupils received instrument tuition from other teachers.

I urge the reader to listen to each recorded example before reading the corresponding text, and in the first instance without looking at the music examples, which are only transcriptions I have made to assist study. The pupils' achievement, if there be any, is not on paper but in sounds.
CHAPTER FOUR

Case Studies (i)

4.1 'Crazy Horses'

The pieces discussed in this chapter were composed by 11/12-year-old (first year secondary) pupils. The composers of Crazy Horses belonged to the 'remedial' class, and the piece was recorded during their first few weeks at Boldon Comprehensive School. At the time the piece was made (1976), composition work was not well established in the feeder primary schools, and the piece may represent these pupils' first attempt at musical composition recognized as such. I asked them to make up some music about animals, after exploring with them a variety of sounds available from percussion instruments. There are two takes: recorded examples 4.1(i) and 4.1(ii). For the second recording of the piece, other members of the class joined (at my suggestion) the four who composed it.

The pupils appear to be enjoying the sheer pleasure of making a lot of noise, as do many children when given the chance. There is nothing surprising or reprehensible about that. We adult musicians may be used to being in control of the sound environment, but a child may find it important to experience the novelty and exhilaration of such mastery. Indeed, it could be argued that 'messing around' with sounds, relatively intentionless exploration, is as necessary a preliminary to music as babbling to speech, or as scribbling to drawing. These early stages have been discussed by, for example, Sheehy (1946, pp.3-21), Glynne-Jones (1969, pp.128-132), Moog (1976, pp.59-62, & passim), Davies (1986, pp.279-281) and Hargreaves (1986, pp.68-73).

But I suggest that there is more to 'Crazy Horses' than pre-musical noise making or pre-compositional exploration, essentially because the sounds are subject to conscious listening and decision making. Indeed, in this case the young composers almost spell out for us a symbolic intention.
The loud and regular instrumental sounds correspond to an exertion of physical strength, to the effort of such an exertion, and perhaps to the pain that might be caused by such an exertion. So the energetic drum and xylophone playing relates to, and (in the sense outlined in Chapter One) symbolically stands for, the imagined wildness and strength of the crazy horses. A horse's hoof is a fearful thing, especially if the horse be crazy. "And so", perhaps the pupils are using their music to speculate, "my own strength too might be fearful, were I to let myself be crazy."

The interleaved vocal declamations "Cray-zee Horr-sez" give the piece an extra dimension. They are excited and loud, like the instrumental passages, but they are also controlled, the style of speech/song recalling that of a circus ringmaster. While the wild drumming and xylophone playing mixes unco-ordinated pulses, in the declamations the pupils take care to keep precisely together, in regard to pitch inflection as well as in regard to rhythm. So, while exploring under the guise of symbols what the wild release of strength might be like, the pupils also symbolically enclose that wildness in a circus ring of conscious control, standing outside it and naming it. The elements of humour and irony may also be a taming, a subjugation of wildness to consciousness.

I do not suggest for one moment that the pupils have thought this out explicitly, in so many words. Rather I suggest that they have thought something out in music, something which a listener can share by involved attention to that music, something which I here render only roughly and imprecisely in words. The pupils have created a pattern of sounds, which corresponds in some way to a pattern of possible experience; so it seems plausible to say that they have created some sort of symbol or metaphor of an imagined way of experiencing consciousness, and that in sharing that insight with their audience they have generated some sort of 'meaning', some sort of 'communication'. It is "a recognition ... of other kinds of experience which are possible" (Eliot, 1932/51, p.303). In that sense, they have acted in an artistic way; they have brought into being an image of time.

Their creative act, however, is simultaneously an extension of skills, albeit at an elementary technical level. I
noted at the time my impression that it was their creative need to
image strength in loudness that determined an exploration of how to
hold the beaters most effectively. And it appeared to be their
creative need to image control in co-ordination that determined a
conducting technique (one pupil held his beaters high to signal the
end of each instrumental section), and the controlled listening in
the vocal declamations.

4.2 'The Whole Wide World'

The Whole Wide World was composed by two of the same
pupils a few weeks later, in response to an open-ended assignment to
"make up a piece of music".

The words image in a remarkably vivid way a child's
widening vision of external reality, starting with 'my mother', and
eventually taking in 'the whole wide world', but not, perhaps
significantly, the self. The composers repeatedly 'turn around', as
though bewildered by the awareness crowding in. The repetition
makes the bewilderment cumulative, but at the same time robs it of
some of its strangeness. Just to incorporate something in a pattern
is in some way to come to terms with it, to grasp it, to understand
it.

I turned around and saw my mother,
I turned around and saw my father,
I turned around and saw my sister,
I turned around and saw my brother,
I turned around and saw my fish,
I turned around and saw my dog,
I turned around and saw my rabbit,
I turned around and saw my cat,
I turned around and saw the whole wide world.

It might be said that these words succeed just as poetry,
and that the performance is more in the nature of declaimed verse
than music. On the other hand, one could argue that as soon as
poetry is performed, rhythmically declaimed, then it also becomes a
species of music. Certainly, few would wish to be dogmatic about
the boundary between performed poetry and song.
But I think it is important to note that several pupils in this 'remedial' class had special difficulties with writing; we must doubt whether their imagination would have been sufficiently free to create this piece, had the assignment been to write words on paper rather than to give a performance.

Moreover, elementary as are the musical techniques used, they do seem eminently suited to the child's eye view of the expanding universe carried in the words. The tune rises by step, and is simply repeated for each line. But there is pitch inflection, which creates heterophonic discord, chiefly on the accented words 'turned' and 'saw'. Pitch inflection also picks out the very last line, so that the words 'whole wide world' are rather spoken than sung. Such repetitive chanting, innocent of beginnings, middles and ends, is often found in so-called 'primitive' music, and one may see it as in some way imaging the pre-self-conscious mode of experience presented by the composers.

The guitars' E minor drone may also remind us of much folk music, while its percussive attack suggests confidence and self-assertion. Again the last line is picked out by three final emphatic strums, so there is a 'wholeness' of different musical ideas related to each other at a musical point in time.

Words and music together, then, might be said to present an image of the child's turning out towards the wide world, with some bewilderment, but also with self-confidence. Whatever success the pupils achieve is in the matching of elementary but congruent musical techniques to words, in a performed presentation of what such a morphology of feeling might be like.

Ex. 1

_Crazy Horses_ and _The Whole Wide World_ were made by members of a first year 'remedial' class. One may detect a lack of self-consciousness, a freshness, and a readiness to expose feelings
to the public gaze, which is far less evident in most of the pieces which follow.

There are several possible explanations for this. But if there was any truth in what I noted as the conventional wisdom of the staff-room, that the class was 'like a primary school class, very nice but very immature', then perhaps it was the pupils' relative closeness to childhood experience, and their linked relative lack of self-consciousness, that enabled them to capture that experience so succinctly.

One might also speculate that a pupil composing as a member of a group is less likely to deal with obviously personal feelings than one writing as an individual. At the same time, the more public and social aspects of experience that may be more readily dealt with in group musical compositions are not to be dismissed simply because they are 'distanced' or 'conventionalized' in the process. On the contrary, it might be argued that such social aspects of life are more likely to be the appropriate concern of young people's music, while the 'individual feelings' aspects of feeling might be more readily dealt with in their writing. But it may also be that songs provide the possibility for a unique bridge between the public world and the private.

4.3 Ostinato Piece

At the very start of their music course in the secondary school, this class performed a simple piece based on repetitions of two ostinato patterns, which I taught them by rote (Ex.2, not composed by pupils in the class and not on the accompanying tape). I then invited each group of four or five pupils to make up a piece of their own, using the given ostinatos or not as they preferred.
Other groups in the class chose not to use the given material, although I would argue that aspects of the given model are detectable in each piece. The group who composed this piece did include given material (the lower ostinato), but the important outcomes are no less unpredictable, because the way in which they weave that given material into a whole piece of music results from their own listening and decision making.

Ex. 3

The tune (whose four-bar structure may also be modelled on the given material) starts with simple repetition, so that the listener might begin to expect a build-up of one-bar ostinatos. Instead, the structure turns out to be A – A – B – B', the 'B' bars sequentially falling to the tonic, so resolving the tension created by the repetition of a harmonic seventh in the 'A' bars (see Ex. 3). The statements of the tune are separated by 2-bar interludes, and the start and end of the piece are marked by a longer fourfold repetition of the ostinato.

An unusual and slightly disconcerting feature is the evanescence of the ostinato through each statement of the tune. The deeper sound of the piano which gives solidity to the introduction and interludes is absent from the statements of the theme, and the metalophone too drops out after two (or three) bars, so that the
tune's resolution of tension has an element of diffidence. This feature is certainly intriguing, but perhaps it weakens the music's impact. Nor can we be sure that the pupils deliberately chose the effect. A teaching approach might be to point out the effect of the evanescence, and then to suggest that the pupils try their music in two or three other ways, listen, and decide for themselves which they prefer.

I do not suggest that the pupils chose these complex structures in the light of an explicit awareness of their likely effect, still less in the light of knowing their technical names. But at least they found a sequence falling to the tonic not inappropriate to their musical intention. They appear to have 'stumbled on' a technique eminently appropriate to their music, but which lies beyond the present state of their theoretical knowledge.

The pupils would clearly benefit from teaching help in synchronizing the ritardando, an effective composing idea marred in performance. Perhaps it should also be suggested to the pupils that the unvarying rhythm in all parts might make the piece a little featureless, and that for their next piece they might explore rhythms which fit together without being the same.

Clues to the 'meaning' of Crazy Horses and The Whole Wide World are contained in the words associated with them. In composing this unnamed ostinato piece, however, the pupils concentrated their explicit intention entirely on the musical sounds. Some will argue that on those grounds any search for 'meaning' must be fanciful. But the pupils' commitment to the sounds, the involvement they show in care and listening attention, must give pause. What is there about those sounds that make them so fascinating to their creators?

I implied in Chapter One that human experience of time may have a certain duality at its heart, although this duality may take on different aspects in different cultures. On the one hand, time is a regular passing of identical moments; day succeeds day, our hearts beat, clocks tick, a parent's love remains constant, and so on. On the other hand, time is an irreversible transformation of the future into the past; day turns to night, we make or lose a friend, we grow old and die, and so on. A regular pulse, or the
repetition of a musical idea, is in some way an image or a symbol of the first, immutable aspect of time; a tune itself, through the irreversible succession of its different notes, is in some way an image or a symbol of time's second, changeable and changing aspect.

The unification of these two elements (say, at an elementary level, in an ostinato) presents an image or symbol of time as both unchanging and changing; as both circular and linear.

This dual aspect of human time is not some particular experience, but a general pattern found in very many experiences. To create a metaphor in sound of such duality is to articulate, and so to have insight into, something central and important about the way we live. Children live in such time, just as adults do. However, they may be less certain than adults that the ever-changing procession of new experiences embodies underlying unities, and so it may be especially important to them to create even very elementary images of unity in diversity.

The interest of the sound structures of Ostinato Piece to its composers is perhaps most plausibly accounted for, if we suppose that they recognize (and create) a pattern in the tensions and resolutions of their music, which corresponds in some way to the pattern of a structure of consciousness—time important to them. Our investigation of the musical facts suggested that this might be something along the lines of a resolution of tension accomplished in a context of diffidence. But if the full structure is one that we— and the composers— find impossible or irrelevant to name, this may be testimony only to the superior precision of music over words.
4.4 'Escape'

The Whole Wide World chanced on 'primitive' musical techniques to present an image of an arguably childish mode of consciousness-time. The remaining songs I shall investigate are more sophisticated in technique, and arguably more adult, or at least adolescent, in their concern.

It is possible to propose a phylogenetic model of musical development, in which "the stages in the individual's music growth correspond to those in the growth of music itself" (Brocklehurst, 1971), and increasing complexity leads each child along the path previously beaten out by the historical development of music from 'primitive' to 'modern'. But our children are not in the condition of 'primitive' people. Any phylogenetic process must be expected to operate in dialectic with shared, established and highly developed musical languages. They live in a complex industrial world, and those with television in the home (from whatever ethnic background) hear the sounds of sophisticated Western adult music from their earliest years, even from the womb. We must expect our pupils to have musical idioms grasped in their memories, prior to any musical tuition we might give them at school. And we must expect that they will bring these memories with them when they come to compose.

For example, Escape has clearly been influenced by the 'punk' style. Indeed it may be taken directly from the song Going Underground by The Jam, also dating from 1981. (I am indebted to an unknown student of Keith Swanwick for this observation.) The assignment was to imagine being stranded on a desert island, to make up a story about how it might happen, and to make up a song about how it might feel.

It's just gone noon above South Shields, South Shields harbour quay, Only a few thousand miles to the island, The island where we'll be free. FREE! For ever, For ever, For ever, For ever.
It's just gone dark above the island,
The island where we are free,
We're wondering how we'll manage,
Without our family tree. TREE!
   For ever,
   For ever,
   For ever,
   For ever.

It's just gone dawn above the island,
The island where we are now,
We've got the food and shelter.
We're wondering what to do now. NOW!
   For ever,
   For ever,
   For ever,
   For ever.

The pupils have chosen to make their arrival on the desert island a result not of shipwreck but of a deliberate bid to 'escape'. They intend to be 'free'; perhaps, in view of the punk-inspired tune and performing style, from the condition of childhood dependency. The simple rising whole tone in a repeated chant is a technical feature common to pre-self-conscious folk musics and to modern 'pop' music. The vigorous rhythmic singing is powerfully assertive, also arguably an adolescent affirmation of confidence in self as peer group member.

Ex.4

Perhaps most children at times experience as frustration their dependence on a family whose sole concern is not with the wishes of that child, and fantasize about a life free of adult repression. Many run away as far as the end of the street - alas, a few run further.

But these pupils have woven a similar fantasy into song, and in doing so they have created something which transcends
fantasy. The articulation of the escape story in a publicly shared texture of music and words allows its composers to explore the ramifications of the imagined escape in a way that neither fantasy nor discourse could allow. It allows them to think out 'But what would running away feel like, as it were, from the inside?'

The shouted response in the first verse is on the key word 'FREE!', so that the punk-style interjection is quite simply a celebration of the escape from childhood. But in the second verse, it is on the word 'TREE!', so affirmation collides directly and disturbingly with that verse's doubts about losing secure roots. In the third verse, it is on the word 'NOW!', creating a still more disturbing juxtaposition of words about time '... now. NOW! For ever ...'. The growth away from frustrated escape fantasy to realistic self-reliance is perhaps not unconnected with a more conscious awareness of time, a realisation that the 'now' of childhood will be woven into a continuous 'for ever' fabric of future experience.

The sinister pitch inflection of 'for ever' seems to reflect an appreciation that the peer group's declaration of independence will not be without its dark side (and incidentally has more music in it than the pupils could possibly have notated). The fourfold repetition is intensified by a slightly wider pitch inflection for each 'e-ver', and this is more marked in the last verse. It is as though the pupils are thinking "It will be fun to get away from intolerant adult control — but also worrying, perhaps a little frightening."

The three phases of the escape from childhood are reinforced by poetic image. The escape itself takes place in the brightness of 'noon', fear and doubt arrive with the 'dark', and the real problems of the situation sink in with the 'dawn'.

The teacher would wish to help the pupil singing about a third flat to get in tune, but this might not be the first or most urgent thing to comment on. If we are sensitive to the feeling behind these pupils' song, we will wish first to comment on those technical features in their music which have successfully embodied their intent.
It may be clearer here than in some of the other pieces examined that creating the song in performance amounts to more for the pupils than making an abstract image of human feeling. "[the] explanation of music as a high abstraction, and musical experience as a purely logical revelation, does not do justice to the unmistakably sensuous value of tone, the vital nature of its effect, the sense of personal import ..." (Langer, 1942/57, p.239) Escape appears to be a celebration/ritual of caring thought in the midst of tough peer-group solidarity, as well as a picture of it. We might go so far as to suggest that the sounds achieve what they signify in an almost sacramental way.

4.5 'Cow-slip'

The announcer on the tape mistakes not only the name of one of his fellow-musicians, but also the title of their piece, which they called Cow-slip not Cow-bell on their written work-sheet. On the other hand, his mistake may be Freudian, suggesting that the cow-bell as a sound-source to manipulate was to the fore in the group's thoughts.

The overall form is A-B-A'-coda, while the 'B' section itself has a-b-a form (see Ex.5).

Ex.5

An immediately striking feature of the opening is the firm pulse distributed between three players. It is arguable that the cow-bell rhythm would be complete in itself, although many children would not give the crotchet rest its full value, if asked to copy and repeat such a rhythm. On the other hand, the xylophone players must project themselves into their friend's rhythm by imaginative
listening, in order to 'place' their own notes in the gap. The player of the upper part does this with slightly more success than her colleague.

During previous work, I had suggested the idea of an unpitched instrument 'filling the gap' in a tune, and this had become something of an idiomatic gesture within the class. In view of their special interest in the cow-bell, these pupils reverse the 'conventional' roles of melody and accompaniment instruments, until the sudden appearance of the extra quaver in bar 4 reveals a hidden impetus in the xylophone part. This propels it into resuming its expected leading role in the 'B' section.

Of course, such patterning may be very elementary, but it is plausible to see it as an image of an important general aspect of consciousness-time; the passing of conscious reality in cycle from phase to phase, or perhaps rather the passing of conscious reality through a cyclical switch of perspectives. (I am reminded of the famous picture of an urn and/or two profiles, reproduced in Koestler, 1964, p.198.) Hence the general importance and interest of such turn-taking, gap-filling, procedures. In this instance, the pupils create an image of a newly particular aspect of consciousness-time; as it were, a new aspect of a familiar aspect. The simple device of musical role reversal, certainly not suggested to these pupils by me, carries with it a powerful and essentially musical irony. If it is something like the emergence of unexpected intelligibility, it is also something that is more than can be said in those words.

In the 'B' section, there is a celebration of the rich sound of octaves on the alto xylophone, and the familiar technique of sequence is modified by the elongation of two notes in bars 7 and 8. However, the third player seems uncertain of what he has to play; the pulse increases nervously, and there is an extra rest, for the intentionality of which there is no evidence.

The contrast between the two 'A' sections is striking; indeed it is possible, if unlikely, that the two sections are not intentionally connected at all. At first, the cow-bell was struck on the outside; now it is also rattled on the inside. The upper
xylophone part is omitted. The rhythm has changed to five time, if we take the least messily performed bar, bar 12, as our guide to the pupils' intention. The four-fold repetition is reduced to three, plus a quite different coda in bar 14. All these it would be plausible to accept as meant transformations. However, the firmness of rhythm has almost disappeared (although the xylophone player retains a sense of pulse), reflecting the player's difficulty with the new cow-bell technique, and I can discern no musical purpose in that.

The coda consists of two glissandi and a single final note. I noted that each of these was a convention recognized in the class for ending a piece. The choice of both conventional endings creates a newly unified musical image, which also refers to the motif of the 'A' sections, so imaging roundness and completeness.

The piece contains such 'powerful musical ideas' as reversing roles, modified sequence, and modified ternary form. And underlying these are still more basic 'powerful musical ideas' such as turn-taking and co-operative listening. In deploying these ideas, the pupils have created virtual time. Their insight is embodied in a brief, elementary, but whole shared sound-world. Their act of creation is associated with learning technical skills and with learning 'powerful musical ideas'.

However, I have suggested that the image of time fades somewhat in the second 'A' section. Moreover, at any level above the single bar, virtually nothing happens twice, and in the context it is difficult to see this as other than a weakness. While it may not be plausible to put the pupils' discovery of role reversal down to pure chance, more of it needs to happen, if its appearance is to be fully convincing. It is in view of particular considerations like these, that the teacher can choose which among many possible questions and suggestions are most appropriate. For example, he/she might suggest that the cow-bell also play (in a subordinate role) in the 'B' section, creating additional coherence between the procedures of the two sections, and perhaps incidentally helping to overcome the third xylophone player's nervous de-pulsing.
If one were to make a single judgement about the piece's success or failure, it might be that the piece does not succeed. Even then, in a piece considered to fail, one can hear the fundamental processes of insight, creation, and learning partly at work. Moreover, these form the growth points for progress, because the failures are identified precisely by reference to the successes.

However, I do not find it possible to stand by an overall negative judgement in this case. There are certainly failures of conception and of execution, but I suggest that important 'wholenesses' make the piece work. The firm rhythm of the opening bars is a joyful invitation to imaginative participation. The emergence of the xylophone from subordination to leadership is intriguing. The connection (dependent on memory and transformation) between the two 'A' sections is at least partly successful. And the reference in the coda back to the musical basis of the 'A' sections integrates the whole.

In the end, perhaps observation alone can not resolve the question. I find myself inexorably turned to the audience-listening experience itself; indeed, imaginative joining in with the process may be the only way to conviction about the product.

It happens that this piece was made by pupils in a 'non-academic' or 'lower ability' class, with a particular record of failure in school tasks. It is possible to argue that their ability to collaborate with self-confidence was negatively affected by the institutionalization of failure implicit in their lower stream placement. But this should make no difference to our assessment of the achievement involved. A comment along the lines of "Good for lower stream pupils" is unhelpful as well as patronizing. To the extent that the piece succeeds, it does so on its own terms, as an image of a particular time-reality, and without any necessity for the audience to 'make allowances'. Its successes form a basis for discussing its failures, and they also form the growth points for helping the pupils to progress as composers.
4.6 'Bananas'

Bananas was made in October of the pupils' first year, and was their first attempt at vocal music in the Comprehensive School. I introduced the project by teaching some "silly" rounds and vocal games to the whole class. The assignment was "Make up a silly song or vocal piece; if you like, let each member of the group have a separate part to sing". In introducing the project in this way, I had in mind to defuse the tension which pupils of this age sometimes bring to singing.

Some of the introductory silly rounds had movement associated with them; this group invented some simple movement to go with their own song. Each singer walks from side to side of the performing area during the main, central section of the song, turning to the audience with open hands on the final "Yeah!" The movement from side-to-side is audible if the accompanying tape is heard in stereo. The whip sound (and movement) seems to be associated with the supposed slave working of the banana boat.

The song is vigorous and enormous fun, at one level a simple celebration of togetherness, but perhaps there are undercurrents of suffering.

The introductory verse simultaneously 'sets the scene' as an everyday street encounter (the banal words, the conventionalized idiom) and 'transcends the scene' by pointing towards pain and cruelty (the agonized pitch and timbre inflections). In the event, the solo verse leads into a harmonically rich and tangled structure. The "little man" on the street turns out to be a banana boat slave, singing "Eli, come ... ", a line from the well-known Banana Boat Song. Meanwhile the slave-owner sings nonsense words interspersed with whip sounds.

At first hearing, the rich vigour of the colliding melodies might be put down to chance rather than to counterpoint. Certainly, there seems little attempt to relate the pulse of the "Doo-be-doo-wah" melody to the rest. But there is a strong clustering of the added parts between each line of "Eli, come, and I wanna go home", giving an intense harmonic flavour that is
consistent each time, and that perhaps insists on the pain of 
unsatisfied yearning, against the home-arriving of the melody's fall 
to the tonic. While it would not be plausible to suggest that the 
pupils chose the harmonic flavour in the light of explicitly 
articulated decisions, it would be still less plausible to suggest 
that no sort of listening and decision making was involved.

Of course, there is a powerful conflict, both musical and 
referential, between the cruel vocal leaps and whip lashes of the 
"Doo-be-doo-wah" slave driver, and the half resigned, half bitter 
protest of the banana worker wanting to go home. But that conflict 
is placed within a distancing frame of pop cliché (the introductory 
street scene, the final "Yeah!"); the pupils do not explicitly 
recognize the force of the conflict that they are presenting. 
Indeed we might see the point of the song as being the incorporation 
of cruelty and bitterness into some sort of social structuring.

As in Escape (see 4.4), there seems to be more involved 
than an abstract image of experience. In an important sense, the 
pupils enact what they image, so that the music is also a sort of 
ritual or celebration.

The inflections of pitch, timbre, and vowel sound, 
particularly those in the introductory verse, deserve careful 
attention. I suggest that these inflections are as much part of the 
piece Bananas, as its melodic and formal structure.

Of course the question arises to what extent, or in what 
sense, the inflections are 'deliberately' chosen. Certainly, it 
seems unlikely that the pupils discussed the inflections in detail, 
and decided explicitly which notes of the melody should be 
inflected, and by what degree.

But I think it would be equally implausible to suggest 
that the inflections are fortuitous, an outcome of the young 
singer's lack of vocal training, because the pitch inflections are 
too consistently applied to certain degrees of the scale. (On the 
other hand, it might be argued that too narrow or rigid a vocal 
training might have closed the boy's mind to such musical 
possibilities.) It is consistently the third, and to a lesser
extent the fifth, of the scale which are most thoroughly inflected, the pitch sometimes rising through a whole semi-tone. This relates the song strongly to the Afro-American tradition, and specifically (although perhaps indirectly) to the blues tradition, with its tension between sharp and flat third. See Mellers (1964, pp.268-269) and Virden & Wishart (1977, pp.166-174), for two different accounts of the significance of this musical fact.

Along with pitch inflection, the 'gravelly' sound of timbre inflection, the pseudo-American vowel-sounds, "Let's hear it, man!", and the initial "I was walking down the street" all together amount to a clear reference to the specific stylistic tradition of blues. This surely makes implausible any suggestion that the pitch inflection is merely fortuitous, and still less a 'mistake' to be corrected.

I feel bound to conclude that these inflections are in some way chosen, and that it is reasonable to characterize that choice as a composing choice.

While consistency of inflection from one performance of the piece to another might be additional evidence of decision, the absence of that consistency cannot alone be evidence of a lack of decision. For the inflections might be part of that sort of composing which we call improvisation.
The pupils certainly have no verbal or notational language in which to encapsulate those decisions. The arrows and crosses I have used above are crude, and it is difficult to conceive of any refinement of paper notation, which would accurately indicate the rate or the extent of the change in pitch.

It seems that Bananas is an example of composing decisions which cannot in principle be wholly represented in words or in notation. It cannot have been the case that the pupils first decided what to do ('composition'), and then did it ('performance'). It must follow that, at least in this instance, composition decision-making is inseparable from an act of performance.

The song's incorporation of pre-existing material may cast further light on the division of labour in the invention of music. Pre-existing elements are incorporated in at least three different ways. Firstly, the line from the Banana Boat Song is entirely pre-composed. Secondly, the words "Doo-be-doo-wah", and the style of tune, but not the actual notes, are drawn from one of the rounds (composed by myself) which served as a 'stimulus' for the project. So is the final "Yeah!" Thirdly, the song uses several vernacular idioms (the American accent for "Let's hear it, man!", the vocal imitation of an electric guitar, the pitch, timbre, and rhythm inflections, the words "I was walking down the street"), without as far as we know a specific identified source.

But the pre-existing elements are transmuted into something that transcends any mere sum of those elements. The accommodation to vernacular models is not an end in itself, but an element in a new whole structure of sound, which refers in some way to a new aspect of possible human life. And it is that act of transmutation, that wholeness, which appears to be the core of the pupils' achievement. Perhaps one can say that it is that transmutation, that wholeness, that makes their music count as music.
4.7 'The Big Bang'

The Big Bang may be unusual in the complexity of levels at which operates the interlocking of cyclic and linear (see 4.3). It begins, sure enough, with three very ordinary one-bar ostinato patterns, although the xylophone glissando and the distinctive rhythm of the bongo give feature to the otherwise straightforward passing of time (see Ex.7). It is almost as though the pupils are saying 'This is how we used to make music, but wait ...'.

A longer, 4-bar ostinato begins. It sets up, then surprises, an expectation of a continuing rhythm. That rhythm is repeated for three bars, but is changed in the fourth bar, the change underlining the strong suggestion of harmonic progression consummated in that bar (tonic to subdominant).

The 4-bar ostinato is repeated, but (as the one-bar ostinatos of the introduction fall away) it is joined by another, at first in parallel fifths above. Again, the fourth bar is underlined, this time by a continuation of the rhythm, cutting across that of the lower part, and by the sonorous interval of a major third strongly confirming the sense of harmonic progression to the subdominant.

The purposeful employment of parallel fifths in this piece may cast doubt on the universal applicability of the famous dictum 'First learn the rules; then you may safely break them'. Having composed this music, these pupils know from the inside what parallel fifths sound like. If any of them go on to study 'classical harmony', they will know from the inside why consecutive parallel fifths are usually inappropriate to that style. Indeed, some readers may take the view that the old dictum should be exactly reversed! 'First break the rules; then you may safely learn them.'

The music has already moved one step from short-term ostinato organization towards longer-term harmonic/melodic organization. Now the pupils take us further. Using the 4-bar tonic-subdominant progression as a harmonic ground, the main tune begins, a formidable 8 - 8 - 5 construction. The eight bars themselves are built on the pattern A - A' - B - A" , the 'A' phrases
being in sequence, neatly organized to end on the tonic. The 'B' phrase (underlined by the tambourine) soars through a powerful minor seventh, perhaps another example of fruitfully breaking the rules before learning them. Indeed, the little discords which spice the piece derive from the (presumably innocent) application of one of the most powerful principles in Western music – the collision of harmonic logic and melodic logic.

The threefold layering of the piece is made clear by the careful choice of beaters. In the case of the very hard beater for the main tune, this was at my suggestion.
Some might feel that the long coda hangs rather awkwardly on the end, and indeed I originally suggested to the pupils that this might be the case. On the other hand, one could argue that its deliberately teasing postponement of the final 'Big Bang' is the intended point of the piece. Certainly, the composers chose to retain the full coda, in spite of my suggestion.

If in some way the firm pulse of the reassuring ostinato patterns and sequences is an image of the comfortable normality of everyday life, the coda extrapolates that pulse into territory with a more and more tenuous grip on normal life. Ultimately, the pupils' music envisages that life's pulse might culminate in something bizarre and outlandish (the trombone glissando), or even in the catastrophe of a 'Big Bang' (the end of the world? death? the beginning of the universe?). At the same time, one cannot help observing that the pupils' achievement in creating an image of the way experience goes — or might go — is inseparable from the extension of their compositional technique which embodies it.

Of course, it might be objected (Stephen Johns made the point at the conference 'Music for Tomorrow', Homerton College, Cambridge, 19/9/86) that case studies like the present one assume too intense an emotional involvement on the part of the composers; school pupils are sometimes, even typically, in a routine mood, and it would be fanciful to impute depth of meaning to music made at such times.

Sometimes, indeed, pieces may be made with no sort of commitment at all, and it would be foolish as well as counter—productive to detect significance in such cases (see 4.9.3 and 8.2.6).

But generally speaking, the intensity of the emotion dealt with is distinct from the intensity with which it is dealt. If emotion may be recollected in tranquillity, perhaps it may also be recollected in the routine of weekly class work. Certainly, the evident humour of these children's approach to their performance should not blind us to its possible seriousness of meaning (if not seriousness of acknowledged purpose), a seriousness of meaning surely shared by all the best jokes.
4.8 'In the Heart of the Sleeping Dragon'

I summarized the class's assignment on a work-sheet, which is reproduced as fig.1, p.72. In talking to the class, I emphasized that the ideas were suggestions only, and stressed the instruction to "listen and decide" for themselves.

The title In the Heart of the Sleeping Dragon arose while this group worked their musical materials, and was in no way a starting-point for the process.

The listener may be struck by the inventive texture of the piece; the recorder's long notes accompanied by pulsing percussion and guitar bringing to mind the dragon's deep sleeping breath but no less passionate heart-beat. This could certainly be described as a simple "sounds like' relation" (Kivy, 1984, p.28).

But I think there is more to the music's 'representation' of the dragon than this. The audience or the composers may hear an isomorphism between the shaping of the recorders' tune and the slow rise-and-fall of breathing in sleep, that goes beyond a simple coincidence of the words that we might use about each, or "cross-modal description" (Kivy, 1984, p.44). Of course, up-and-down has a crude analogy of structure with in-and-out. But because of the very slow perceived speed of the recorder tune (this perception is assured by contrast with the faster accompanying notes), because of the still slower rate at which the tessitura of the melody changes, and because of the whole-tone discords of the tune's harmonic relationship with the percussion, the analogue with specifically sleeping breathing must surely go beyond coincidence. Even in this regard, one notes the 'wholeness' of a set of non-discursive decisions about a multiplicity of means.

These two sorts of analogue, along with the chosen title, certainly constitute musical 'representation' in Kivy's sense. But, paradoxically, the title itself urges one away from 'representation' as the central explanation of what the children have done. The piece is not about "The Sleeping Dragon", it is not even about "The Heart of the Sleeping Dragon", rather the music brings us "In the Heart of the Sleeping Dragon"; it creates an illusion of
Make a piece of music, using some of these patterns if you like.

- Try fitting the starting note with a triad that includes that note.
- Your tune may consist entirely of triad notes or mainly of triad notes or of any notes at all. LISTEN AND DECIDE.
- You may find you prefer F# to F, if you use mainly chords of E minor and A minor. LISTEN AND DECIDE.
- It often sounds good for the bass (lowest) note to be the name note of the triad. LISTEN AND DECIDE.
- But don't restrict yourself to these suggestions. Always choose what sounds best to you.
- Find a good way to start. Find a good way to end. Find a good title.

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consciousness-time itself. This detailed and overall analogue with feeling goes further than representation, and may be of greater importance in understanding the heart of the pupils' achievement.

One must approach the structuring of the music at many levels. At the level of a two-bar unit, say bars 7 and 8 (see Ex.8, p.74), time is unified by the constant pulse, and by the exact
repetition of the guitar motif. It is differentiated, becoming more intense, by the splitting of the xylophone motif into shorter note-values, and by the upward movement of the glockenspiel. But while the second bar represents principally a progression, finally there is recession too, in the xylophone's return to a crotchet at the end of its phrase.

At the level of a four-bar unit (say bars 7 to 10), we have the progression and recession of the recorders' rise and fall. In bar 9 the second xylophone player joins in, using an idea from the work-sheet in a way never envisaged for a moment by its author; a broken chord of A minor played simultaneously with the broken chord of E minor. So we have not an 'harmonic progression' in the diatonic sense, but rather a progression in harmonic colour, further specified by the choice of soft beaters, and by the upper part remaining in crotchets when the lower changes to semi-quavers. The interval of a fourth may be perceived by the pupils as referentially Oriental; certainly, the colouristic use of harmony was not part of the Western classical tradition before Debussy, and is still seldom part of the 'Theory of [Western] Music'. But what is musically important is that all these decisions amount to the creation of a structure giving particular coherence to the way in which virtual time surges and ebbs through those four bars.

At the level of sixteen bars (bars 7 to 22), one notes at bar 15 the recorder tune rising a fourth, which may or may not have been suggested by the movement up a fourth modelled in the assignment, while the harmony beats inexorably on. The tune, which of course started on a 'wrong' note, continues to oscillate by a whole-tone to or from a 'harmony' note, until bar 23.

The audience-listener may be struck by the thoughtful intonation on the descant and treble recorders, but may be disappointed by the same players' breath control. One feels that the sustained note in bar 10, as near as full a breve as can be managed, is closer to the reality of the overall conception than the shorter notes elsewhere. This may be as much a failure of nerve as a failure of breath, and is certainly something the teacher might want to question.
At the level of the whole strophe (bars 7 to 28), the regularity of the sleeping breath is disturbed at bar 23. Let me try to list the ways in which bars 23 to 28 grow out of bars 7 to 22, but at the same time detach themselves. Of course, the pulse is the same, and the tune rises by another fourth, so it appears for a moment to be continuing the sequential process of bar 15. However, the harmony does not now go inexorably on, although here and at bar 29 the guitar provides a link. Instead the high C is held for two whole bars, almost straining upwards, while the xylophone fills all
eight beats with quavers on the flattened supertonic of its previous root, making a perfect fifth so full of tension that one may describe it as a discord. The tune goes on to take the step up a tone that it first took in bar 8, but the step is delayed by a minim, and when the tune does rise (twice), it doesn't fall again.

So, while the sleepy recorders rise-and-fall, the sleepless heart-beat moves forward, and forward, and forward relentlessly. Until, as though impelled upward by the xylophones, the recorders too rise-and-rise. Incidentally, they use a pentatonic scale, although the pupils are very far from the world of 'frameworks for composition' (see 8.4).

At this point, in contradiction to every 'Theory of Music' rule, the discord of a perfect fifth resolves onto the relative concord of a minor seventh, pointed up by a single note (E) on the guitar. Of course, it would not be difficult on the basis of a tonal theory transcending rule-based 'Theory of Music' to explain the reasons for the discord-concord relationship between these two chords. The point is that any such theory was certainly beyond the pupils' stage of explicit knowledge at the time they made the piece. This confirms strongly the priority in music of non-discursive learning over discursive learning (see 2.3). To conceptualize the reasons for these notes forming a discord-concord recession in words would have been beyond them; nevertheless, they have conceptualized the recession - in sounds.

Of course, we might also say that the music at bars 23 to 28 is a little as though some nameless fear or other passion has invaded the heart of the sleeping dragon, so that it holds its breath while its heart thumps faster. But the musical impact of the moment does not depend on those words I now invent; the picture they conjure is nothing but a crude pointer towards the precise musical image created by the relationships of sound themselves.

So at bars 23 to 28, virtual time passes in a way which is deeply rooted in the way in which virtual time passed through bars 7 to 22, but at the same time it strains to detach itself from its past. The achievement of this relatively long term structuring is certainly dependent on memory, for bars 23 to 28 take on meaning
only in their relationship to the long build-up from (at least) bar 7.

But there are two awkward moments, in bars 25 and 28. Is the phrase-length meant to be three bars? Or four bars? Or what? The performance muddle points to a muddle in conception which might be discussed with the pupils.

Now I turn to considering the piece at the level of overall design. After bar 28, the dragon's peaceful sleep resumes, but on the second time through, it doesn't culminate in the rise to C. Instead, the recorders simply stop, while the xylophone interpolates three bars of the broken chord, but falling for the first time in the piece. We then hear the bottom half only, once only, of the disturbed phrase from bars 23 to 28, and the piece ends with two syncopated notes. The three-bar length of the phrase at bar 29 has a curious inevitability; a four-bar phrase would have failed to detach itself sufficiently from what went before, and might have been considered banal. And the phrase may possibly offer an answer in retrospect to the puzzle about the length of phrases between bars 23 and 28.

The two strophes, then, are also related as rise-and-fall in several coherent ways.

The last two notes bring us a little surprisingly to C as to a tonal centre. At the time, I noted that I suggested to the pupils that this ending might not 'fit' with the rest of the piece. I am happy to record that they insisted on the integrity of their solution, and I am indebted to the unknown colleague (point expressed at the conference 'Composing, Improvising, Exploring World Musics', Clacton-on-Sea, 15/11/86) who pointed out that the strongly accented C in bar 2 may imply a tonality of C as framing the whole piece, but dormant nearly throughout. If so, then it is possible to take that tonality as wakefulness, and E minor as sleep; the introductory slides could well 'represent' going to sleep. However, the end does not sound very much like waking up, unless it be by coming back to earth with a bump!
What can be said is that these tonal relationships are partly determined by the physical layout of the instruments. Thus recorders tend to like G or (treble) C, the guitar E minor, and the tuned percussion C. This does not detract from the significance of the tonal relationships. Everything that any of us does in music is use of materials; what counts is what we make of what we have. Thus, for example, the initial A and C on the glockenspiel may have been suggested by the fact that these are the extreme notes of the instrument, but the player goes on to use the same notes at different octave positions, and they also anticipate the A minor harmony of the upper xylophone.

I have indicated some of a large number of decisions about continuity and change, identity and difference. The complexity of those decisions defies exhaustive description but nevertheless forms a unified whole, and so perhaps deserves the paradoxical tag 'coherent tangle'. There are several layers at which the patterns of surge and ebb operate, and the success of the piece lies in the integration of those levels, one to another.

"One may trace the relations of an element in many directions, drawing in more and more elements, but never to a limit, ... at some point, suddenly, its initial character changes, or some other element has taken its place, not dislodged it but swallowed it so that the old element is somehow 'in' the new but is transformed by figuring in another functional pattern altogether." (Langer, 1967, p.200)

The dragon slumbers. But in his — or her — heart pulses some fire of consuming passion and grief. Or rather there pulses a way for consciousness to pass through time, which embraces but transcends what I can say in those words. The children image that still dark burning force, and image it not only as in the heart of the mythical beast, but metaphorically as in their own heart too; else I see no reason for their commitment to the sound materials and structures being sufficient for the coherence which they have created.

That force may be sexual desire, or it may be the fear of aging, or it may be anger in the face of death. Or rather it may be not any one of those, but rather some aspect common to all of them, and to much else too, grasped as yet dimly in each pupil's verbally
named experience. It may be that none of the composers has yet undergone the full heat of any of these fires; it may be that they have. Music may image already real experience or it may image speculative future experience — it is none of our business as teachers or as musicians to find out. What is our business is to recognize the depth of thoughtful feeling involved, and to respond to the technical particularities of the pupils' work in the light of their resonance in deeply conscious and deeply rational, but non-discursive, thought.

4.9 Four pieces

These pieces were recorded at the same time as In the Heart of the Sleeping Dragon (see 4.8), by the other members of the same class. Together, the five pieces represent the outcome of work on the project described above, by all the pupils in this 'mixed ability' class.

4.9.1 'Chinese Warriors'

The contrast on the guitar, resonating chords followed by percussive thuds, provides an impressive rhythmic drive and urgency. Each added part unveils new implications in what went before, so that the first section considered on its own has a sense of wholeness, and creates a vivid illusion of organic growth. However, although the placing of some cymbal strokes off the beat is intriguing, there is no evidence that this is under control, and the teacher might find ways to suggest a 'fixing' of the idea.

There is a rhythmic motivic link between the two sections, but the overall two-section structure might be considered disappointing, as the second section does not match the growing impetus of the first. Some sort of recapitulation of the opening material might more fully realize what seems to be emerging as the pupils' intention.
4.9.2 'Songbird'

The recorder uses a rising tessitura with generally falling phrase lines, modified sequence, and shortening units of construction (from four bars to two bars, and arguably to one bar), to make a melody with an intriguing forward movement of feeling. Its slightly disturbed yearning is rooted in the rock-like accompaniment by common rhythmic elements.

It is interesting that what turns out to be the final phrase sounds very much like the start of a new section, and that the melody comes to its most conclusive resting-place at the end of the fourth bar. The piece would certainly have lost its impetus there, were it not for the entries at about that point of the xylophone and maracas, which carry the momentum forward. This odd construction might relate to other disturbing or inconclusive elements of the piece (it ends not with the guitar, but with the less solid, and fading, music of the xylophone), but it is not easy to be convinced that this is musically intended. The teacher might suggest that the pupils try other, more obviously conclusive, ways of ending the tune, and "listen and decide".

I noted at the time "Great difficulty in synchronisation only solved when I insisted on [the pupils] not using notation." Perhaps the odd construction also is attributable to too early use of notation, with the pupils becoming committed to ideas written down before the composition as a whole had been subject to experiment.

4.9.3 'Mixed Music'

I noted a strong sense of disappointment in this group of pupils, and a definite feeling that "We aren't ready to record." I asked them to do so nonetheless, in order to have a complete representation of the class's work on the project, and for purposes of reported assessment. I could elicit no instance of two or more pupils having decided on something to play together, so I simply asked each member of the group to play one of the ideas he had tried. Although some of the ideas have similar pulses, the taped
performance does not have even a link of common pulse between succeeding tunes.

Apparently, this group of pupils scarcely engaged with each other in their task, and the explanation may lie principally in a failure of group dynamics. I have evidence that all the boys in the group did successful work in differently constituted groups at other times in the year.

But there are positive features in the performance, and these could form the growth point for helping the pupils get out of their difficulties, if time allowed. (Of course, reconstitution of the group and a fresh start might be a better teaching solution, depending on the practicalities of the situation.) Thus each idea on its own has a coherence of pulse. The third and fifth players use modified repetitions, which might suggest ways in which the other players' music might become more structured. The chromaticism of the second tune is attractive.

Where group dynamics have failed, perhaps because the pupils lack belief in, and experience of, their ability to create musical relationships with each other, a teaching intervention based on the teacher's music-making rather than on the teacher's audience-listening and verbal commentary might be particularly appropriate. In the present case, I might ask one of the pupils to repeat his tune as an ostinato, and I might model joining in with another melody with the same rhythm. I might then invite the other pupils in turn to make up something to join in with the same ostinato. "It can have the same rhythm if you like, or a different rhythm if you like" may be an important way of freeing the pupils' exploration from extrinsic worries.

Wherever a pupil seems to fail in joining in with something given, either by the teacher or by another pupil, it might be important to ask that pupil to take over the lead and make up an ostinato pattern. If the teacher then matches the pulse of the pupil and joins in, the pupil is given the experience of success in matching pulses, an experience crucial in overcoming these basic musical learning difficulties.
A further stage would be for the teacher to model joining in only every second time, or joining in with only part of the pupil's ostinato.

4.9.4 'The Jungle Diamond'

This piece has a large range of sound effects and other species of musical representation. It seems at first as though these are to be ordered as a simple (arguably not musical) catalogue of animals. But the disparate ideas are then brought into a relationship of simultaneity, and there follows a purely musical celebration of the animals' relationship to "The Man".

The peculiar chords formed by the xylophone and recorders may not be significant harmonically, but may be due rather to highness, lowness and direction of movement, being more important to these pupils at this time than precise pitching on a 'lattice' (see Wishart, 1985, p.316). The xylophone coda sets up an expectation of exactly repetitive rhythm, to be surprised by an unexpected, almost casual, syncopation at the very end.

More than once, the piece reveals that 'there's slightly more to this than meets the ear'.
CHAPTER FIVE

Case Studies (ii)

5.1 'Starshine'

This chapter turns to pieces composed by 12/13-year-old (second year secondary) pupils. Starshine was recorded before I planned the present research. The class used a pack of printed worksheets on 'stars' (Arnold, 1976); I did not keep a record of which worksheet was used by each group, but I can find none which could be plausibly credited with more of this piece than the extra-musical ideas of stars and of 'brightness'.

The pupils in this group decided to take the well-known tune Good Morning Starshine from the musical Hair, and worked out empirically how to play it on the pitched percussion instruments.

They certainly intended to create 'representation by conventional association' (Kivy, 1984, p.51 – see 1.9 above), the unsung but known words of the tune putting the listener in mind of starshine. There is a 'frame' passage on tambourine and cymbal, whose crescendo and crash give a strong sense of power and brilliance. It is almost as though the rest of the piece were about stars, while the frame is stars, in all the intensity of their brilliance. This is probably intended as representation dependent on what can be called "cross-modal description" (ibid., p.44), the 'brilliance' of the crash relating to the 'brilliance' of the stars.

But if Starshine points beyond itself in the representational sense, in at least these two ways, I suggest that its fundamental symbolic function and its musical achievement lie elsewhere, or rather at a level which incorporates and transforms representation into something more profound.

One notes that the performance of the tune is itself not without decision-making. The syncopated rhythms would be beyond these pupils' grasp of notation, and the subtlety of accent with which they are played may be beyond any notation. It seems that these performance skills are being developed as they are deployed.
But there is also a complex of decisions about the accompaniment. The tambourine is accented in such a way that its jingles are heard clearly only on the crotchets. The cymbal's figure is the same as the tambourine's, but played every second time (see Ex.9). This sets up a relationship not only between cymbal and tambourine, but also between cymbal and tune, because the cymbal as it were 'fills the gaps' in the tune. The bells play along with the cymbal, but with a shake (referring us to the music of the frame?) rather than with a definite rhythm. In the middle section, the roles of cymbal and tambourine are exchanged, so that the cymbal plays all the time (its figure here being an augmentation of that in the first section) and the tambourine 'fills the gaps'. Again, so complex and coherent a structure of relationships can be plausibly explained neither by chance nor by verbally explicit decision-making, but only by non-discursive decision-making.

Ex.9

The accompaniment figure at bar 7 is altered. As this happens only once, one assumes it to be a mistake. However, it sets up an additional relationship with the tune (because it waits for the completion of the two-minim pattern of that bar), and so it is surely a 'fruitful mistake', potentially adding to the vital presence of the musical image. Whether it arises by pure chance, or whether it springs from some 'sub-conscious' sense of rightness may
not be important. What is important is for the teacher to recognize it as a pointer to suggestions which may be appropriate to the pupils' musical situation.

The pupils choose a ternary structure, inventing a new tune for the middle section, and adding the 'frame' already considered. But the tune is cut by half on its return. I noted at the time that the technical ideas of ternary form, and of framing, were previously familiar, while the classic and entirely convincing foreshortening was the pupils' own discovery.

It is important to note the ways in which the invented material relates musically to the found material, apart from the obvious continuities of pulse and timbre. Thus the melody of Good Morning Starshine opens outwards (see Ex.9, 'a'), and so does the invented tune (see Ex.9, 'b'). This is certainly a motivic relationship; our musical experience of listening to the middle section is referred to what went before in our experience of the music, and to what is to come. It is plausible to claim that this reference occurs without necessarily being explicitly recognised by the listener. While it may be far-fetched to see that relationship as explicitly intended by the composers it seems equally implausible (once again) to dismiss it as occurring by chance.

Part of the lightness, the airiness of the found tune lies in its three-crotchet anacruses. This rhythmic airiness is carried forward into the invented material of the middle section in an intriguing way. We must feel the middle section either with a two-crotchet anacrusis to each phrase (the notation in Ex.9 assumes this way of listening) or in the more plodding rhythm notated as Ex.10. But the second possibility requires there to be an odd two-four bar somewhere in each link. That the pupils are consistent in the bar lengths of the links, suggests strongly that the first is the way in which the pupils feel, and musically intend, the passage.
This pattern of relationships must cast light on the question of the length of the link passages. Quite apart from not maintaining the four-bar structure, the first link is long enough for the audience to become uncertain of where the bar-line accent lies, and therefore tends to lose the airy link between the found and invented tunes. So it would make sense for the teacher to suggest to the pupils that the passage is too long. In the white-heat of classroom interaction, of course, there may well not be time for the teacher to think that through. He or she might just feel that the link passage is too long. What this discussion suggests is the value of in-depth listening to pupils' work, perhaps during 'marking' time with the help of a tape recorder, to supplement the 'live' interactive listening of the classroom itself. Such reflection may not only cast light on the particular piece considered, but may gradually modify the teacher's way of listening in the classroom itself (see 8.7).

'Wholeness' is also carried in the leading of pulse from the initial frame passage, and (perhaps) into the final frame passage.

Thus we see that the tune, the found material, has not simply been juxtaposed with invented material, but incorporated into a newly conceived whole structure which transmutes it. "... the old element is somehow 'in' the new but is transformed by figuring in another functional pattern altogether." (Langer, 1967, p.200) So, although the tune was found ready-made, taken from a professional popular composer, the whole network of relationships in which these pupils place it is new, a created particularity of sound structures.

One can enumerate an array of types of 'creation' manifested in the piece. The pupils have 'brought something new into existence' in the sense of something new to them, simply by copying the well-known tune. They faithfully work out and present the slightly unexpected accents and phrasing. But they have brought something new into existence in an additional sense, in so far as the tune is not merely found and copied but brought to vital existence in their choice of attack, dynamic and timbre. In a third sense, the pupils have created an 'arrangement' of the tune in the rhythmic counterpoint on unpitched percussion. They have
brought something new into existence in a fourth sense, in so far as they have composed entirely new material not only to go alongside the ready-made vernacular tune, but to transform its musical meaning by the new relationships of the larger structure.

Fairly complex inter-relationships between various aspects of creation and skill-learning become apparent. A range of different 'decisions about sound', and a range of performance and composition skills have been deployed and developed in relation to each other. It is unclear, and perhaps not very important, which of these creative decisions count as 'composition' and which as 'performance'. The fundamental of what is taking place here is something more general, namely the making of music. The pupils are taking their place alongside the professional composer of the popular tune, as fellow-workers in the unfolding of the possibilities of consciousness-time.

5.2 'Midnight Delirium'

Midnight Delirium began with an assignment based on the exploration of musical techniques, but the pupils themselves turned it into an explicitly recognized representation of feeling. The class worked together on finding three minor chords on the guitar and on melodic instruments. Then they worked in groups on the assignment "Make a piece of music, using some of these ideas if you wish." A duplicated worksheet summarized the technical ideas, the same as that used with another class during the composition of In the Heart of the Sleeping Dragon and its companion pieces (see 4.8, 4.9, and fig.1, p.72).

The flute's opening tune (Ex.11) is based on two of the suggested triads, A minor (ascending) and E minor (descending). The last two notes of the phrase, G and E, are repeated gently rocking to rest, so that the tune as a whole might form an image of subsiding to rest, and therefore if we wish - or if the composers wish - an image of falling asleep. In fact, one of the pupils later wrote that it was this tune which suggested to them an overall plan for the piece, which would represent falling asleep, having a nightmare, and waking again.
We have seen that the pupils used suggested ideas for the initial flute tune. But they rejected the minor chords recently learned for the guitar, and chose instead the chord of E major. Their choice has an evident musical implication. The false relation between the flute's and the glockenspiel's G natural and the guitar's G sharp sets up an uneasiness at odds with the modal calm of the melody; the clash warns us that sleep may not after all be so peaceful. The guitarist originally held her hand badly, so that not all six strings sounded clearly on each strum. I suggested an improved hand position, and one can hear the player adjusting her hand after the first chord on the taped performance. One can surmise that it is the creative need to have their music sounding as they intend that informs this listening care over technique. In fact, the taped performance is still marred by several strings sounding imperfectly. Perhaps I might have spent still longer helping with this, as the clear sounding of all six strings would seem so important to the pupils' apparent musical intention.

For the second section, the nightmare itself, the pupils chose the harsher timbre of the xylophone, and a melody beginning on F natural, the flattened supertonic of the previous key. While they were using a diatonic instrument, they had F sharp bars readily available, and the duplicated worksheet had specifically warned them to try F sharp. Nevertheless, they preferred F natural, and one of them later wrote that they chose the opening notes of this melody "because it sounded frightening". A flattened supertonic, of course, has long been a way of introducing special tension to music, for example in the operatic use of the Neapolitan sixth chord.

The flute's downward glissando, achieved by twisting the barrel, adds to the tension, which is then further heightened by the transformation of melody into noise, as the xylophone plays rapid glissandi and the flute a trill. The effect of this moment of
terror was originally less intense through being very short. I suggested that the pupils try making the glissandi and trill longer, and decide for themselves which way of playing would make their intention clearer to the listener. They adopted this suggestion.

There follows a six o'clock chime and a cockcrow. Some may feel that since daybreak and bright wakefulness are adequately set forth afterwards in musical terms, the sound effects merely detract from the truly musical import of their work. However, the sound effects are not merely sound effects - the six o'clock chime reintroduces the brighter timbre of the glockenspiel, referring us back to the opening music, and forward to the bright final section. And the three notes used for the sound effects, A, C and E, prepare us for the A minor broken chord of the next section's melody. The "sounds like' relation" (Kivy, 1984, p.28) has been caught up into a wider network of musical relationships. In fact, I suggested to the pupils that the sound effects might be superfluous, and asked them to try the music both with and without, then to decide for themselves; in this case they rejected their teacher's idea, and chose to retain their original idea.

The brightness of the final waking is achieved by timbre, by the transformation of the 'falling asleep' melody into a dance tune with rhythmic counterpoint (Ex.12), and by the disappearance of the disturbing G sharp, the guitar now playing only a single-string E.

\[\text{Ex.12}\]

Sleep is the relinquishing of consciousness, and that can be terrifying as well as peaceful. When we go to bed, we are never absolutely sure that we will wake again. These pupils have used sounds to create an image of the fears they associate with sleep, but also of the cheerful confidence they assert in the face of those fears. It seems plausible to say that in creating this image of feeling, in articulating to themselves an aspect of the way they
experience and overcome fear, they have come to understand something about fear which could not be articulated so precisely in words. If so, then it is legitimate to say that they have come to know something about themselves which they did not know so precisely before. And they have shared that insight with any of their audience that listened sensitively.

In noting this particular interpretation of the music, which the pupils themselves have suggested, one should not forget that musical insight transcends any verbal account of it (see 1.8 and 1.10). Like many composers of programme music, the pupils have designated one (to them important) manifestation of the morphology of feeling embodied in their music. But, again as in the case of other programme music, we listeners are entitled to hear it as presenting a more general and nameless morphology of feeling, of which night-time fears are just one manifestation.

The pupils used fairly sophisticated techniques to build up tension. But they did not know the theory of false relations, nor that of the flattened supertonic. Moreover, the flute player had not previously used a glissando. Perhaps their discovery of these things was no more than a series of lucky accidents? The crux may be that if they did stumble on a musical idea 'by accident', nevertheless they did not find the sound inappropriate once stumbled upon. They chose to retain that 'accidentally discovered' idea, and their choice is most plausibly explained by their hearing the appropriateness of the idea to the expressive intent of their music. We do not know whether they 'accidentally discovered' any particularly tense melodic ideas while composing the final, cheerful section of the piece; but if they did then they rightly chose to reject them.

All this said, however, the new techniques did not come out of the blue. Each is in some way an extension of a technique already familiar, or perhaps the result of the putting together of two previously learned but previously separate ideas. Thus the flute player already had the performance skill of adjusting intonation by adjusting barrel position. In writing about the composition of Midnight Delirium, she recalled having been reminded to adjust her intonation in that way, during a school wind
band rehearsal. And she had the composition skill of employing an unexpected note to increase tension. We might say that she has put the two together by a leap of understanding that she could use her barrel-twisting technique to make a note unexpected in a new way — sliding flat. She thus creates something new (at least to her) by putting together two things which had previously been apart, a process perhaps very close to that which Koestler called 'bisociation' (1964, p.35 and passim).

5.3 'The Cobrimobogil'

There are two takes of this piece: recorded examples 5.3(i) and 5.3(ii). I introduced the project to the class in an exceptionally detailed way, so that arguably I gave a mere composition-exercise rather than an invitation to composition itself. In collaboration with members of the class, I created models of pieces in A-B-A form, each section comprising two or more ostinatos. I distributed a worksheet headed Ostinato Sandwich (fig.2, p.91). This was almost prescriptive in regard to formal organisation, although the instructions included the open-ended clause (reinforced in what I had said to the class) "Here is one way to make an interesting piece ... Can you find another way?"

In this case the pupils take advantage of that open-endedness, and reject the ternary idea which was my teaching starting-point. They join in one at a time, then drop out in reverse order.

The girls are plainly delighting in the blend of timbres, choosing instruments and registers to create a sound akin to that of the big-band. In this case, it seems clear that timbre is not simply a material, but itself already a relationship of sounds, something worked, listened to, decided upon.

But the overall jazzy timbre alone is not the heart of the matter. The pupils' choice of instruments and registers is closely tied in to choices about inflection of timbre, dynamic, and note length, as I shall argue in a moment, and the musical 'wholeness' lies in the relationship of those elements to each other.
OSTINATO SANDWICH

STEP ONE - OSTINATO ONE

*1- Each member of the group try making an ostinato.
*2- Choose one of them. (If you like more than one, write the other down and save it for Step Three - or save it for another piece!)
*3- Write down the ostinato. Call it Ostinato One.
*4- Choose one person to play it.

STEP TWO - ADD A TUNE

*1- While the ostinato is played, each other member of the group try making a tune to go with it.
*2- Choose one or two (or three) of these tunes.
*3- Write down the tune(s).
*4- Play this music in the Music Room.

STEP THREE - OSTINATO TWO

*1- Each member of the group try making an ostinato. Aim for one as different as possible from Ostinato One.
*2- Choose one of them.
*3- Write it down. Call it Ostinato Two.
*4- Choose one person to play it.

STEP FOUR - ADD A TUNE

*1- While Ostinato Two is played, each other member of the group try making a tune to go with it.
*2- Choose one or two (or three) of these tunes.
*3- Write down the tune(s).
*4- Play this music in the Music Room.

STEP FIVE - PUT IT ALL TOGETHER

*1- Here is one way to make an interesting piece:

<table>
<thead>
<tr>
<th>Ostinato One &amp; its tune(s)</th>
<th>: Ostinato Two &amp; its tune(s) :</th>
<th>Ostinato One &amp; its tune(s)</th>
</tr>
</thead>
</table>

Can you find another way? If so, write it down.
*2- Think of a good way to get from one section to another.
*3- Think of a good way to start.
1  *4- Think of a good way to end.
*5- Think of a good title.
*6- Practise playing your music all the way through without stopping. Do you need a conductor?
*7- Play the whole piece in the Music Room.

Fig.2

The music begins with naive harmony, amounting to something like organum (see Ex.13, p.92). However, the change from fourths to fifths between the two trumpet parts in bar 5 (reversed in bar 9 when the clarinet becomes the bass part) is particularly intriguing. It arises because the pupils are not applying a formula about organum, but discovering organum in the course of a listening
deciding process. Again, the heart of the matter is the wholeness of the musical relationships. The pupils choose those relatively bare harmonies to begin, and that choice corresponds to the choice near the opening of the relatively homogeneous trumpet sounds, and of relatively simple rhythms. The more complex timbre and rhythm of the clarinet’s tune, and the still more complex timbre, rhythm, and formal pattern of the saxophone’s tune, are kept until later.

Thus the first trumpet part, which frames the whole process of progression and recession, has the simplest note values, and the simplest (all stepwise) melodic pattern. However, it is worth noting that the player’s music is far from being simple in all respects; she inflects the timbre and dynamic of each note, giving a rapid recession from the initial attack, followed by gradual progression towards the next note. The fourth note in each phrase is given slightly more weight before being cut short.

The second trumpets begin by going along with the first trumpet part, but they unveil its swing rhythm implications in their second bar. The displaced accent of the swung second D reveals a significance in the first trumpet’s minims which was not before apparent, and is closely related to the still emerging jazziness of timbre. This gradual unveiling of the implicit turns out to be a continuing process, unifying the order of entry of the apparently diverse tunes, as though in an image of vital, unfolding growth.

The clarinet tune is in octaves with the first trumpet tune, but dividing each note in four. (It was originally played at the unison; I noted that one of the other pupils suggested the octave transposition.) The clarinet unveils the full implications of this heterophony with the slightly disturbing quaver anticipation

Ex.13
of the trumpet's A. That syncopated note is a little less than three-quarters of the way through the phrase as measured in time, and one notes a matching progression towards a similar point in the second trumpet and clarinet parts. Actually, the point in question is slightly ahead (0.688) of the golden section point (0.707), if one assumes the clarinet to be playing in equal quavers, or slightly after it (0.708), if one assumes the second trumpets to be playing in triplet quavers.

The saxophone part matches the clarinet rhythmically, but it detaches itself from the other parts by its contrary movement in the first bar. It is the only part with a repeated pair of notes, and the careful choice of staccato and tenuto also tend to detach this part from the others, as it were bringing it out into the foreground. In addition, its alternating octave position creates a four-bar pattern against the two-bar patterns of the other players. Again, we note the 'wholeness' whereby a multiplicity of means detaches this part from the others. At the same time, however, the saxophone unites itself with the progression towards the golden section moment of each two-bar phrase, making a tritone with the clarinet at that point.

So the parts are added in increasing order of complexity, creating a unified illusion of a forward movement of consciousness-time. And within the two bar structure all parts project themselves forwards to the golden section point, and back from there.

Nevertheless, the overall form does seem constrained, planned perhaps too self-consciously and according to formula. The saxophone's octave jump might form a growth-point for suggesting more interesting progressions in the other players' parts; the almost complete predictability of the structure, with a turning point precisely half-way through, seems at odds with the sense of organic growth implied in the musical ideas, and particularly by the unified progression to the golden section point within each two-bar phrase. The stultification of patterning becomes acute near the end, when fully four bars are still assigned to each section of the gradually thinning texture. Perhaps my work-sheet had modelled too contrived a formula, giving the false impression that overall form
could be decided apart from the particularity of the materials to be (as it were) poured into the mould, and ignoring the necessity of determining the overall shape by what is implied in the musical ideas. Although the group made up their own formula, they followed the model at least as to contrivance; their music might have been more convincing, had I modelled a more musical way of reaching decisions as to form.

However, it is important to note that their failure only becomes discernible as such in the context of understanding what there is of wholeness in the piece. There is a particularity of failure only in the context of a particularity of success.

After the piece had been recorded as part of the class project, I invited the pupils to perform it as part of a school public concert. Although other work had been begun, they practised the piece again, and (presumably inspired by the more musical context of the proposed performance) added a coda (see Ex.14). This version can be heard on the second take, recorded four weeks later.

In the coda, the unified identity of the group of five musicians is revealed to be precariously composite, as a rising scale is distributed between the contrasting timbres of the instruments. The Minotaur was part-bull, part-man, but the apparently monstrous Cobrimobogil turns out to be made up of five young girls; the composers' surnames begin respectively with the syllables 'Co-', 'Bri-', 'Mo-', 'Bo-', and 'Gil-'. In the end they reunite on a rich smiling octave. The humour of the title and the humour of the coda seem closely related, and the 'fundamentum in re' of the joke appears to be the dilemma of one-ness and group-ness.

With the help of a previously designed information sheet, I explained the instruments' transpositions to the pupils, but the saxophone player had fitted her tune to the rest of the music before
I had the chance to do so. (Concert B flat is the alto saxophone's G, and the other instruments' C.) So my help made explicit to the pupils something they had already discovered in an implicit way by listening and deciding. They did draw on the new explicit technical knowledge in making up the coda.

It is possible that an admired model, either the School Jazz Orchestra or the 'big-band' sound known from more general musical experience, is being invoked. But, if so, that is not the heart of the matter. The heart of the matter is the way in which the pupils draw on and extend their skills in the context of creating a piece of music, whose complex wholenesses determine the success of the project, but at the same time indicate points of failure, and directions for development.

5.4 'The Old Woman'

The Old Woman was composed in response to an assignment to make up a song about loneliness. The teacher was Clive Maidens. In trying to envisage loneliness, the pupils wrote words with conventionalized images of old age.

In a dark, dark wood,
In a dark, dark shed,
Lives an old woman whose husband is dead.
   She's an old, old woman.
   She's lonely, mumbling, grumbling, wrinkled,
   Lives in an old, old cottage.

'No one visits me,
Or cares for me.
I'm just an old woman, oh, can't they see.'
   She's ...

With her fat black cat,
Beside her side,
It's the only company that she can find.
   She's ...

While the "dark, dark shed" and the "dark, dark wood" may be literally trite, even absurd, perhaps they are metaphorically accurate. And the music gives substance to what might otherwise be a mere shadow of feeling.
The tune has an overwhelming predominance of falling phrases, imaging the experience of drooping weariness (see Ex.15). The melody of the first bar is heard twice, and so one expects a similar repetition when it returns in the fifth bar. Instead, weariness is cut into by pain, as the melody leaps to a B. The phrase sinking chromatically from that agonized B, two bars long instead of the expected one bar, is a picture in sound of the morphology of feeling which might make someone "lonely, mumbling, grumbling, wrinkled". If the pupils know of an old person, perhaps one whose mumbling grumbling used to be distressing or puzzling to them when they were younger, then this musical phrase may be a leap of insight, as it were entering into that other person's experience, by articulating an image of what it might be like. This is sympathy in the etymological sense of that work ('suffering with'). It is interesting that the pupils composed the chromatic phrase by purely vocal exploration, only later finding the notes on the piano.

(embell & symbol not transcribed)
 Extra voice in 2nd verse not transcribed voices

Ex.15

The second and third verses have a bright major third above the melody note A in the fourth bar. Again, this was composed by vocal exploration, without support from the keyboard. The note has a striking tonal effect. As a tierce de picardie, it seems to affirm A as the tonal centre, momentarily illuminating the dark, bent figure of the imagined old woman as with a halo. But the C sharp is an uneasy neighbour of the C natural which the piano immediately reaffirms as the tonic, as it resumes its weary tread.

It is significant that the bright C sharp first appears in the second verse, the only verse in which the old woman speaks in
the first person. And this change of narrator is also marked by the change from ensemble singing to imitation between solo voices. The second voice in this unachieved canon might be a ghostly image of the wished for, but absent, visitor.

It seems plausible to consider this song too as a metaphor of an imagined way of experiencing life. In creating it, the pupils have had insight into another mode of experience which might be possible. Of course, they acknowledge their purpose as being to represent the loneliness of old age, but perhaps they have also revealed an aspect of human consciousness more general than that, for we go through mini-old ages of weariness and isolation throughout life, even in childhood.

The act of creation is inextricably tied up with steps forward in the craft of composition; built on the foundation of techniques long familiar to them, like the use of parallel thirds, or the use of a final ritardando and percussion crash. But it is in the context of the articulation of 'internal reality', the generation of meaning, that the technical aspects of the composition take on their significance.

5.5 Unnamed Piece 1

Helped by the class, I modelled ways in which rhythmically different tunes could fit together, and how it might be effective to make a piece using tunes sometimes singly, sometimes all together, sometimes in different combinations. The assignment was for each group to make a piece of music, using that idea if the members wished.

Of the four groups, this one found effective collaboration most difficult, but I noted no evidence that they abandoned trying to engage with the task. The music as recorded bears many signs of lack of self-confidence, and I would not rush to dispute with someone who believed it to be disappointing work for pupils of 12/13 years old; it was the product of three weekly lessons. There is no attempt to play contrasting material together as suggested, and it would be hard to argue that this was a decision taken on sound musical grounds.
But although the techniques may be elementary, and although it may be right to judge that overall the piece 'fails', I suggest that it is in close attention to what is there that one will begin to understand the musical thinking of the pupils, and so find the best clues as to how to help.

All three pupils play in thirds, although there are several 'misses', which I took at the time to be due to the impact on their technique of an exceptional lack of self-confidence. The two-bar rhythm is not strikingly original, but its structure of faster note-values in the first bar recessing to slower in the second is neatly matched to the outward melodic movement of the first bar recessing to inward movement in the second (see Ex.16). There is also a certain 'crossing over' of progression and recession, in that the rhythm of the note-values is faster in the first bar, while the harmonic rhythm is faster in the second bar. In this particular structure of matching and cross-over, there exists a particular network of relationships of sound, and this may justify one in acclaining a musical 'wholeness' even at the level of a simple two-bar phrase.

I suggest too that this melodic idea, played in rich thirds, and retaining its firm pulse as it passes in turn between the three players, is quite enough to create a musical 'wholeness' at a higher level, a complex total of related sound actions, and that this constitutes a 'presence' of imaginary time, a particularity to the texture of the time in which one listens to it. At however simple a level, this is fully an example of the creation
of virtual time, perhaps in particular a celebration of the vigour and persistence of life.

In a case like this, where the pupils' self-confidence is at the heart of things, it may be particularly important to begin consideration of how to help, with the wholeness of one's involvement as listener, with the possibilities of supporting the present musical reality. And perhaps it is particularly appropriate in such a case to go right down to the roots of the imaginative music-making which may comprise the teacher's audience-listening (see 3.1), to 'live' music-making itself. Prior to offering verbal suggestions or criticisms, the teacher might ask the pupils' permission to join in.

On what basis might a teacher reach decisions about just how this musical involvement should go? Plainly it would be unhelpful to transform the pupils' music into something alien to their present musical thinking-acting, perhaps by improvising a complex jazz solo to fit their rhythm and harmony. Rather the teacher must refer to the particularity of the relationships of sound which (I argued) constitutes these pupils' articulation of consciousness-time.

The continuity of pulse between three players taking turns seems crucial. So the teacher might ask to be allowed to take a turn instead of one of the pupils, or might ask to be given a turn additional to the existing pattern. In the latter case, of course, the phrase structure would be lost, and this may or may not be important to the music in this case. So it would be necessary to propose this with all due respect, perhaps saying "May I suggest a different idea to try? It may not be a good one; let's listen and decide."

The rich harmonic flavour of the thirds seemed a crucial element in the pupils' musical conception. So the teacher might ask to join in (say) "along with Michael", and further enrich that sound by doubling at the octave. Such an idea may or may not be compositionally appropriate, and it may or may not be technically possible for one of these pupils to play the phrase exactly copied at the octave. But by modelling the idea, and then asking the
pupils to try it "or something similar!" if they wish, the teacher is avoiding tying any of the pupils into a possible negative cycle of attempting something that may be just too difficult on the spur of the moment to achieve exactly, with consequent anxiety and failure.

However, there also seem to be chances of extending the pupils' range of possibilities, while remaining true to their musical thought, and while remaining within their framework of confidence. The alternation of two players is very suggestive. One way to support this would be by matching (say) a tambour with the first player and a wood-block with the second. Or the pupils' use of 'cross-over' might be taken up, by matching the (higher) wood-block sound with the (lower) first player, and vice versa. Or the alternation might be at a different level, perhaps every four bars or every bar.

The use of mirror inversion is also suggestive. The teacher might ask to be allowed to insert a mirroring phrase after bars 9-10, as "... a different idea to try; let's listen and decide." Or perhaps it would still be operating within these pupils' present musical reality to copy that phrase exactly; or in sequence.

In the light of the rest of the piece's repetitions, it may be a weakness for this same-but-different phrase to be heard once only. One is tempted to suggest it being further developed. But the teacher needs to judge the appropriateness of suggesting such changes in the context of the perhaps over-riding need of these pupils for support. That support need not exclude teaching and challenge, but on the contrary sensitivity to what is the present particularity of their genuinely musical thinking will ensure that challenges will meet their real target.

It may also be important for the teacher to note that the piece is rich in 'fruitful mistakes'. For example, the thirds sometimes become fourths or seconds, giving an intriguing variety in harmonic flavour. While it would be fanciful to hear that as any part of the pupils' intention, it might also be foolish to ignore it altogether. Indeed it is fascinating that the first player only
plays a fourth once, and that on the sixth beat of the phrase, precisely imitating the second player's most frequent 'mistake'. One possible line of development (always considered in view of the pupils' principal need for support) might be to model ways of exploiting such variety.

The ending is played tentatively, almost like a throw-away line, and may have been entirely spontaneous. I noted that it was not recognizable from any of the material I had heard during rehearsal. But its syncopated rhythm is perfectly executed, and the subsequent glissando and upper tonic make a thoroughly convincing close. These two bars strongly suggest a musical capability far greater than is generally manifest in the piece, and the existence of some extrinsic restraint preventing it from being manifest. Again, the syncopated rhythm might suggest "something different to try", perhaps a taking turns game in which the teacher starts with that rhythm.

All the first years were taught at that time in 'mixed ability' groups, and these pupils had recently been allocated to one of the newly created 'lower streams' of the second year. I noted my impression (I claim no more for it than that) of a feeling of low self-esteem. But however layered over with fear and hesitation, however far short of potential achievement it lies, this piece does display the dynamism of the creation of an image of virtual time.

And by becoming sensitively and intelligently involved in that dynamic act of creation, perhaps not only as audience-listener and critic, but also as composer-listener, the teacher may genuinely collaborate in the overcoming of difficulties, in the flowering of learning.
5.6 'Outer Space'

The instruments chosen for this piece were a Yamaha 'Portasound' keyboard, a melodica, an open piano and a bongo drum. One pupil played both piano and drum. I noted at the time the dramatic impact of the music, with intense involvement on the part of composers and audience alike. It may be worth reminding the reader that the accompanying score (Ex.17, p.103) is my transcription for study purposes; the pupils themselves did not notate the music in any way.

The melodica part, considered for the moment on its own, carries a definite melodic unity. It begins and ends with a single sustained note, the more intricate patterns reserved for the middle. The first of these patterns (at 18) begins as though it is to continue a series of sustained notes, but the note is rudely broken into by a louder, shorter A sharp, more than an octave above. This shock is, as it were, absorbed into a rocking pattern at 25, but on notes each a tense interval (an octave plus or minus a semitone) away from the high A sharp. In the aftermath, at 33, the A and B are reversed to form the start of a version of the Close Encounters of the Third Kind film theme. This leads to yet another isolated phrase beginning with B and A, at 42, but this time an octave higher, and with a rather more aggressive rhythm. The final single note refers back to the first note, not only in its length, but also in its mode of attack and decay.

However, this 'wholeness' at the level of a single melodic line is only part of a greater 'wholeness' of decisions relating to each other the directions taken by the different strands. For example, the melodica generally enters immediately following a portasound crescendo, with the significant exceptions of the calming Close Encounters theme at 33, and of the final note at 53. The portasound player can be heard to take great listening care over his use of the volume control.

The moment of tension caused by the sudden A sharp (at 20) is marked also by an additional crescendo on portasound, and by a slightly increased density of the piano slides.
The rocking at 25 seems to calm both the piano, whose slides fade then cease, and the portasound, whose repeated notes die out altogether, and whose cluster drone becomes very quiet. It leads to a still point between 30 and 40, with only the cluster drone and a gentle tapping on the drum supporting the reference to the known space film theme.

There is a somewhat higher density of events as the melodica reaches the highest point of its melody between 40 and 45, initiated by the reappearance of the piano slides (now more disturbing because more extreme in dynamic and speed contrast), and by a sudden portasound crescendo.

As the melodica plays its final single C sharp (forming a tierce da picardie in regard to the note A, which is part of the drone cluster, which began the melodica's melody, and which turned out to be the tonic of the portasound's melodic fragment at 52), there is a correspondingly low density of events, but still a tiny portasound crescendo relates to the very slow final piano slide.

One might plausibly argue, then, that the whole piece embodies a coherent pattern of tensions and resolutions, which might resemble a possible pattern of tensions and resolutions in human experience of time. The pupils' decision-making has brought into existence an instance of 'virtual time'; in creating an image of a new aspect of the structures of consciousness, they have made music in the truest sense. Moreover, the coherence of their pattern is partly based on parameters of decision-making (density, dynamic) not always recognised as central in the theory of Western classical music.

The problem of whether and where to acknowledge intention is particularly acute in considering this piece of music. The pupils may have spent three weekly sessions in trial, discussion, and decision, but is it not fanciful to interpret that final C sharp as a 'tierce de picardie' intended as such by the pupils? Is not any harmonic implication rather the result of lucky chance? Certainly there is no evidence that these pupils could have described many of their decisions, either in words or notation. Nor did they know any theory of the sharpened third. It happens that
they belonged to the second year 'remedial' class, and all had special difficulties of one sort or another in 'main-stream' verbally based school work. But in creating 'Outer Space', they have made a network of musical reality whose 'wholeness' is apparent to the audience-listener, and partially accessible to analysis. It seems implausible to attribute the coherence of the resulting complexity to chance, and if the assumptions of Chapter One are accepted it is unnecessary to do so. We may acknowledge musical intention here as embodied in the musical decisions themselves, and existing independently of any verbally or notationally embodied intention.

The title arose not from the assignment (which was open-started: "Make up some music"), but in the course of composition, as in the case of Midnight Delirium (see 5.2). Although the sounds obviously conjured some celestial image for the pupils, prompting the choice of title, and although the melodic fragment at 32 is clearly intended to be referential, I would be inclined to argue that the title may mislead, certainly if we wish to get to the heart of the matter. The adventure in an utterly alien environment suggested by the title is but a pointing in the direction of the more general pattern of possible consciousness-time which the music as a whole symbolizes and realizes. To the extent that the music succeeds, perhaps it is not so much about outer space, as about inner time.
The rhythmic excitement of The Spy is perhaps its most immediately striking feature. Of course, a repeated rhythm often has a cumulative effect, involving listeners almost physically in the build-up of excitement. But the effect here is subtle, going beyond what one could readily notate, let alone what the pupils might be able to notate. For the fourth quaver in each group is sometimes present (\(\text{\text{\textquotebox{}} \text{\textquotebox{}}}\)), sometimes missing (\(\text{\text{\textquotebox{}}}\)), and sometimes half-stated (\(\text{\text{\textquotebox{}}}\)).

At one point the xylophone and the guitar (\(\text{\text{\textquotebox{}}}\)) give a metaphor in sound of what being chased might feel like, in the simultaneous relentlessness of the quavers and breathlessness of the rests. This powerful rhythmic idea is absent from the James Bond theme which might have been a model for other ideas in the piece.

The rhythmic excitement is offset and intensified by the cooler solo guitar passages. On the other hand, the cooler passages are linked to the chase music by the woodblock playing on the fourth beat of the bar in both sections. So a 'wholeness' is created, making an illusion of vital connection, of organic unity in contrast.

The pupils' choice of chromatic movement, with its clearly sinister implications, results from their own exploration of the guitar, an instrument on which chromatic ideas suggest themselves more readily than on keyboard or on conventional classroom percussion instruments. The chromatically moving guitar chords are just single finger barrés. The unusual, arguably world-weary, harmonies of the cooler passages are achieved by very simple but very open-minded exploration of the fingerboard. A G major seventh chord is played by placing just one finger on the first string second fret, while a sort of A seventh chord (over D) is created by moving the same finger to the next string. These pupils' use of the guitars might be seen as a most interesting example of techniques employed for deeply felt musical purpose, and becoming consolidated (and extended in unanticipated directions) in the process.
The glockenspiel tune was originally diatonic; unfortunately, there was only a diatonic instrument available at first. I listened to the pupils' emerging musical intention, found a chromatic instrument, and suggested ways of making chromatic tunes. The pupils explored along those suggested lines, and chose one of the ideas they found.

The xylophone's music is diatonic; the pupils did not like any of the chromatic alternatives I suggested they try. But, with evident musical purpose, they eschew the familiar intervals of thirds and octaves, choosing instead to begin with the tenser sounds of seconds and fourths. The appearance of the xylophone's music first unaccompanied in two parts, then accompanied, but with each part separately, adds another knot to the 'coherent tangle' of relationships.

In regard to overall form, the excitement of the spy chase is maintained to the end by the composers' transformation of the familiar ternary form, a full ensemble of all the tunes being saved until near the end. Again, we seem to find the creation of an image of feeling to be inseparable from the extension of technique embodying it.

We may fairly safely surmise that these pupils are familiar with the fantasy world of spying presented on television or in pulp literature. The excitement of that fantastic world must be very interesting to the young adolescent, even if the more level-headed are fully aware of its unreality. In creating The Spy, the pupils have made an image of what that fantasy world might feel like. But they have approached their task with artistic integrity, arguably with moral integrity, and so perhaps they have gone beyond what television is usually able to tell them. The articulation of a mode of consciousness in music has given them some sort of understanding or knowledge of what one might call the inside of the spy's imagined human experience, and that speculative thinking may put the cruder television fantasies into a more realistic perspective.
5.8 'Jack'

Of the five pupils who composed Jack, three had been members of the group who made The Spy (see 5.7). Particular musical ideas from The Spy are carried forward, but they are transmuted by the alchemy of the listening-deciding mind, so that something new is brought into being.

One of the pupils transcribed the words as follows:

Jack! ....
His name was Jack!
He broke his back.
In a crash
His car went smash.
Jack! ....

Jack! ....
He got the sack,
That stupid Jack!
Off his boss
He was cross.
Jack! ....
Jack! ....

In The Spy, a new guitar chord was discovered by moving a fingering pattern across the strings from a known chord. In Jack, the same pupil extends this technique (simultaneously a composing skill and a performing skill?), in this case moving the two finger pattern of E minor downwards by one string (see Ex.18, p.109). At the same time, the other guitarist, who uses his instrument like a bass guitar, moves from E to G. The second chord is played twice (short-long), not once, so that with each repetition tension moves forward in at least three unified ways. With its jarring major seconds, the second chord is tense in a particular way, and that particularity of tension, along with the particularity of rhythmic impetus, gives a particularity of insight into the sort of jarring pain suffered by Jack in his car accident and in his rejection at work. We can surely say that the chord-creation technique learned or practised during the composition of The Spy has now become the base for a further step forward in technique, and that the skill learning in question has been intimately, perhaps inextricably, linked with the creation of an associated musical image.
As in *The Spy*, rhythmic excitement is contrasted with cooler moments, although in *Jack* the contrast of tempo is more extreme. In both pieces, the diversity of mood turns out to be a device of musical unity.

Of course, in comparing these two pieces of music, one is attending to just one small part of the technical basis for the growth in learning in question. There are vastly many events to which reference might be made, some of which are known (guitar lessons, a record of previous compositions in the school), others of which might become known on research (musical experiences in the primary school, the pupils' preferred music for audience-listening), and others again which lie beyond realistic reach of enquiry (the precise content of the guitar lessons, musical experiences in the cradle, even in the womb).

Nevertheless, it seems plausible to conclude that the process of technical learning one here witnesses is tightly linked to the particularity of the associated act of creation. The skill learning one observes is not so much a pre-requisite of, but is rather a companion of, even an aspect of, the growth in human self-understanding which one might identify as the heart of the learning which has taken place.

The terseness of each line of verse matches the harshness of the crash and of the dismissal. The name "Jack" is at first spoken-sung to a short and brutish quaver. Each succeeding line is cut short in a similar way, with a jabbing quaver guitar chord on the last word. Only at the end of the verse is there a sustained sung note, the two full bars of G yearning, as it were, for a fuller being than the calamity has permitted. And that last-minute yearning is cut short by another brutish quaver.
At one level, then, the structure of sounds the pupils have chosen is a bit like the particular structure of consciousness-time, when that consciousness is shattered by a rude attack. We could plausibly say that the pupils have made an image of 'The Victim', not as the victim appears from the outside, but as he appears from the inside. Not as the victim might be described, but as he experiences his own being-in-time as victim. If these pupils have never themselves experienced injury in a motor accident, or dismissal from employment, one can be sure that they have experienced other (hopefully minor) shocks and calamities, and that they can expect to undergo more. In choosing these sounds, they have made, as it were, a picture or symbol of what it feels like to be smashed and rejected; they have grown in their understanding of the possibilities of human living.

But how far does this take us? Have we yet reached the core of the pupils' achievement? Certainly, there are further technical intricacies to note. The cymbal plays single strokes to the opening guitar chords. But when the same chords return at the end, the cymbal plays a roll. Before each verse, the portasound builds a solemn ninth chord on F, for the first verse from single notes, but for the second verse from repeated notes.

In the faster section, vernacular conventions are invoked, but in a particularly purified way, by the cymbal taps on beats two and four, by the 'bass'-guitar-and-xylophone tunes, and by the tightly controlled quavers on beat one from the guitar. The differing tempos of the distinct sections unite to create an overall rhythmic impetus, again imaging an overall unity of time-as-experienced. It seems plausible to suggest that such continuous transformation, such varied repetition, contributes to what Langer (1953, p.126) called "the semblance of organic movement, the illusion of an indivisible whole".

The overall structure is composed of abrupt, sharp statements; indeed on first hearing, the piece may seem fragmented. There is no variation or recapitulation of material until the arpeggios introduce the second verse. But in fact the material is unified by rhyme, by varied repetition, and by accurate tempo relatedness. So an important part of the teacher's insight into the
music can come only in retrospect, or even on repeated hearing (see 8.2.1). The teacher's understanding as audience-listener depends partly on memory.

And the pupils' understanding as composition-listeners depends on memory too; they have remembered what they think is important, and 'rhymed' it. The literal rhyming of the lines of verse is matched to a 'rhyming' or 'alliteration' of musical ideas. Thus the varied repetition of the cymbal accompaniment to the framing chords (first short, then sustained/rolled) matches the short then long notes of the vocal part.

The piece is very 'fully' composed, with intention and decision manifest in every moment. That the xylophone music is part-improvised in no way contradicts this; it simply means that some of the detailed decision-making takes place before, and some during, the performance.

I suggest that it is because those intentions and decisions are deeply musical, way beyond determination by discursive thought, that the pupils manifest a deep seriousness of conception. Jack is not a crudely stereotyped 'victim', but in some way responsible for his misfortune ("That stupid Jack"). So the 'sym-pathy' of these pupils with Jack has taken an intricately musical form, and is free of the sentimentality which arguably mars The Old Woman (see 5.4).

It may be for the same reason that the one invented human is transfigured to something beyond particularity. The composers have not just painted a picture of Jack's feelings; rather they have pointed to what unites Jack's experience and ours, the passing of time, the passing of consciousness. Their image sets out to refer to the pain of brutal shock; but the shock is distilled to a great purity and simplicity, and so the song points also beyond (or inward) to a stillness and wholeness.

In the end, this verbal analysis has told only some of the truth. It has revealed its own inadequacy, pointing inexorably beyond itself to the fuller meaning accessible to us only as audience-listeners, as participants active principally in a musical
way. As Langer (1953, p.109) said "A work of art is a unit originally, not by synthesis of independent factors. Analysis reveals elements in it, and can go on indefinitely, yielding more and more understanding; but it will never yield a recipe." Perhaps it is precisely because these pupils' image is so vividly particular, that its import is also vividly universal.
CHAPTER SIX

Case Studies (iii)

6.1 'The ...'

13/14-year-old (third year secondary) pupils composed the pieces discussed in this chapter.

The composers of the first piece spoke their extraordinary title onto tape, and I do not know how, if at all, they envisaged that it might be written. I have transcribed it as "The ...", because it suggests unachieved or frustrated intentionality, and because some aspects of the music itself seem to suggest something similar.

In the first section (see Ex.19), intentionality appears as motivic growth. A two-note fragment is repeated, then inverted, then repeated inverted. Then a three-note fragment is subject to the same process. Then a four-note fragment to a similar process, and so on. Each fragment comprises, as it were, an extra off-shoot from its predecessor.

Ex.19

But this is just one of several ways in which the pupils' melody images growth. There is also growth in range, from second to sixth. And growth in rhythmic complexity, starting with straight crotchets and moving on to syncopation. Moreover, it is not in the sheer multiplicity of images of growth, but rather in the particular way in which they are unified, that the precision and musicianship
of the pupils' image lies. Indeed, the word 'growth' begins to seem a poor approximation to the more precise reality imaged in the sounds.

Nor is this the whole story; the intentionality is unachieved, the growth is not vertical. Downwardness and reverse is imaged, firstly, by the downward movement of the second phrase, where the first had upward, the fourth phrase likewise in regard to the third phrase, and so on; secondly, in the almost sinister semi-tone relationships of the start of the melody; and thirdly, in the narrowing of the gap between question and response, although the upper part always starts its next phrase after eight beats. So the simple logic of numbers demands that by the seventh phrase the two fragments, spiralling as it were up opposite sides of a post, should at last have come to overlap. But the two five-beat fragments are allowed to hold each other apart in a ten-beat phrase. When finally the answering part can hold itself back no longer, and reaches out to touch its partner, the result is immediate nervous collapse, extending even to the regular heart-beat pulse of the drum. The musical fragments move ever closer, but avoid the intimacy of actual contact, until contact produces collapse. Again, however, the precision of the musical image far exceeds that of the words 'frustration', 'unachieved intentionality' or whatever.

The moment of collapse is given all the more point by the extreme precision of piano to drum synchronization in the first bars, which may be further evidence of the identity of performance skill learning and creative act (see 2.4).

It is more difficult to 'place' the later vagueness of rhythm; it may be simply that the pupils have an idea which exceeds their performing technique. On the other hand, the 'collapse' in technique coincides with the imaged 'collapse': perhaps one could describe the outcome as an unachieved picture of unachievement.

However, in a further striking image, the 'moment of collapse' turns out to be a resurrection as well as a death. The tonic G becomes a dominant by insistent repetition, and the listener is led to the second section, a domain of brighter reality in the sub-dominant major, C. The lower part begins by playing along with
the upper part, the brightness underlined by the extra octave interval between the two parts.

Again, growth turns out to be associated with reverse; the melody climbs higher and higher, gathering thirds as it goes, but quickly overreaches itself and becomes diffident and uncertain. The drum player again reveals precision in the first part of the section, this time in subtlety of accent and dynamic, but there is increasing technical uncertainty as the image itself becomes more uncertain.

The third section remains in the key of C. The xylophone is heard in this section only; one suspects that the xylophone player had a tune to play, which was included in the piece out of fairness, rather than out of artistic conviction. The drum's conventional drum-kit beat lacks the subtlety and precision displayed in the other sections.

The fourth section is different in style yet again from its predecessors. But one can hear a link with the first section, in the return of the close semi-tone relationships, first B, C, Bflat, then D, Eflat, Enatural. At first the drum is silent, but then joins in, subtly filling the long notes, the gaps in movement of the piano parts. Along with the G and B, we hear C sharp, then D, then Eflat, so here again is a reference to the opening semi-tone motifs. However, it is the augmented triad which turns out in the end to be home! The pupils' free, almost wild exploration of chromatically altered triads is held together by unifying the harmonic increases in tension with changes in dynamic, tempo, and instrumentation. The bass line's fifth and octave leaps not only link the music to classical and vernacular idioms, but also give a profound firmness and confidence to the closing moments of this image of uncertainty.

All this said, however, there does seem to be an overall failure to sustain the invention. One might say that instead of exploiting the material of the first section, the pupils simply start again (section 2); and again (section 3); and again (section 4). Certainly, the links between the sections are oddly diffuse. While the first link strongly implies continuity, even resurrection
in the midst of collapse, the second link is non-existent. In the third link, just the drum-beat survives from the third section, but the off-beat is (mistakenly?) taken for an on-beat as the next section begins. An understanding of the strong imagery of the first section and the first link, however, suggests points of development. It might be appropriate to suggest repetition of, or further exploration of the implications of, the first idea. Perhaps there is room for some modified rondo structure, the intertwining melodies from the start returning to lead into each of the other ideas?

This discussion points to the complexity of intentionality. Just what did the pupils mean to do, and what resulted from chance, mishap, or lack of skill? Even when what sounds like technical limitation results in something one can accept as musically appropriate, to assume that it was fully intended might be to mistake the pupils' thought-processes, and this would ultimately demonstrate lack of respect for the integrity of their groping towards wholeness of thought.

If there is some validity in my suggestion that the music includes images of frustrated intentionality, and yet the piece as a whole is somewhat diffuse, if it is perhaps not yet really a 'piece'; then perhaps it is not too fanciful to describe it as a partially achieved image of partial achievement. If so, then the teacher's sensitive understanding that growth occurs in and through failure and unachievement, must at least match the understanding of the same thing shown in music by these five young pupils.

6.2 'Nightfall'

This miniature was composed in response to an assignment further to explore triads, melodic and harmonic. I mentioned that while it often works well to have a tune starting with one of the notes of an accompanying triad, this was not a rule, and that there were special effects to be gained by starting with other notes.

The piece is interesting because the pupils have discovered a veritable catalogue of what one would recognize as classical inessential notes, and because they have done so in the
context of creating a melody that is 'classical' in the way it contains pain within poise.

The first bar of the melody starts on a harmony note, as one might expect (see Ex.20). It has two unaccented passing notes, although the second of these is on the half-accented third beat of the bar, and anticipates the 'sighing' motif of the third and fourth bars.

Ex.20

The second bar begins with an accented passing note, resolving within the beat, but repeated as an auxiliary note on the next beat.

The third bar begins with a suspension (if one consider the F sharp in the previous bar as its preparation), held for a whole beat, and on the emotionally fraught augmented fourth over the root. These two things together intensify the anguish of the discord, and may remind us of many 'sighing' motifs in classical music.

The fourth bar reiterates the third bar's sigh, but the augmented fourth is now an accented passing note, prepared by the harmonically correct G in the third bar.

The classical rules of preparation and downward resolution were entirely unknown to these pupils, and the only plausible
explanation for their use is that, while exploring, the pupils heard the appropriateness of those procedures to the restrained poignant feeling that was emerging as their musical intention.

The central, partly improvised section dispenses to some extent with the classical 'rules', and the melody includes unprepared and unresolved discords. The effect is more free, less intensely poised.

The accompaniment provides a steadily throbbing background, and the delayed entry of the guitar helps to move the piece forward. The guitarist had originally tried to play the same rhythm as the accompanying xylophone, but found it difficult to change chords quickly enough. I suggested the one strum to a bar rhythm, along with others, and the pupils adopted my suggestion.

Had any of these pupils gone on to study 'classical' harmony, their experience of creating this piece would have stood them in good stead — they already know, and from the inside, what an accented passing note and a suspension feel like. We might surmise that it was the open-endedness of the assignment that allowed them room in which to make these valuable discoveries. In fact, as far as I know, none of the group did go on to study music at a specialist level. 'Nightfall' stands as an example of relatively sophisticated techniques employed for genuinely musical purpose, as part of pupils' general education.

Incidentally, the piece also provides evidence for the imprecision of programmatic titles. The pupils originally called it Dawn; whatever nameless morphology of feeling is articulated in the piece must be very general indeed to justify two such contradictory verbal labels!
6.3 Unnamed piece 2

This piece arose from a class assignment to make up music perhaps incorporating one or more surprises.

There are six sharply distinct sections. In many ways the first, a xylophone solo (see Ex.21), stands apart from the others. There is a sequence, a firmly assertive but slightly disjointed rhythm, and an unchallenged tonal centre. A repeated phrase on the beat leads to three syncopated perfect fifths.

Ex.21

The second section begins with the metalophone alone (see Ex.22). Clearly timbre, harmonic flavour, and rhythm combine to make this section more fluid and disturbed than the first, but the two sections are unified as well as contrasted by musical means. Thus the pulse and the C tonality remain the same, and the chord with which the second section opens includes the perfect fifth C and G which ended the first section.

Ex.22

Above the G, however, is a diminished fifth D flat, anticipating the tonality of the third section, and initiating the semitone conflicts of the rest of the piece. The chords which follow unite the melodic logic of their respective parts, with a consistently disturbing choice of intervals for the upper pair of notes (diminished fifth, minor second, diminished fifth again, and minor ninth). And each includes a clash of a second, a seventh or a ninth with the pedal C. As this music is repeated, the minim
discords are joined by a very gentle sound on the maraca. The flute plays a tune also using the intervals of minor second and diminished fifth. One finds that these musical decisions unite to make a coherent musical 'whole' at the level of the section, while simultaneously uniting it with the previous section, so that the second is perceived as growing out of the first, not as simply opposing it.

In a similar way the third section grows from the second. The final E flat (in the top part of the chords in the second section) points onward to the first part of the tune of the third section, just as the final E flat of that first part points onward to the second part of the tune (see Ex.23). The rhythm is more fluid again, with accents marking the cumulative time patterns. The soft beater glissando on the xylophone is ametrical, so that the fluidity of rhythm matches a fluidity of timbre and texture. D flat is the clear tonal centre of the pentatonic melody, the scale presumably suggested by the shape of the instrument; but the fluidity of tonality is maintained by the fact that the xylophone remains on 'white notes'.

Ex.23

In performance, two notes were reversed in the first five-four bar. This breaks the simple cumulative pattern, but adds interest. It is unclear whether or not it was intentional; it may be a 'fruitful mistake'. The teacher might suggest that the pupils try placing the reversal in the second five-four bar, so that they establish their pattern very clearly before varying it, and so that the forward movement of the piece would be better maintained.

So there is a wholeness at the level of each of the three sections, and a further wholeness (of growth rather than of mere opposition) at the level of each pair of sections. But there is also a coherence between the growth from first to second section and
the growth from second to third. In each case timbre, tonality, and rhythm unite in the direction of progressing fluidity.

However, the third section ends with a repeated D flat, perhaps signalling a move in the opposite direction. And indeed, the fourth section has a more regular rhythm, whose pulse is that of the first and second sections rather than that of the third (see Ex.24). Although the xylophone glissandos form a link with the third section, a harder beater is used, and the lower-note-then-upper pattern is like that of the metalophone in the second section, so that the effect is of progression in strength rather than in fluidity. The tonal conflict between 'white' and 'black' notes is drawn more tightly together. (From the context, it seems clear that the fudging of the start of this in the taped performance is not intended.)

Ex.24

The last of the glissandos is down instead of up, is one beat earlier than expected, and coincides with the metalophone's major third, the unity of these decisions constituting the musical drawing to a close of the section. But, in this case, the unity of decision-making at the level of the section seems to be in dis-unity with what went before. For each of the previous sections closed with some sort of open-endedness, some sort of musical pointing forwards; here, the rounding-off is complete. Indeed, the performance at this point has a hiatus in pulse which seems to match the failure of the fifth section to grow as organically from the fourth as did the previous sections from each other.

However, the fifth section does refer back to its predecessors in many ways. Overall, it brings the semitonal conflicts of the piece to a culmination, the lower xylophone notes being centred on D flat, and the upper notes on C. The metallophone plays a pedal D flat. The semitone flute trill refers back to the first notes (E and F) of its tune in the second section. A frenzied
(and perhaps too long?) accelerando drives home the fierceness of the semitone discords, and leads to a sudden stop.

The sixth section, while contrasting again with what went before, is also united with it by musical means. The D flat is revealed as the tonal area winning the foregoing conflict. The semitone clash survives, but it is removed to the less tonally disruptive, more colouristic sixth above the bass, so that the piece ends (as it were) in a sort of gently disturbed peacefulness (see Ex.25). The shape of the repeated fragment (bass note, then upper notes) refers back to that of the second and fourth sections, and the maraca played with the upper notes (rather too gently in the taped performance?) also emphasizes the link with the second section. But there are crucial differences. As befits the end of a piece, there is simple repetition without sequence, counterpoint, or extension. Only a carefully controlled diminuendo. The timbral threads of the whole piece are drawn together in an intriguing sound, itself a new relationship of sounds. The metalophone has D flat played with a hard beater, while on the xylophone there are soft beaters on G flat and B flat, and a hard beater on A.

Ex.25

It might be argued that, on the face of it, the piece is weak because not thoroughly unified motivically. But although the motivic references between sections are not strong, I believe one can detect underlying unities of a sort other than motivic, which hold the piece together and make it generally convincing.

In the earlier sections, where there is bitonal conflict, C is the bass note, or 'white' notes come below 'black' ones. In the fourth section, C and D flat immediately next to each other are sounded together, and from then on D flat is most likely to be the bass note. So we may detect an overall progressive tonality from the unambiguous C of the first section to the static chord over D flat in the final section. Of course it would be dangerous to
assume that the pupils thought this out explicitly; but it would be equally implausible to assume that it was purely fortuitous. A teaching strategy would be to point out the felicity of the structure, to invite the pupils to try it in other ways, to listen and to decide.

Of course, a lot of the harmonic flavour, and a lot of the unity of material, arise from the shape of the instruments, and particularly from the apparent separateness (on the Premier xylophone and metalophone) of 'black' and 'white' notes respectively. But this is not to deny the musicianship or originality of the use the pupils have made of that material. They have drawn out in structures of sound something which was only implied in the physical structure of the instruments.

I have already pointed out the unity of process in regard to fluidity, from the tight opening section towards increasing fluidity, but then back towards increasing firmness until the sixth section, when the music comes to a flickering end. The first section stands apart, but after all it may represent the 'normal' datum in the light of which the following disturbance takes its meaning as such. If one only imagines the piece with the present first section placed elsewhere, after the tonal conflicts had become established, it is hard to imagine that the piece would then be successful. Indeed, the absurdity of swapping these sections around at all (with the possible exception of the fourth section?) is further evidence of the overall unity of forward movement, giving the "illusion of organic growth" which constitutes these pupils' musical achievement.

But if there are unities other than strictly motivic ones, there are also flaws in the overall 'wholeness'. For example, although (as I have suggested) the flute tune in the second section has an harmonic flavour related to its immediate context, the fact that the tune is heard only once, together with the flute's distinctive timbre, makes it rather isolated, somewhat like a 'sore thumb'. The teacher might suggest repeating the tune, perhaps changed in some way, and the pupils might decide whether or not this improves their music.
The misfit of the fourth section, and the possibility that motivic unity would strengthen the other unities of the piece, may suggest to the teacher a unified line of help. Could the pupils use earlier material in remaking the fourth and fifth sections? This possibility could be modelled and discussed; it may be that in generating new ideas with that fairly expressible goal in mind, the pupils would find solutions which also dealt with the problem of growth from fourth to fifth section, perhaps more difficult for the teacher to communicate with them in words.

These composers have made a piece which explores (to them) uncharted sound patterns. A unity of purpose and process holds the piece together and convinces. Perhaps they have not yet learned to integrate repetition and novelty effectively in terms of their new material, but the wholeness of their vision provides a rich context in which the teacher may explore that learning with them.

6.4 'Night'

Night, like Midnight Delirium (see 5.2), affirms confidence in the face of night-time fears, but in song:

Night, night is all right,
With the stars alight,
To keep you safe.
Night, night is all right,
With the stars alight,
To keep you safe.

Is it all right to leave you
Alone in your bed?
It's safe now the monsters
Have gone.

Night, night ... [etc.]

You
Are haunted by nightmares.
You should not be
So scared.

Night, night is all right,
With the stars alight,
To keep you safe.
Night, night is all right; 
Night! [whispered] Goodnight!
The introduction uses the technique, long familiar to the pupils, of joining in one at a time (see Ex.26). Ten bars might be considered too long, although (once the triangle begins) we can hear the pupils' commitment to phrasing in four-bar units. On the other hand, it could be argued that the introduction anticipates each of, and is therefore indispensable to, the six- and four-bar phrases to follow. The teacher might invite the pupils to try cutting the introduction by four bars, perhaps with the guitars starting at the same time as the triangle; to listen; and to decide.

Ex.26

The triangle and glockenspiel parts remain virtually unchanged throughout. The triangle had originally played just one note to the bar, the same as the glockenspiel. I suggested that someone might sometimes play two crotchets, modelling one-then-two.
The pupils' choice of two-then-one on the triangle was their own modification of my suggestion.

The guitar chords are relatively simple, but the rich harmonic range of the song is determined by the way in which the placing of those simple chords is chosen. Thus there is a rich brightness in the G chord over A pedal on the word "stars". The verse, at bar 23, starts with subdominant harmony, but then moves flatwards to the dominant seventh of the flattened mediant, relating closely to the glissando semitone drooping of the melodic line on the word "you" (in both verses) at that point.

The singers follow vernacular models, not only in that glissando, but in the overall style of voice production, and in the attempt at harmonized singing to 'Ah'. While this remains often at the unison, there are some musically important and well sustained harmonies at the third and sixth. Again, the learning of a skill, in this case independent harmonized singing, appears closely tied to a creative purpose.

The phrase structure of the song itself has twice six bars for the chorus and twice four bars for the verse. In the verse, the melody is far less regular, avoiding the first beats of the bar. On paper the line lengths in the verse are most irregular, and one must doubt that they would have been invented had the pupils been required to write the words prior to their musical realization.

The song ends with a restatement of the chorus, but the expected twice six bars are curtailed. From bar 37 the percussion instruments drop out, there is a carefully judged ritenuto and diminuendo, the melody is held on the word "right", we hear a harmonized third, a whispered "good-night", and a final bump on the third beat of the fourth bar, like the light turned out and the bedroom door closed just a little too soon.

There is then a rich particularity of choices to be heard. However, none of those relatively predictable ideas amounts to a musical achievement on its own. It is in the complex relatedness of those choices that the 'wholeness' of the work resides, and it is there that the heart of the pupils' work may be understood.
At a first level of 'wholeness', consider the unification of several choices focussed at bar 23. There is forward movement in changing to the subdominant, with the melody on the optimistic major sixth of the scale; the voices change affirmatively to unison, and to more open vowel sounds; the dropping out of the percussion seems to loose the music from earth-bound fears, but perhaps also from earth-bound security; the change to four-bar phrases, and to irregular syncopation in the melody gives added urgency.

We have already noted the further 'unification of particularity of choices' at bar 25, the melody falling to the minor sixth of the scale; the flatwards movement of the harmony; the glissando; the words about aloneness. The unity of those two unities gives a higher level of 'wholeness', the lack of percussion at 23 referring forward to the droopingness of bar 25, and giving a particular qualification to the forward urgency of bar 23.

The relatedness of the two four-bar phrases gives a higher level of 'wholeness' again. The second time round, the phrase runs out of steam earlier, in the third bar; this is matched to the guitars' unexpected rest, so that the silence on the first beat of bar 30 is unnerving.

At still another higher level of 'wholeness', the unified contrasts between chorus and verse define an absolutely particular structure of relatedness of sounds. The unnerving silence lasts only for a crotchet, and the bongo makes explicit again the pulse of affirmative life leading into the reassurance of the chorus. The harmonic change D to G7 is nothing new, but its precise placing after two hearings of A to G/A to A probably is quite new. Even if it turned out that the pupils had taken the total harmonic structure (more or less consciously) from an existing song, the pupils' use of that structure within the particular set of choices about timbre, melody, and so on still constitutes the creation of a complete structure never before heard.

Further, no matter how sympathetic the reader may be to this analysis, I hope that at one level it also raises dissatisfaction. The analysis points beyond itself, for the full musical reality to which it refers is a sensuous reality, and
further layers of complex relatedness, quite inaccessible to words, are carried in the sheer immediacy of listening to the sound. Excluding the cases of deliberate or unconscious plagiarism (which the teacher can never exclude for sure), one may say that these pupils have created a structure of sounds, a 'virtual time', which would otherwise never have existed.

This total structure in turn might be said to image an absolutely particular structure of fear and confidence, weakness and affirmation, provided always that one recognizes that the reality is greater than such words can convey. With that reservation, one may describe the middle section as imaging at once a moving forward to adult self-possession and a recognition of the survival there too of darknesses and nightmares. One may feel that the pupils take on multiple roles throughout the song – parent, child, big sister – in a way not possible in discourse. If so, then they have not only grasped something about themselves for themselves which they could not have grasped in any other way; they have also made a small but unique contribution (for all who listen with sympathy and attention) to the understanding of the possibilities of human existence in time.

The pupils have learned, and here reinforce, various skills in vernacular idioms. It might be argued (though I do not believe it) that the pupils' 'chief interest' was in sounding like admired models of the vernacular idiom. However, even if that could be shown to be their motivation, it would have absolutely nothing to do with the music as music. We might almost as well say that Bach's 'chief interest' in composing the Brandenberg concertos was to improve his career prospects; it may or may not be true, but it adds little to our understanding of the concertos. It is the particularity of what is done with the idioms that creates the musicianship (and therefore the universality) of the outcome. As Langer (1967, p.124) said,

"I think it far more likely that every artist has only one artistic aim, whatever non-artistic interests he may also find opportunity to satisfy by his work. The sole artistic intent is to present his idea of some mode of feeling in the nameless but sensible quality which shall pervade his nascent creation."
6.5 'Santa Conquers the Martians'

Here is a group of boys from a third year 'lower ability' class, none doing 'extended curriculum' music, none destined to opt for specialist study of music in the fourth year, and using classroom percussion instruments of arguably limited appeal. The performance is riddled with flaws, what good ideas there are are scarcely exploited, and no one would claim there is outstanding originality. But perhaps close attention will reveal that even in such work-a-day class music the fundamental processes of insight, creation, and learning are in play.

An immediately attractive feature is the unexpected timbre of the shafts of two beaters on the edge of the xylophone, and the contrast of timbre in the use of both soft-headed and hard-headed beaters on the xylophone.

But this is surely more than an example of variety (allowing us to mark the pupils up for 'timbre contrast' in some fixed-criteria profiling); the musical achievement lies in the fact that that variety is unified with a corresponding variety in melodic type, and that that unity creates an image of very precise feeling structure. The harder beaters are used for the 'harder' Tune A (see Ex.27, p.130), with the violently displaced accent of the last note of each phrase. The softer beaters are used for the 'softer', more even, Tune B and its extensions, the acciacaturas implying warm thirds, the longer two-bar phrasing implying more gentleness than the aggressive one-bar phrasing of Tune A.

The motivic growth of Tune A arises from a tension between threeness and fourness. In the third bar, the first three notes of the four-note motif are repeated, so that at some level the listener begins to think it is a three-note motif after all, when the fourth note seizes one by surprise again.

The timbre of the instruments chosen gives a light 'airy' feel, and again one notes the wholeness of the musical insight which links the lightness of overall timbre to a lightness of glockenspiel register (until the emphatic conclusion), and to a lightness of melodic direction in Tune B and its extensions.
One might detect a mildly disturbing harmonic flavour, arising from the unusual mode of A, in which the F and B tritone is prominent. But the music ends (again with unity of insight) in solid C.

After once through Tune A, a crotchet's rest is omitted, so that the off-beat tom-tom becomes on-beat (again! see 6.1), and the effectiveness of the vernacular 'drum-kit' pattern is marred. The off-beat accent, its disruptiveness of good order occurring in perfect order, is lost. Tune B leads to an melodically upward aspiring, but rhythmically disruptive codetta, for which the regular pulse accompaniment is halted.
Then Tune A on its own, its aggression become pathetically isolated, even perhaps "conquered". Then a gentle scale all the way down to C, derived from Tune B's third-below acclacaturas.

We have already noted the wholeness of musical insight in the concluding bar. It returns the listener to earth with a bump that unites decisions about timbre, rhythm, and distribution of parts.

Of course, I do not suggest that the pupils made these musical decisions in view of a verbally explicit intention to create a symbol of gentleness and aggression. They have done their thinking in music, not words. But the consistency of the image, along with the commitment of the pupils to what they are making, strongly indicate musical intention.

There is always a doubt as to whether a mistake really is a mistake. Might not the teacher's prejudices alone be responsible for that judgement? But in the same way, there is always a doubt as to whether another's felicitous thought really is a thought at all; in understanding one another's understanding, certainty is rare. This piece illustrates forcefully the extreme complexity of mistake and felicity in pupils' music.

In the light of the vernacular drum-beat's role in what seems to be the overall significance of the music, its disruption by omission of a beat in bar 6 is almost certainly a straight mistake. Of course, I might have asked the pupils to record the piece again, after some elementary teaching interaction; it was shortage of time in the hectic classroom that prevented me doing so. The displacement by a quaver of the glockenspiel's accompaniment figure is more difficult to 'place'. That the displacement is a mistake seems to be evidenced by the return of the figure starting on A in bar 15. On the other hand, the accented discord B adds to the bite of the music. Perhaps this is best treated as a 'fruitful mistake' (see 6.3). The xylophone's codetta figure is different each time. This could be a simple mistake, or it could be deliberate, or it could be a 'fruitful mistake'. Similarly, the missing two beats after the last playing of Tune A. The glockenspiel starts to join in the final isolated statement of Tune A. Again, perhaps a 'fruitful mistake'?
This discussion strongly suggests that assisting pupils in the learning process will be strongly guided by understanding the specificity of the insight in that piece, and that (since one generally finds that understanding to be provisional) identifying 'mistakes' must generally be by questioning and interaction. And the discussion also suggests that the rank-order judgements hinted in the first paragraph, however justified in their own terms, would miss the point. Not only would they fail to understand the particularity of these pupils' insight, they would be useless in identifying possible ways of helping with the 'mistakes' (see 8.2.6).

A celebration of togetherness is carried in the vernacular elements, in the cheerful vigour of the performance, and in the title, referring to a film in the current vernacular out-of-school culture, and distancing the musicians from any intensity in what their work signifies, through irony and jest. But perhaps the title is not entirely ironic; perhaps it says something about the relationship between sentimental images of childhood and adult toughness? The music does seem to present an image of delicate restraint, bespeaking such life enhancing qualities as care and gentleness, but in the context of (peer-group, rock oriented?) toughness. Kind Santa does after all conquer his enemies.

Caring in the context of toughness and solidarity is not only imaged but celebrated, perhaps even 'sacramentally' enacted. Thoughtful attention to the particularities of the music reveals a learning of skills that is simultaneously a learning about (and growth in) the possibilities of human engagement. And the same attention to the particular reveals ways in which the teacher might help in that learning and growth.
6.6 'A Dedication to Beethoven'

The assignment in this case was summarized on a work-sheet (Fig.3, p.134). With the help of members of the class, I modelled the ideas of parallel moving triads, and of off-beat quavers, supposed to be part of 'simple reggae patterns'. I stressed that these features alone would not constitute 'real reggae', and that that was not the object of the assignment anyway. I invited the pupils (as usual) to make some music, using the modelled ideas if they wished. The pupils in this group made a piece which certainly claims attention as a whole 'work', given the relative importance of overall structure and long-reach relationships. They decided to make detailed notes of their music (see Fig.4, p.138).

In bar 1 (see Ex.28, pp.135-136), the off-beat quavers are heard without the previous establishment of a beat. So the audience may hear them as on-beat, until the bass starts in bar 2. That sort of displacement of beat, of course, is an important feature of reggae style, and one which I had not suggested. The missing bass note is mirrored at bar 10, and recapitulated at bar 32. Should a teacher suggest that so interesting a surprise might be made more exciting still by further delaying the entry of the bass? I am not convinced of the wisdom of that, on the grounds that the suggestion would give too much weight to one feature in relation to the whole. While attractive at one level, it might neglect the profounder aspects of the piece in the interests of sensationalism.

Each bar of the tune at bar 5 starts on a note of the triad, but then follows its own logic, creating - and insisting on - an intriguing added sixth in the second half of bar 6.

The second section (from bar 11) has the same harmonic pattern as the first, but transposed to the subdominant. The feeling for this change may come from the pupils' familiarity with using the 12-bar blues pattern. The rhythm of the off-beat quavers links the two sections, while the semi-quavers both in the tune at bar 13, and in the "quick quavers: A / holding one end of note" (see Fig.4, p.138), unfold an unsuspected implication of what went before. The tune has four-bar instead of two-bar phrases.
Here is a chord pattern useful for simple reggae:

- Make up a tune based on notes of a triad. Play it on each of the triads, changing it if that sounds better. LISTEN AND DECIDE.

- Use the given chord pattern, or make up a new one. LISTEN AND DECIDE.

- Invent an interesting rhythmic accompaniment.

- Make up a piece of music, using some of these ideas if you wish. As always, listen and decide.

The third section (from bar 22) refers in different ways to both the first and the second. It seems like an intensification of the first. Several elements specify this. Motif 'b' is derived by removing the last note from motif 'a'. The accompaniment consists of just one repeated note, while the tune is in thirds, as it were reversing the relationship of tune (unison) and accompaniment (triads) at bar 5. And the repetition is not exact, but inverted. Instead of going repeatedly down, the tune goes
down-then-up, in one-bar not two-bar phrases. The musical impact of this development (the term seems particularly appropriate here) is again one of progression in intensity. The accompaniment simply continues the semi-quaver A's of the second section, but the earth-bound quavers have disappeared. The added lower tune at bar 24 ('d') also uses the down-then-up pattern, so being at once an augmentation of the tune it accompanies, and a diminution of 'c'.

The entire absence of the piano in the middle sections is puzzling. The lightening of the texture does seem part of the wholeness, relating perhaps to the introduction of semi-quavers in the same sections. On the other hand, the sharpness of the opposition of texture seems to detract from the general sense of

Ex.28
wholeness and growth. In view of that apparently intended wholeness, the teacher might decide to suggest the pupils explore something light (up an octave?) as a bass line on the piano. As the pupils have already taken several sub-structures from the reggae vernacular, the teacher might well suggest off-the-beat bass patterns; such a pattern would also relate to the apparently intended lightness of these sections.

Having looked at some of the relationships between the material of the first three sections, one may turn to the way in which they are joined. It is notable that each section seems to 'peter out' in one way or another. But I think that this turns out to be part of the semblance of how time passes, to be a 'petering out' in virtual time, not in the real time of some failure on the part of the pupils to maintain the illusion. (Although I think there is also one such failure; see below.) Indeed the lack of conclusiveness turns out to be the means of making the joins between sections organic. The unconvinced reader might care to imagine the
first section being 'brought to a conclusion' by a phrase such as Ex.29 inserted between bars 10 and 11.

![Ex.29](image)

In each link the pulse is maintained. In the case of the first two links, an accompaniment figure completely bridges the gap. It is true that the timing of the second link is slightly confused by one player trying to do a ritardando in bar 19, although the tune of bar 22 does in fact come in precisely on pulse. In the context of the whole, this rhythmic confusion seems inappropriate, and the teacher might discuss this with the pupils, with a view to tidying the performance.

The first section has off-beat quavers in the accompaniment, the third section has semi-quavers, while the second section has both. So the semblance of continuity between separate blocks of time is achieved through the first three sections by the overlapping of these figures.

The link into the fourth section (or recapitulation—again, the term seems particularly appropriate here) is very different; the 'petering out' seems for a moment to be complete, with a two-four bar of complete silence. But the two xylophone players carry the implicit pulse across that general pause, entering accurately on the off-beat of that pulse in bar 32.

The nature of each link in turn relates to and gives meaning to the overall pattern of links (we might call it 'join-join-break'), which is therefore justified by the particularity of the materials. I suggest that one need only imagine the general pause at the end of the first section instead of where it is, and the essential nature of the relationship between material and structure in the piece becomes apparent. The music

- 137 -
1. Chord (x4):
AC E
GAC x4
Repeat 4 times on first beat G.
Second beat A.

Tune: EEE DC

GGG F EE
EE

Odissando:
EG B etc.
more out of each tune

2. Chord (x4):
AFD
GEC

EDC D

Repeat:
Quick quavers A
holding one and
of note.

3. Chord:

Quick quavers
on A

P + C + D + E

Tune:
EEE DC

GGG F EE

Off beat: AC E, x4
GAC x4

Fig. 4
138
leads onwards from first section to second and from second to third, but then breaks back to recapitulation of the first.

It is not possible to sum up all these relationships in a phrase, and of course my list of musical relationships is not even exhaustive. Could it be so, then there would be little need of the music itself (see 3.2). But perhaps one can say that the music creates a pattern a little as though excited aspiration was twice gently exhausted and reborn, and then more decisively exhausted, so that a basic slower reality had to be reinvoked. Provided that one keeps in mind that that formula of words only points to a far fuller network of musical relationships, which is itself only partly described in this analysis; then one can also say with confidence that the pupils have not only learned how 'to music' and about music; above all they have learned about consciousness-time in music.

Turning to the recapitulation, one notes that the modifications are introduced not just 'for variety', but very much in the light of what went before. In the 'exposition', the quaver triads were left pulsing as not only the tune but also the bass withdrew. Here instead the bass continues its whole-tone oscillation, while the triads fall and fall. I suggest it is not entirely fanciful to see that fallingness, that dyingness, as determined by the 'exhausted aspiration' that went before. If so, then it seems that the musical achievement cannot be reduced to 'unity in variety'; change as such is not of musical interest. What counts is the relationship of the particularity of the change to the rest of the music, in this case to the overall structure. Musical achievement lies in the totality of these relationships.

So while analysis may demonstrate the possibility, even the likelihood, of the relationship I am arguing for, I suggest again that conviction might come from imagining the music otherwise. The reversal of what I have called 'recapitulation' and 'exposition' would surely be absurd?

The music culminates in a cut-off which is not so much a hammer-blown as a scissors-snip.
It is primarily in the light of the teacher's global understanding of the piece as an audience-listener, and secondarily in the light of an analysis of that experience such as that given here, that possible suggestions can emerge. Thus the organic modification of the recapitulation is delayed until the eleventh bar of the section. Perhaps the pupils' evident intention would be more fully realized if something happened differently before that? For example (and here the teacher's knowledge of classical precedents may be helpful) the introductory passage (bars 32 – 35) might be reduced from four bars to two?

We have seen that thematic connections exist, and that in this case they are deeply coherent. The choice of ideas so closely related is certainly part of the wholeness of the musical act of creation. But I think it plausible to conclude that those connections form still only part, and arguably not the main part, of the music's 'wholeness'. The sheer sensory 'presence' of the pulsating semi-quavers is itself musical reality, musical decision, musical insight. The conception of an overall structure which is only sketchily summarized as "A – B – C – A'" is also an aspect of the whole. But it is in the relationship of all those things to each other, sensory action to formal idea, formal idea to melodic shape, melodic shape to phrase length variety, and so on, that one may look for the uniqueness of the whole. And it is only in the particularity of that whole, that one may look for the semblance of consciousness-time that determines any universality.

It is important to note that the pupils could not have settled their 'form' apart from the 'content' they invented. The musical materials genuinely determine the musical structure, or rather each determines the other. The wholeness of the total structure of relationships is what constitutes the pupils' achievement, and that wholeness was anticipated only in general terms in the given assignment; indeed because the wholeness is unique, it could not in principle have been predicted.

It may also be important to note the musical sub-structures, including vernacular and 'house style' conventions, some learned previously, some perhaps from the teacher's input for the project. But to suggest that the vernacular might be the
central feature of the music, rather than one of a set of
sub-structures contributing to the uniqueness of the whole musical
act of insight, would be to ignore the central determining feature
of what has taken place.

When I first taught, I used to set "Story of a Life" as a
descriptive assignment. Here the setting of musical exploration as
an assignment has resulted in a piece which turns out to have much
to say as "A Story of Life". Perhaps its organically musical
structures of relationship allow it to be more like the way
time-life passes than many of the pieces which set out explicitly to
be about that.

6.7 Unnamed piece 3

This piece was composed by another group in the same class
as those who made A Dedication to Beethoven (see 6.6), and recorded
on the same day. This group chose to take up none of the ideas I
suggested (see fig.3, p.134).

Instead, they devised a sort of round. Since the piano's
version of the tune has only eight bars while all the others have
ten bars, the entries of the tune become piquantly unpredictable
(see Ex.30, pp.142-143). Moreover, the start of the round is
'disguised' by repeated quavers on A; these disappear once the
contrapuntal entries get under way, but return on C near the end, as
the entries of the tune are completed.

The notes used for this quaver pulse are the top and
bottom notes respectively of the New Era xylophone, and the overall
shape of the melody, first heard on the xylophone, is perhaps also
inspired by the physical layout of the instrument, with its range
from C up to A. The same limitation of range does not apply to the
piano, and advantage is taken of this in the addition of thirds to
part of the tune when the piano plays. But if the layout of
instruments provided materials, it is in the 'wholeness' of what the
pupils do with those materials that their musical achievement lies.
The melody chases its own tail, the last phrase of one statement forming the first phrase of the next (Ex.30, 'a'), and this gives an unresting, strangely circular feel to the music. At any moment one hear a preponderance of upward moving phrases, but phrase 'a' takes on a powerful downwardness from its vital quaver rhythms. So the listener is kept as it were buoyant in this image of forward flowing time.

Further complexity is introduced to the predominantly two-bar harmonic rhythm, with the introduction of the one-bar rising sequential figure 'b'. The culminating unison on 'a' seems an almost ironic comment on what went before.
6.8 Unnamed piece 4

The first performance of this piece delighted an audience of fellow pupils, and the tape recording has continued to please teaching colleagues who hear it. Clearly, the piece draws on one of the composers' rich experience of playing the guitar outside class, not only for her playing technique, but for her repertoire of harmonic progressions. It also draws on all the composers' theoretical knowledge of triads, built up during months of composing in class. But I want to suggest that the musical quality of the piece, the underlying reason for any musical insight members of its audience may experience, and so for any delight they may feel, lies not in the technique displayed, but rather in the unpredictable, particular ways in which that technique is applied to the creation of a unique structuring of sounds.

The first section might put a listener in mind of an English folk dance, not only in the regular quavers of the melody
and of the oom-pah guitar, but also in the two stamping crotchets at the end of each line, and perhaps even in the way the melody is structured, with two lines each repeated, the second line being a varied version of the first (see Ex.31, pp.144-145). If it is a dance, though, it is a particularly placid one, with a tempo carefully restrained and poised.

Ex.31
Ex.31 (cont.)

After a one-bar glockenspiel introduction, the first line has four beats on each of the two chords, then two beats on each chord, then one beat on each chord. So within the context of placidity, there is an acceleration in the rhythm of harmonic change. But this progression culminates in bar 5 with a recession; there are crotchets instead of quavers in the guitar and xylophone, then in the glockenspiel, and the upward questioning melodic fragments are replaced by an assertive scale, straight down to the tonic.

The second line of the first section starts off with everything a third higher (F major instead of D minor). Such a sequence alone would represent a progression in tension, but here progression and recession are to be wondrously mingled. At bar 8, the glockenspiel moves down a step instead of up a step, so returning to its pitch of the first line, and creating an rounded A - B - A' - B structure. The guitar has returned to its original music already in bar 7.

But the xylophone continues to play a third higher throughout the line. In bars 7 and 8, the result is the appearance of sevenths chords. The harmonic shock is mild because it is the outcome of a clear melodic logic, and because the sevenths notes appear off the beat. Then in bar 9, the xylophone notes (still a third higher than in bar 5) create a slight heightening of bar 5,
but since the notes belong to the triad, this remains in the context of an overall sense of rounding off. Again analysis reveals a unity of decision making. The sevenths harmony is ideally placed with the surprising triplet semiquavers and with the unfolding of a clear melodic and harmonic logic, to create an overall illusion of organic unity in forward movement.

The 'dal segno' repetition of the first line might be considered superfluous, because bars 8 and 9 contain quite adequate 'rounding off' elements. Certainly, if this were an English folk dance, there would be no such repetition. This is something which the teacher might ask the pupils to explore and consider.

Turning to the second section (bar 10 onwards), the range of rhythm is suddenly expanded. In the first section, the tune and guitar accompaniment had the same quaver rhythm, but in the second section the rhythm of the tune is slower, while the rhythm of the accompaniment is faster. So it is not easy to decide whether to notate the tune in faster crotchets (as I did when transcribing the passage in Loane, 1984b, p.226), or in slower quavers (as here, Ex.31).

After a four-bar introduction, the top (glockenspiel) part has an A – B – A' – B' structure, the second (xylophone) part C – C – D – E, and the third (xylophone) part F – F – F' – E. This phrase analysis, however, does not exhaust the structural elements in the pupils' work. For example, the second half of phrase C (bars 16 – 17) is the inversion of the first half, and the basis for the octaves passage in bars 25 and 26.

These tunes work with a very restricted range of notes, six, four and three respectively. Each begins on a note of the guitar's chord, but each then follows its own gently discordant contrapuntal logic, guided by the listening deciding ear. Since the discords result from the collision of a strong melodic logic in each part with the harmonic logic of the guitar, they lie very close to the world of Bach, arguably much closer than examination exercises based on rules supposed to represent a beginner's simplified version of that world.
The illusion of forward movement is subtly maintained. The inner two parts are relatively plodding, with a minim every second bar, but the top part keeps things moving across the end of the first phrase. Only in bars 21 and 30, at the end of the first half, and at the very end, do all parts come to relative rest.

In bars 25 and 26, there is an astonishing unity of musical decisions, with faster (quaver) rhythm in all three parts, extension of the phrase length by a bar, two bars on the same (dominant) harmony, accented minor sixth discord, and octaves between the parts. To go into octaves during a contrapuntal passage might be considered stylistic incoherence, but the precise placing of the idea in this case gives a fierce intensity to these pupils' shaping of time. Indeed, it has a precedent in Bach's 48 (Book 1, No.10, bar 19 of the fugue), if not in harmony text-books.

In the last phrase, the two lower parts appear at first to have left their contrapuntal independence behind in the maelstrom of bars 25 to 26. But in bar 29, all parts recall for a moment their gentle contrapuntal disturbance of peace, even as they finally settle to rest on the tonic.

On first hearing, the two sections might seem disconnected, but there are several links, which may account for the composers' (and their audience's) commitment to the piece as a unified whole. The structure of each section is the same, to the extent that each has an introduction consisting of a unit (one bar and four bars respectively) of the main melodic material. The main (glockenspiel) melody line uses the same restricted six-note scale. Each section is in D, mainly staying in the dorian mode. There is a shift to F major harmony at the start of the third phrase in each case; indeed there are nearly enough similarities in the harmonic structure of the respective sections, for us to regard the piece as deploying 'variation form' in the classical sense.

But the pupils use musical means to unify their two sections, not by mere similarity and cross-reference of ideas, but by the coherence of the changes they make. In the first section, there is a sort of four-squareness of rhythm, of harmony, and of phrase structure. In the second section, however, the rhythm is
more varied, there is a wider range of chords, and the five-bar phrase at bar 22 disturbs the four-squareness of phrasing. So in all those senses, the second section is made to be an opening out of the first, like flower and bud. We might say (although as always the words tell less of the truth than does the music itself) that the first section is dance-like, speaking of the innocence of physical vigour, while the second section has more pain and subtlety, but at the same time greater poise and calm, like something grown but still delicate, just emerging from the chrysalis of childhood.

Yet, although there are powerful musical reasons for considering the two sections to be an integrated whole, an important doubt remains. Given the musical weight each has to carry, one may feel that the second section is too short in relation to the first. I have already suggested that the 'd.s.' repetition in the first section might be dispensed with, and if the pupils were to accept that suggestion, this might resolve the imbalance. Alternatively or additionally, a recognition of the 'Theme and Variation' structure might lead the teacher to suggest to the pupils that what is needed is more variations. On the other hand again, perhaps the delicacy, I almost dare say the fragility, of the second section, has a musical logic which demands that its flowering should indeed be short-lived, like a dragon-fly or a day lily.

These doubts refer back for resolution to something prior to discourse, to the underlying listening experience itself. No one element in what I have said, nor even any sum of those elements, amounts to a recipe for the musical achievement of the piece. It is in the unity of those elements and others, in the total network of their relationships, that one can grasp what the pupils grasped (or nearly grasped) when they made the piece. While parts of the music may be described in words, the total network is not accessible in discourse at all, but only in sensuous musical experience, only in being listener-participants ourselves. For example, the teacher may identify performance flaws crucial to the particularity of the music. Thus the 'tripping up' in bar 26 mars the intended tension of the extra bar of dominant discord, while the resonance of the glockenspiel C at the very end is out of place in the clearly tonic-tending harmonic structure.
Whether a teacher is approaching relatively elementary work like *Unnamed Piece 1* (see 5.5), or a relatively accomplished piece like this, the fundamentals remain the same: imaginative participation founds insight into the particular wholeness of the pupils' musical thinking, a shared grasp of a structure of consciousness—time, and that insight suggests particular ways of nourishing their musical growth.
CHAPTER SEVEN

Summary of Conclusions from the Case Studies

7.1 Particular conclusions

For the moment (but see 7.3 below) I make no claim for the general validity of the conclusions summarized here; I submit only that, if the assumptions of Chapters One to Three are accepted, then the following conclusions are well established in regard to the particular pieces studied in Chapters Four to Six.

(i) That what happens when children compose in class may be coherently understood as musical action in the full sense. In other words, that children make decisions about structures of sound which articulate insight into the way they experience - or might experience - time as consciousness. In other words again, that children are originators of the "creation of virtual time" (Langer, 1953, p.125). For evidence, see every case study. Conclusions (ii) - (v) are corollaries of this.

(ii) That children's musical achievement is to be sought primarily in the wholeness of their music as insight, rather than in particular technically identifiable accomplishments. For evidence, see especially 4.5, 4.6, 4.8, 5.3, 5.6, 5.8, 6.1, 6.3, 6.4, 6.5, 6.6 and 6.8.

(iii) But that that wholeness is embodied in the particularity of musical choices, rather than in any universal recipe; that the heart of children's musical achievement is unpredictable. See especially 4.3, 4.6, 5.1, 5.2, 5.5, 5.7, 6.2, 6.4, 6.6, 6.7 and 6.8.

(iv) That musical decision-making need not be expressed explicitly in words or notation, in order to count as musical decision-making. Indeed, that it may be typical not exceptional for musical decision-making to proceed in advance of its articulation in words or notation. See especially 4.1, 4.3, 4.4, 4.6, 4.7, 4.8, 5.1, 5.6, 5.8, 6.2 and 6.5.
(v) That relationships of sound other than those highlighted in most theories of the Western classical tradition are a significant part of pupils' decision-making in music. See especially 4.1, 4.2, 4.4, 4.6, 4.8, 5.6, 6.3 and 6.4.

(vi) That creation and skill learning are not two separate areas of music education, but are rather two ways of considering the same reality. See especially 4.1, 4.5, 4.7, 5.1, 5.2, 5.4, 5.8, 6.4 and 6.8.

(vii) That there are very many things that we might say about each piece of pupils' music. Therefore, that assessment in music education, in so far as it addresses the heart of the matter, is itself permanently a process, an interaction, and can never claim to have become definitive. See especially 4.5, 5.2, 5.5, 5.8, 6.1, 6.3, 6.4, 6.6 and 6.8.

(viii) That children's music making transcends the distinction between composing decisions and performing decisions. See especially 4.3, 4.4, 4.6, 5.1, 5.6, 5.8 and 6.4.

7.2 A note on research method

At this point, it is necessary to reflect on the nature of the inquiry, to achieve "a certain standing back and viewing our procedures from a critical position" (Swanwick, 1983, p.14), in order to establish the strengths and limitations of the research method employed, and hence to 'place' the status of its conclusions.

Chapters One to Three should be seen principally as a declaration of assumptions and as conceptual clarification, although there is also an evaluation of the coherence of the assumptions and of certain alternative assumptions. There is no claim finally to have 'proved' a theory of musical experience; however, it is claimed that the 'ways of thinking' outlined have sufficient to be said in their favour, for them to deserve to be tested in particular instances.
Chapters Four to Six have two aspects. Firstly, they consist of musical analysis. It is important to note that (in line with the assumptions) this analysis is based on trying to uncover the whole particular of each piece selected for consideration, rather than on trying to isolate common features of different pieces. The method is one of close study of individual cases, rather than broad study of a range of cases. This has the strength of disclosing detail and depth, but the limitation of doubtful representativeness; applicability to other situations is unsure. Nevertheless, since the evidence is that thinking along the lines suggested works well in these twenty-eight instances, I claim a prima facie case that thinking along similar lines may prove helpful elsewhere (see 7.3).

Of course, there is a sense in which close study procedures do result in empirical disclosure of common features, for example in this case the existence of 'complex whole structures of sound'; but these features remain at a high level of generality. A reader who wants to know "What technical accomplishments can I expect from pupils' compositions in the second year?" will not find answers in this sort of inquiry — although she/he might find a challenge to the assumptions behind the question.

The second aspect of Chapters Four to Six is a further evaluation of the assumptions declared in Chapters One to Three, this time not for internal coherence but for plausibility and educational relevance in regard to instances. The outcome of this evaluation is summarized in 7.1 above. An important limitation of all inquiry arises from the danger that confirmation of the assumptions will be simply 'read into' the evidence; in the present instance this danger is intensified by the claim that the music transcends the explicit content of the analyses presented. In declaring the assumptions clearly, however, I hope to enable the reader to assess the extent of any such circularity of argument.

I think there is a sense in which the children's music has not been the field of inquiry of the thesis, or has been so only as a starting point; as Papert (1980, p.10) said, "the best way to understand learning is first to understand specific, well-chosen cases and then to worry afterwards about how to generalize from this
understanding. You can't think seriously about thinking without thinking about thinking about something."

Rather, the principal object of study has been the 'ways of thinking' themselves. If the pupils' composing is a sort of thinking, and if the teacher's analysis of their work is thinking about thinking, then this thesis might be characterized as 'thinking about thinking about thinking'. In the case study investigations, three implicit questions were addressed throughout: 'Are these ways of thinking coherent? Are they plausible? Are they helpful?'. The answers to those questions constitute the thesis's evaluation of the 'ways of thinking' which are its data.

Finally, what sort of 'objectivity' has this method of working? This question may reduce to another: are the results reproducible? Now in one important sense I am convinced that they are not reproducible! For the evidence nowhere supports the idea that there is just one valid way of thinking about each composition, and that this is it. On the contrary, the evidence is that verbal thinking always falls short of the musical thinking it addresses. If so, then each teacher or researcher will articulate only part of the reality of the pupils' music, and each may be expected to articulate a different part.

These considerations imply for the inquiry at once a limitation and a strength. For I cannot say to the reader "Here is something about pupils' compositions which you did not know!" What I do claim is to have outlined ways of thinking, the sharing and development of which may substantially deepen and broaden our insight into the heart of children's music-making.

7.3 To what extent do the conclusions have general implications?

If the pieces discussed in Chapters Four to Six above were shown to be quite untypical of what pupils can do, then the conclusions summarized in 7.1, while valid in regard to those pieces, would be of little general interest. It is necessary now to declare some important particularities of the context in which the evidence was gathered. At the same time, some consideration can be
given to the broader context in which similar results might be expected.

The most obvious particularity is that of age, the pieces investigated being all by pupils aged from 11 to 14. Davies' analysis of songs mostly by 3 to 11 year olds tends to offer support for several of the conclusions being applicable to younger pupils' music. A 6-year-old's song about trapeze girls matches "the swinging of the trapeze, which the singer imitated with her hands", with "the rise and fall of melody". The young composer integrates upness-and-downness at two different levels, that of the single bar, and that of the four-bar phrase, creating a musical wholeness whose essence lies in its particularity (Davies, 1986, Example 3, p.282). In another song, a child shows "with her first attempt at composition that she has absorbed and can use a far more sophisticated musical vocabulary than we would normally offer to a nine-year-old beginner composer if we were presuming to provide her with 'suitable' material". Davies tells us that this girl's achievement was well ahead of her ability to notate, or even to read Davies' notation of, the song, but that in making it "she was able to reveal aspects of herself which would have been difficult to discover in any other way." (ibid., Example 13, p.288)

A little further evidence (including a closer look at one of Davies' examples) is presented in the Appendix below, that similar ways of thinking may be coherently applied to younger and older pupils' work. However, there is clearly a need for substantial further research in these areas.

A further particularity is the school context. This statement was agreed with the head teacher:

During the time of these recordings, Boldon Comprehensive School had perhaps as close to a genuinely comprehensive intake as one may find, there being no selective schools, nor indeed any large fee-paying schools, within the Borough of South Tyneside. The school drew its pupils from council estates, from a relatively prosperous middle-class housing development, and from a colliery village. The pit closed during the time of the recordings, but while Boldon suffered its share of the unemployment typical of the region, no-one could claim that it was an area of exceptional deprivation. A Community Centre shared
accommodation with the school, and this arrangement contributed to some close links between school and home.

Music in the first three years was given in weekly lessons of about seventy minutes to full classes, ranging from twenty-four to thirty-two pupils. In the second and third years, and before 1980 in the first year, the classes were divided by 'ability' into 'two broad bands'. After 1980, the first year classes were 'mixed-ability'. In all three years, there was a separate small 'remedial' class.

The particular musical and social background of the school did not include the range of diverse cultural traditions found in many parts of Britain.

The school's accommodation for class music comprised two class rooms and four 'practice rooms', with occasional access to hall and drama room. As this space usually had to be shared between two classes, it was far from ideal, and it was not generally the case that enough separate rooms were available for each group out of a class of thirty. Nevertheless, all the pieces represented here arose from work which included some time in a space where the pupils could hear what they were doing.

The absence of widely diverse cultural traditions certainly represents a limitation on the study, and further research is indicated in schools where those traditions are directly represented. It should be pointed out, however, that strands of Afro-American and Afro-Caribbean music have entered many vernacular musics, and are clearly in evidence in several of the pieces. See especially 4.1, 4.4, 4.6, 5.1, 5.3, 5.7, 5.8, 6.1, 6.4, 6.5, and 6.6.

I do consider the number of rooms available to be crucial. Of course, ingenious organization can allow some composing work to be done in poor accommodation (see Paynter, 1982, p.138-143); but I do not claim that any of the results of the thesis are reproducible unless, for some of their working time at least, pupils working in small groups can attend properly to the sound of what they are doing.

An important particularity is that all the music investigated arose from work in collaborative groups. Of course, individual composing is an important musical activity (see A.4 and A.5), but shortage of space and time constrained me to concentrate on group work during my class teaching, and so for this research. The
sharing of the composing decisions was generally unknown to me, although of course I took what action I could to monitor this, and to assist the fuller participation of any pupil who seemed to be being 'carried'. When the work was done and the piece presented, I found it rare for any pupil in a group to reject responsibility for the whole product, and so I have not hesitated to attribute the creation to the whole group.

Further particularities of resource constraints and shortage of time, not to mention short-comings in my own skills as a teacher, no doubt placed limitations on what the pupils achieved. As the thesis does not claim to be a comparative study, I make no claims that the pieces are either normal or exemplary.

But perhaps some reader will suggest that the music shows greater achievement than one might usually expect. Once a colleague who heard me comment on some of the pieces objected "... but most of what you get in class will be mediocre, and a lot of it will be rubbish." (Open discussion at conference 'Composing in the Classroom', Christchurch College, Canterbury, 9/7/86) As some counter-evidence to his hypothesis, I have included examples of pieces with little technical accomplishment, or manifesting some difficulty in pupil collaboration (see 4.1, 5.5, 6.5), and the entire product of one mixed-ability class's work on one project (see 4.8, 4.9). It is true that each piece selected for detailed study elsewhere in the thesis has some point of special interest, but the discussion of 4.1, 4.8, 4.9, 5.5, and 6.5 may suggest that all work undertaken with commitment may demonstrate some form of that insight, creation and learning investigated in detail in regard to the other selected pieces. Of course, nothing will be achieved without commitment, but I submit that there is no reason to expect pupil commitment to be atypical, provided that the two great obstacles to achievement in school music, grossly inadequate accommodation and severe lack of self-esteem, are removed. Again, the discussion under 4.8 and 4.9 is some evidence for this.

To summarize this summary, I suggest that the case studies exemplify one way to think about children's compositions; that in regard to those twenty-eight pieces, it is plausible, coherent, and helpful; and that there is a prima facie case that some such way of
understanding children's compositions might be valuable elsewhere, under different conditions, for other music teachers. If that case is accepted, then there are important implications for teaching, for teaching teaching, and for researching teaching; and to these the next chapter must turn.
CHAPTER EIGHT

Implications for Music Education

8.1 An approach to children's compositions

Several years ago, David Holbrook (1964b, pp.10-12) said of children's poetry and stories:

"... because children work so directly from the unconscious, their creative work contains a surprising amount of genuine art expression which we can properly examine and compare as we examine and compare the work of adult professional writers. Despite all the uncertainties of dealing with such material, this is a process from which growing attitudes to human experience and capacities to deal with it may emerge - as they do from literary criticism ... Similar creative and critical processes go on at a naive and simple level in the classroom, as children write their poems and stories, while we 'mark' them, and provide the context for reading and 'criticism'. And the answers to all my points above [six questions about the meaningfulness and educational purpose of children's writing] are virtually to be found in applying to children's work in simpler ways the methods of critical analysis such as we apply to literature ... The important thing is that the context should be established as that of a vigorous concern with creative expression as a proper and important activity and a personal discipline, which leads both to the advance of living powers and to the deepening of literacy - the two going together, as a growing process in thought and feeling."

One way to encapsulate the conclusions of this thesis would be to say that a growth in thought and feeling, analogous to that described by Holbrook in children's writing, may also occur in children's music. If this is so, then the central implication of the thesis is that it may be important for teachers to approach music produced by ordinary pupils in ordinary lessons as music in its deepest sense, as an artistic endeavor.

As teachers, we may sometimes look for prescriptions and recipes to guide our work, and there are understandable reasons for this; it is absolutely right to draw on the pooled experience of other teachers and researchers, in order to raise the standards of our own action in the way we help pupils. But in the light of what has just been said, formulas may not be enough. Perhaps the
improvement we all seek is more likely to come from a 'dynamic of practice', from sharing ever deeper insight into the nature of our art, than from trying to agree on fixed patterns of development or assessment.

So I do not propose to present a schematic model of how a teacher ought to respond to pupils' musical compositions. I think the implications of this investigation lie rather at the level of a general method of adjusting practice by reference to fundamental principle. Of necessity, this chapter will represent that process like a snapshot, at just one 'moment' in my own development as a teacher. I offer it to fellow teachers as such, rather than in any way as an immutable paradigm. But I hope that will not suggest for a moment any lack of commitment or rigour. While details of his practice remained flexible and open, the principles on which Holbrook has approached his pupils' writing are strongly held and constantly challenging. We should bring no less purpose and dynamism to reflecting on our pupils' music; at the heart of that professional task is rigorous attention to the heart of the young people's endeavour, the musical Act of Creation itself, and this must give strength and shape to the whole of our approach.

Before unfolding further implications of this, an important possible objection must be considered. For even if children's music work may be approached as genuinely creative art, it could be that our day-to-day response in the classroom should not be centred on that premise. It is possible to argue that creativeness is an elusive phenomenon; one the teacher does best to leave to take care of itself, while he/she concentrates on the skill learning aspects of development. I would reply that these case studies tend to establish that musical creation is an important species of thought, deserving no less respect and attention than other species of thought. And I suspect that readers of this thesis who have seen the development of that thought in young people, as a central outcome of their professional activity, will not easily be persuaded that the centre of their interaction with those pupils ought to be something else.

The conclusions of the case studies suggest that it is how the teacher may respond to the unpredictable particularity of the
pupils' work which is important, and this tends to support the warning of HM Inspectors of Schools that "... success may depend just as much on successful teaching strategies as upon the selection of appropriate material." (Department of Education and Science, 1985, p.2)

It seems as though **we should give somewhat higher priority to the middle of the learning process than we have.**

I warn the reader again how inappropriate it would be to fix the pattern in which one responds to pupils' compositions by the adoption of a prescriptive schema. However, to clarify the present discussion it may be helpful to summarize under eight headings some elements that may be involved:

- Initially, an involved audience-listening response to the music. (See 3.1, 3.2, 8.2.1)

- Some expression of appreciation or valuing, to indicate the existence of the audience-listening response. (See 3.3, 3.4, 8.2.2)

- Reflection on the musical facts we hear and see. (See 3.3, case studies passim, 8.2.3)

- Reflection, probably very brief and certainly very provisional, on the import of the pupils' music. (See case studies passim, 8.2.4)

- Positive questioning on, and feed-back about, the musical facts, perhaps involving the rest of the class. (See case studies passim, 8.2.5)

- Helping with particular basic difficulties, if any. (See 4.9.3, 5.5, 8.2.6)

- Perhaps, consideration of 'fruitful mistakes'. (See 5.1, 5.5, 6.3, 6.5)

- Additional questions and suggestions. (See case studies passim, 8.2.7)
8.2 Implications for the teacher's response

8.2.1 The priority of imaginative participation

I began by assuming that audience-listening is a form of insight involving an imaginative projection of oneself as music-maker (see 3.1), and that insight into the wholeness of other people's music begins with the wholeness of this non-discursive grasp of a totality. "... a theory of music comes into its own by explaining, post factum, your musical experience to you." (Walker, 1966, p.5) "How do you criticise music you insist on holding at arms' length? Until you have embraced it, assimilated it, there is nothing to criticise ..." (ibid., p.107) The case study investigations confirm that young people can make music whose complexity deserves attention of this sort. Moreover, at several points it seemed that reference back to a foundation of 'whole' musical insight was essential to guide the teacher's later verbal thought processes into important channels (see especially 4.5, 5.5, 5.8, 6.4, 6.8).

If so, then the primary way to understand what is important about children's compositions, is to give them the open-minded, open-hearted attention one would give to any new music, particularly imagining ourselves in the place of the young composers, as though we ourselves were actually listening, deciding, and playing. As Langer (1967, p.68) said: "following the author's [or composer's] undertaking through all his artistic problems and decisions ... [is] the surest guide to the import of the work, the idea expressed."

Many teachers find it important normally to listen twice to pupils' music before commenting, and this may show why. In discussing Jack (see 5.8), we found that key elements of rhyming and variation became apparent only near the end. Pupils might be puzzled or reluctant when asked to "play it again", but it may be worth insisting; the young composers already have an overall conception, which they gained through working on the materials, and it may not be easy for them to realize that the teacher does not.
Of course, imaginative participation need not be restricted to audience-listening; the teacher might sometimes ask the pupils "May I join in?". He/she might take one pupils' place in the performance of the composed materials, or even participate in the generation of materials. If a general atmosphere is established in which pupils' ideas are valued, there will be no threat or 'put-down' implied in this.

8.2.2 Valuing the pupils' music

But audience-listening is invisible and inaudible; although there may be body language cues during the music, and conversation afterwards, generally we have no 'direct' access to another person's musical experience, unless that person is actually making music.

In this case, the young composers do not have direct access to the wholeness of their teacher's audience-listening grasp of their music. The danger is obvious: that what I say to my pupils is inevitably only part of the truth about their work, but may appear to be the whole truth. If I add "But this is only part of the truth", those words alone may not be enough to convince the pupil that I want him/her to look beyond the immediate import of what I can say.

Fortunately, there is a way of pointing at the wholeness of our audience-listening experience, even if it is not thereby fully articulated: we can indicate or express our valuing of the music, and this is usually so closely associated with our insight into it (see 3.4) that in many contexts one may be taken for the other.

So it turns out to be important to allow expression to our delight in the young people's music, and perhaps to the delight of other pupils attending to the performance, not only for the obvious reason that pupils generally benefit from encouragement, but because otherwise there would be no reference to the wholeness of our audience-listening, and so to the provisional and partial nature of whatever verbal commentary may follow. The expression may be a
smile, a phrase, or even applause, while sometimes the 'moment of silence' at the end of the performance may be sufficient signal of our involved attentiveness.

I think that from time to time, and quite justifiably, this may end the matter. If my argument here is correct, then an expression of appreciation alone may be a pointer to the wholeness of insight, and so may rank as a genuine teaching intervention. Although there may be "no end to the things we want to mention" (Aspin, 1984, p.15), there must be an end to what it is useful to say. "Teaching music must therefore also be an activity which stands back ..." (Glynne-Jones, 1985, p.102)

8.2.3 Reflection on the musical facts

I think the case studies demonstrate a rich particularity of pupils' musical ideas, and strongly suggest that the core of their achievement lies there. If so, then articulating our perceptions of children's musical reality will remain a task almost as perpetually unaccomplished and innovative as music itself. Moreover, it is something that each of us can only bring to reality in practice by her/his own thoughtful reflection, although that reflection can certainly be illuminated by what we hear each other say; I hope that discussions like those in Chapters Four to Six will contribute to this.

However, within this general imperative for what might be called a 'dynamic of perceptive response', priorities may appear. Here I want to unfold some implications of the conclusion that aspects of sound other than those which can be readily notated, and other than those that are highlighted in Western theories of music, must receive the teacher's attention (see 7.1(iv)-(v)).

At one level, this has nothing to do with the fact that many pupils in our schools possess cultural roots outside Europe, although it may be that the presence of these pupils and the need to afford them equality of opportunity, serves forcefully to draw attention to the problem. The Western European 'high' tradition itself transcends the contents of its theory; singing in the opera
house may involve precise control over portamento, over ever-changing rates of vibrato, and over the gradual opening or closing of the timbre of a vowel.

At another level, however, several writers have argued that inflectional aspects of music play a greater role in non-Western traditions, and that the Western classical tradition's dependence on notation is related to a relative neglect of inflection.

"Features of music which are notatable are explored and expanded via the medium of notation – features which are not remain in the background, their use implicit in the conventions of musical practice, or the subject of musical 'intuition' in performance, never raised to the level of conscious visualisable development and extension." (Wishart, 1985, p.318)

It is hard to dispute that the approach to music theory in which many of today's music teachers were trained almost entirely disregards inflectional aspects of music. If so, then giving more explicit attention to inflection may be an important part of developing the curriculum.

The possibility of 'missing the point' by hearing music with ears trained in other musics is real enough. If we merely 'use' other musics to illustrate concepts arising primarily from the theory of Western classical music, as Simpson (1985, p.5) seems to suggest, then we may do a dis-service to each. But teachers need not therefore take refuge in a narrow concern with what we already know; I think the case studies strongly indicate the possibility of entering a dialectical relationship with the contexts of pupils' music. As teachers, we too learn and change, we are not exempt from the dynamic of culture, we are not bound into permanently distinct cultural assumptions. "... schools are best seen not as transmitters of culture but as complex cultural exchanges." (Calouste Gulbenkian Foundation, 1982, p.43)
8.2.4 Reflection on import

Reflection on the musical facts can lead us into reflection on what the music symbolizes. At its deepest level, this symbolic object may be always the same thing (consciousness-time), and always beyond words. However, consciousness-time always appears in a newly particular aspect. As we have seen, it may be possible to use words to point at part of that particularity, as long as we remember that "the vital import of a work of art need not and cannot be derived by any exegesis." (Langer, 1967, p.84)

In the classroom, reflection of this kind will have to be very brief, and it must certainly be very provisional. Moreover, if the teacher's understanding of pupils' music includes a tentative identification of modes of experience there symbolized, it by no means necessarily follows that he/she elaborates that speculation to the pupils. Indeed, there are very good reasons not to do so; the pupils may be exploring painful and private aspects of experience under the shelter of the generality of musical imagery, and perhaps with a layer of humour and irony. But this does not mean that reflection on emotional content is totally irrelevant; rather it casts further light for the teacher on the sounds themselves, by prioritizing ideas which seem most central to the apparent intent of the music. It is in terms of the sounds themselves that communication between teacher and pupils will take place.

8.2.5 Questioning and feedback

The problem here is how to "... take account of the significance of language in pupils' development - without denying the nature of the [musical] medium" (Glynne-Jones, 1985, p.102). The foregoing sections strongly suggest that it is in attending to the sounds themselves that the pupil-musicians will most surely grasp their meaning, and it is in attentively modifying, working on, taking decisions about the sounds that they will most surely elaborate and extend meaning.

So the teacher's task is not just to talk, but to elaborate ways of choosing from the great list of things we might
talk about. Ways of doing so are explored in the case studies. Above all, the teacher's task is not to talk alone, but to enter a dialogue with the pupils by using appropriate questions; not just to find out whether the pupils understand what the teacher already understands, but to advance the understanding of each.

8.2.6 Help with special difficulties

Sometimes pupils may not succeed in engaging with the task, and the reasons may be more or less understandable. In these circumstances, one will get nowhere by pretending that positive features exist which do not. Pupils will surely see through a teacher's deceit, however well-intentioned.

I do not think that this need imply unqualified rejection by the teacher of the pupils' efforts. We found evidence in the case studies (see 4.9.3, 5.5) that non-engagement may not be purely disengaged, so that response to non-engagement may be precisely in terms of what positive features there are. It may be important to stress that a positive approach to musical difficulties need not imply some soft motive of making pupils feel good about themselves, no matter how inadequate they may 'really' be. Rather it is rooted in evidence that the fundamental process of listening, deciding, creating is detectable even in pieces whose technical accomplishment is poor. Nourishment of those processes is probably the best way, and possibly the only way, to aid their growth.

8.2.7 Additional questions and suggestions

The foregoing discussion tends to support the idea that additional suggestions will arise from the particularity of the pupils' creation, and from the teacher's imaginative participation in that process. Thus Bunting (1987, p.47) tells how he found a pupil's chord "hard to accept". However, he goes on: "We could not find any better chord for this passage; the problem was one of a general harmonic naivety which could not be 'cured' by my more sophisticated knowledge because it is an integral part of the whole language of the piece."
So further development might well arise from questions like "What other ideas do you think you might try?" Where the teacher chooses a definite idea to propose, it might come in some form like the following:

- "Here's another idea to try; Try it."
- "Try something like it."
- "Try something different."
- "Then try what you did first."
- "All the time, LISTEN AND DECIDE!"

In Chapters Four to Six, I sometimes wrote: "The teacher might suggest ...". Unless otherwise indicated, I have no record of in fact doing so; often, it occurred to me not in the rush of the classroom, but while listening to the tape at home, perhaps some months after the event. One outcome for myself of writing this thesis has been the realization of many realities and possibilities not noticed in the classroom at the 'right' time. I believe that some of those realizations have been absorbed subsequently into my daily awareness: it seems that the practice of thoughtful listening to tape recordings of pupils' music after the event may be an important way of developing one's skill for the future in noticing important things at the event: what Keith Sedgebeer has called "analysis on the hoof" (Conference 'Composing in the Secondary School: Process and Progress', ILEA Music Centre, 3/10/87).

The qualities of response and interaction suggested by this close examination of pupils' music turn out to be close to those proposed by Ross (1984, p.33) as implicit in the application of "the vernacular principle" to arts education. For example, self-evaluating rather than other-evaluating, use value rather than exchange value, continuum rather than fragmented, inter-active rather than private, collective rather than patronized, changing rather than fixed (ibid.).
8.3 Implications for the formulation of aims and objectives

One finding of the case studies has been the uniqueness of the creative act manifested in each composition (see 7.1(iii)). It is the wholeness of relationships of sound particular to each piece that constitutes its achievement. The implication must be that the important outcomes in music education cannot be predicted.

For example, the guitar part in Songbird (see 4.9.2), like that in Chinese Warriors (see 4.9.1), uses a contrast between strumming and slapping, which had been suggested by the teacher. The melody, like that of In the Heart of the Sleeping Dragon (see 4.8), starts on D against E minor harmony, a felicitous idea discovered independently by the two groups of children. But the achievement of Songbird lies in neither of these commonalities; in fact not at all in what it shares with the other pieces, but rather in what is unique to itself. We might go so far as to say that its achievement is different in kind from that of each of the other pieces.

If all this is true, then it is what goes beyond any teacher input that matters; it is what we couldn't possibly have anticipated that counts as the pupils' musical achievement. This means that music education may have exceptional requirements for the formulation of its aims and objectives. For one will not be able to say before the musical and learning process begins what important outcome one expects, except of course in general terms like 'To make music' (see Paynter, 1982, p.135).

The argument here may be analogous to Regelski's critique (1986, p.191) of what he called "generalising abstraction", which "applies 'in general' ... - even if the generalised similarity or regularity is not the most characteristic or only significant quality of the experience." He argued that in the case of music "... the novelty present must be addressed if the full value of the experience is to be realised", and concluded that "... the Action Learning teacher always considers that the methods and materials of teaching are never set but are rather points of departure for a controlled experimental process."
Similarly again, Glynne-Jones (1985, p.101) argued that: "Individual differences in music are not only that children and young people have different interests, abilities and preferences and develop at different rates, but also that what has meaning for individuals, what touches them as they listen to music, or as they craft or interpret it, is particular and distinctive".

Of course, none of this is to say that we should abandon the whole idea of objectives in music education; rather it implies that, in the nature of the case, the important music education objectives will be heart-centred and process generated.

The HMI document Music from 5 to 16 (Department of Education and Science, 1985) features a multiplicity of aims and a multiplicity of objectives, with little attempt to distinguish between the central and the peripheral, between musical activity and supporting activity. Thus, a teacher might decide that a class had performed with relatively little success on items 3, 4, 5 and 7 of the list of objectives for 14-16 year olds (p.15, q.v.), but that their success on items 1, 2, 6 and 8 would allow the course overall to be considered adequately successful. But it could be argued that the latter activities are at best supporting in nature, that they need involve no musical decision taking at all, and therefore that the pupils should not be considered to have succeeded in a course deserving the title Music. The case study conclusions imply on the contrary that our aim as music educators will be truer if it is single, or rather if it is heart-centred, if our planning is principally targeted on the one purpose of enabling the act of musical creation. This tends to confirm Glynne-Jones' conclusion (ibid.) that "curricula in which composing activity is based on givens, a title, mood, picture, poem, event, or a formal or stylistic aspect, or one in which teacher-led-and-welded class compositions are the order of the day, do, in the final analysis, miss the point, as do curricula in which performance activity is exclusively in large teacher-directed groups."

Of course, the case studies also suggested that as the course of musical learning unfolds, the process generates very definite objectives, and that these may well become quite specifically technical, for example the improvement of the
guitarist's hand position in *Midnight Delirium* (see 5.2). But such objectives arise in view of the wholeness of creative intentionality; no number of technical objectives adds up to a musical objective, just as no amount of technical achievement adds up to a musical achievement.

This points to a conclusion different from what may be implied by Swanwick & Tillman's suggestion (1986, p.335, my emphasis) "that we should focus our musical curriculum activities towards broad aspects of musical development". Rather, it seems that we should focus our music curriculum activities towards the particular and unpredictable aspects of musical development.

I suppose it is possible that some will see this whole argument as tending to deny the importance of planning and care in music education, but I believe that nothing could be further from the truth. What the argument does imply is the importance of always deepening our understanding of the particularities of pupils' music. If we do this, then we will develop a broad repertoire of process objectives on which to draw as appropriate. If we do not, then we will be forced to choose between having no objectives (and so perhaps no purposeful interaction), and having pre-determined objectives (in which case we may miss the unpredictable heart of the pupils' work).

8.4 Implications for starting points of assignments

I argued that the teacher's response, the 'middle' of the teaching process, may deserve relatively higher priority than it has always been given, and I discussed this 'middle' in 8.2 above. However, I think the case studies also have implications for the 'beginning', for the way we go about initiating class musical projects.

In the first place, do we always need to give the pupils a 'stimulus' at all? The HMI document quoted above, *Music from 5 to 16* (Department of Education and Science, 1985), insists on a link between composing and a "stimulus" ("for example a story, a poem, a mood, movement or activity derived from play") (p.3) in all the
objectives lists up to age 14. Admittedly this link is qualified at first by words like "possibly" (p.3) and "with or without" (p.6). But no such qualification attends the statement of composition objectives for pupils "to age 14" (p.10), as though pupils at this level are expected never to compose from musical considerations alone. The GCSE National Criteria go so far as to define composing as "... the creation and organisation of sound based on stimuli chosen either by the pupil or by the teacher." (Department of Education and Science; Welsh Office, 1985, p.1, my emphasis)

On the other hand, Glynne-Jones (1985, p.100) has challenged what she calls the "the 'empty vessel' theory and the 'stimulus for creative activity' theory, both of which are based on the premise that without initial priming by teachers no worthwhile pupil activity is likely to occur."

The case studies certainly support the view that it is unlikely to be those aspects of musical reality which the teacher feeds in as a starting-point that turn out to be the most important. So, whatever the teacher says at the outset (and we will all have different approaches to this), the important thing will be to contrive to leave the pupils free to uncover the unpredicted. In other words, whatever explicit ideas we introduce must be introduced in a special way, in a way that does not distract the pupils with those ideas. The explicit ideas will be grievously limiting if they concentrate the child's attention on something other than the sounds themselves. "What need of 'themes' and 'topics' when we all have so much at our imaginative fingertips!" (Ross, 1984, p.116) "Music that is invented while the composer's mind is fixed on what is to be expressed is apt not to be music." (Langer, 1942/1957, p.240)

So, generally, the way we introduce projects to pupils must contain a pointing forward; it must indicate more or less explicitly that the content of the outcome is not contained in the content of the input. The pupils may have expectations determined by other (especially exam-oriented) school practice for us to contend with here.
If all this is so, then descriptive ideas are unlikely to be fruitful as normal starting points. Paynter (1982, p.107) pointed out that:

"Poetry, pictures or stories may appear to be good starting points for generating musical ideas, though they are in fact rather deceptive stimuli. They provide ready-made images - something to hang on to - but they do nothing to encourage us to 'work' our sound ideas, developing the potential in the sounds themselves for musical reasons".

We found evidence of the importance in some pupils' song making, of the music emerging with rather than after the words (see 4.2, 5.4), and this too tends to suggest the priority of musical ideas over verbally explicit ideas as starting points.

Of course, it will not do to be too dogmatic about this. Some of the pieces on the accompanying tapes (see 4.1, 4.4, 5.1, 5.4), and no doubt many pieces that other teachers could quote, originate from descriptive ideas suggested by the teacher. Others again, although originating in technical-musical suggestions from the teacher, are known to have taken further impetus from descriptive ideas supplied by the young composers (see 4.8, 5.2, 5.6, 5.7, 6.2, 6.5). The imperative is to realize that the dynamic of the pupils' work will come from something other than the initial idea, and to find a way of presenting any such idea that takes that into account.

By a similar argument, it looks as though a clearly stated open-endedness may be a fruitful normal way of presenting assignments; frameworks are unlikely to be fruitful as normal starting points.

Once again it would be unhelpful to be dogmatic; restrictions may certainly turn out to be an important part of the musical thinking process. For example, the restrained poise of the second section of Unnamed piece 4 (see 6.8) seems related to the narrow compass of the xylophone melodies. The melody of In the Heart of the Sleeping Dragon (see 4.8) is pentatonic. But these restrictions were imposed by the pupils themselves in the course of composition; if the restrictions had been imposed by the teacher, before the creative process had got under way, then the pupils' attention could have become focused on what they must not do, rather
than on what they might do. Davies (1986, p.282) drew a similar conclusion from her analysis of songs by younger pupils:

"A restricted framework, within which the child concentrates on a limited vocabulary until he can handle it confidently, may well prove helpful for some children. But ... prescribing limits and attempting to intervene in the child's own musical activity may inhibit unnecessarily."

So perhaps we should normally start with a 'launch-pad' rather than with a 'framework'; and at least until pupils are entirely convinced that it is their unanticipated ideas which count, it may be well to make the launch-pad explicitly open-ended, for example: "Try this idea ... ; then try something like it of your own ... ; then try something quite different ... ; and so on ... ; LISTEN AND DECIDE! You are the composers."

Bunting (1987, p.51) has described one instance of what I would call a 'launch-pad' approach in detail:

"The process [of 'distorting triads'] is very simple, yet it allows for choices at every stage, enables the pupil to work within his chosen idiom or to explore beyond it, and can be repeated always with different results. Similar processes might be invented for melody, rhythm, timbre or texture. This seems to me a fruitful field for research."

Sometimes indeed the launch-pad can be open-started as well as open-ended; just "Make up some music" (see 4.2, 5.8, 6.4, 6.8). If the pupils are used to purposive interaction with the teacher arising as part of composition, such an assignment will not seem vague or lacking in progression at all.

Another implication arising from the case studies is the value of expecting and targeting towards the pupils' previous musical experiences. Assumptions along the lines of 'We have to start from scratch because they all come from different feeder primaries' cannot be sustained. The Schools Council Project Music in the Secondary School Curriculum evolved as one of its "guiding principles": "Because most pupils already have an interest in music of one kind or another, a variety of musical activities are possible which are not dependent upon formal musical training. These are
starting points, and appropriate training should then follow from
identification of the pupil's musical interests." (Paynter, 1982,
p.xiii) "... at whatever age or stage teachers begin to work with
children and young people each individual will be a going musical
concern, and a continuing one, in his or her own way."
(Glynne-Jones, 1985, p.101)

So the 'launch-pad' (if there be one) can often arise from
relatively fortuitous 'discoveries' in the pupils' previous
compositions which are known to the teacher. But more importantly,
the way a project is presented must allow psychological room for the
pupils to bring to bear all the richness of their prior musical
experience; and that richness is certainly unknown to the teacher.

8.5 Does assessment have a heart?

It is sometimes assumed that assessment has to do with the
'end' of the teaching and learning process. But the case studies
suggest that matters may not be so simple. The teacher's insight
into the pupils' composing is imaginative participation in musical
decision making; it is imaginative participation in judgements about
what works and what does not work, about success and failure (see
3.3); so it seems thoroughly reasonable to say that its articulation
is 'assessment'.

Of course, other sorts of judgement about musical activity
are possible (see 3.4), and they may be important. The issues at
stake are "Which sort of judgement may act as a paradigm of
assessment? And which sorts of judgement are (at best) supporting
and incidental?" I believe that this study suggests that as long as
assessment claims to be concerned with musical achievement itself,
with the creation of a new wholeness of sound, then it must be
rooted in the sort of involved grasp of the whole which I have just
described.

The heart of the assessment of music is assessment of the
heart of music.
This tends to support the view that assessment of pupils' music remains permanently and irretrievably provisional, that assessment is at root a process not a product. Bunting (1987) has given an excellent account of what amounts to a process of interactive assessment, although he does not call it that. The important judgements about his pupils' music are not finally fixed, but continuously interact with the music to which they refer: "This model is based on an interplay — fruitful we hope, but not without tension — between the viewpoints of teacher and pupil." (p.26)

The case studies also strongly suggest that assessment of pupils' music in the important sense can only be rooted in a particular piece of music, and that comparison of one piece of music with another piece is irrelevant to judging its successes and failures. I have argued this in more detail elsewhere (Loane, 1982). In rejecting the possibility of rank order assessment of the heart of music, I do not of course suggest that we pretend that all pupils are the same. Rather I suggest that we identify successes and failures, instead of purporting to measure them.

The case against 'norm-referenced' grading of compositions seems fairly well established. However, I think these case studies also provide evidence against the view that compositions may be graded by reference to a pre-selected set of criteria. For each composition creates a new image of consciousness-time, and the criteria for choice within each of those sound-worlds must be unique to that sound-world. The criteria for success and failure of any musical act are generated by the particularities of that act. Of course, one can say in general terms (like 'coherence') what one proposes to count as success in music; but those general terms will be re-defined by each new act of musical creation. It must follow for logical reasons that they cannot serve as bench-marks in any 'criterion-referenced' grading.

Although the GCSE in England and Wales was intended to be a criterion-referenced examination, it seems to have been accepted that in the case of Music the intention has not yet been realized (see Secondary Examinations Council, 1986a, p.4). A working party was convened after the publication of the criteria document "to develop grade criteria for GCSE Music" (Secondary Examinations
Council, 1986b). It would be unfair to prejudge the outcome of those deliberations, but the evidence presented in the thesis does suggest that the search for universal criteria may prove fruitless not for contingent reasons, but in principle.

The case studies also suggest that the GCSE National Criteria (Department of Education and Science & Welsh Office, 1985, p.1) are simply wrong to assert that music-making activities "require the ability to use musical notation and vocabulary", and wrong to see "some knowledge of the social, historical and biographical background" as a "constituent" skill of the activity of composing. There seems to be a reluctance here to value musical action itself, as opposed to its description in words or notation.

Of course, some colleagues may want to use the word 'assessment' in a sense different from that outlined above. For example, the Music Advisers' National Association (1986, p.24), while drawing attention to 'musical encounter' as the heart of the matter, nevertheless defines 'assessment' as "the means by which information is made available about a pupil's attainment and potential". While it might be purist to object to this as a possible way of defining terms, I think that 'information', linearly recordable and transmittable to different interested parties, can present no more than a sub-section of 'assessment' in the fuller sense indicated in the case studies; it can articulate only a small part of the rich understanding achievable in live classroom interaction.

It may be a mistake to see the need and the form of assessment as arising principally from current concern with 'accountability' (see Elliott, 1987, p.157). A teacher's prime accountability is always to the learner, and the way in which we are able to communicate assessment outwards cannot be allowed to act as a model for how we elaborate assessment in interaction with the principal party concerned, the pupil. As the Calouste Gulbenkian Foundation report (1982, p.143) put it, "... patterns of assessment should take account of the principles and objectives of arts education and of the nature of aesthetic experience and development."
I do not deny that it may be relevant occasionally to assess technical vocabulary and other associated skills and knowledge separately from the act of musical creation itself, although there is a strong argument against entitling any such assessment Music. If the skill in question has a musical outcome, it will be manifest in that musical outcome and need not be separately assessed; if it has no musical outcome, we have no musical reason to value it, and it should not be assessed; at least, not under the title Music.

Nor do I suggest that teachers should always abstain from rank order judgements. In the Heart of the Sleeping Dragon (see 4.8) may be an outstandingly beautiful and sincerely engaged piece, and Mixed Music (see 4.9.3) may arise from an almost entire failure of musical interaction. It would be foolish to pretend that these judgements do not amount to a rank order assessment.

But I believe that the conclusions of the case studies strongly suggest that these other sorts of judgement cannot form the paradigm of assessment in music education. A rank order, derived either from comparison between pieces or from comparison with pre-ordained criteria, will bear false witness to the uniqueness of the act of creation it purports to represent.

8.6 The inadequacy of the 'composing, performing, listening' model

Some have given the status almost of an axiom to the proposition that there are three basic musical activities, namely 'composing', 'performing', and 'listening' (See, for example, Fawcett, Preston & Vincent, 1981; Wells, 1986, p.XII). Urgently from a practical viewpoint, the trichotomy is crucial to the criteria for examining all pupils at 16+ in England and Wales (Department of Education and Science & Welsh Office, 1985, p.1), and courses not based on the trichotomy are to be refused validation under the title Music.

It is interesting that there are other versions of the triangle, and even other geometries, which nevertheless share the crucial features of the most widely disseminated model. The
guidelines for music teachers in Inner London divide assessment and evaluation into four categories: "attitudes ... listening ... performing ... inventing" (Stephens Dennett & Vincent, 1977, p.49). Swanwick's "five parameters of musical experience" are "Composition, Literature studies, Audition, Skill acquisition, and Performance" (1979, p.45) Ross's version is "forming, performing, attending, and mediating" (1984, p.80).

I have argued the case elsewhere (Loane, 1984a, pp.27-36) that as 'listening' is a generic category, it cannot sensibly be listed alongside 'composing' and 'performing'. The evidence presented in this thesis tends to confirm that pupils' listening is the centre of their musical creation. We repeatedly found grounds to believe that the pupils had listened—and—decided, and that this was the heart of their musical achievement.

But the evidence in this thesis also suggests that the dividing line between composing and performing is irrelevant to the heart of the matter (see 7.1(viii)). For example, in Bananas (see 4.5) pre-existing fragments and ideas are combined in a new way, and some of the musical ideas, while subject to musical decision, are not subject to representation in word or notation. In that case, it was clear that composition—listening could only occur in performance—listening. It seems likely that this is the primary case, of which the separation of composer and performer is a special, not necessary, development; Small (1977, pp.7-58) presented evidence that the strong division between composer and performer, just like that between audience and musician, is a peculiarity of one musical tradition. And Wishart (1985, p.318) also suggested that it is the "... split in conception between what are seen as primary [notatable] and secondary [non—notatable] aspects of musical organisation [that] leads to a split between composer and performer."

Indeed, since there is always pre-existing material in music, musical action always consists of re-processing, of the weaving into new configurations of ideas from elsewhere. Kivy (1984, p.12) goes as far as to claim that:
"Composers do not start from scratch with some kind of palette of natural sound. They work with melodies, melodic fragments, pre-formed patches of harmonic fabric, well-worn, secondhand bits and pieces of contrapuntal building blocks; in short, the materials of music are not natural sounds, but music already."

The world's musics exhibit a huge variety of ways in which this weaving of new configurations occurs; the musical decisions are distributed among those involved by an astonishing variety of processes. Some aspects of the sound may be determined by tradition; others by new decision. Some aspects of the sound are agreed prior to the actual performance; other decisions will be taken as the performance proceeds. The various decision makers may play relatively collaborative roles or relatively autocratic roles.

In this light, it may be sensible to account for Western orchestral music as an important but extreme case, in which relatively very few aspects of decision-making are left to the 'performers', most of those being entrusted to just one, the 'conductor'. The fact that this tradition dominates certain school classroom walls should not allow it to dominate our thinking about how music learning in general takes place.

Of course, any model may be an adequate tool for thought in an appropriate context, and the 'composing, performing, listening' trichotomy could not have gained such currency, did it not correspond to something important in some people's musical experience. To take an example from physics, Newton's laws of mechanics prove to be inadequate for thinking about very massive objects, or about objects with relative velocities comparable with that of light. For those purposes, we need Einstein's theory of relativity, of which Newton's theory turns out to be a special case. But Newton's laws are perfectly adequate for thinking about the behaviour of objects under ordinary terrestrial conditions. So I am not proposing that we banish the trichotomy 'composing, performing, listening' from all thinking about music. What I do suggest is that it should not be allowed to impose boundaries and limitations on curriculum development.
This is a real and present danger, as long as the documentation of assessment is supposed to be divided into those three categories. The trouble with assessing 'composing' separately from 'performing' is that it enshrines mistaken assumptions about how music-making develops, as we have seen. The trouble with assessing 'listening' separately from 'composing and performing' is that audience-listening is invisible and inaudible, and so what is assessed turns out not to be 'listening' at all, but rather the student's verbal or notational description of that listening. However important in particular contexts those descriptions may be, I see no argument for including them as a compulsory and compulsorily separate component of all assessments entitled Music. As I argued in a more general context above (see 8.5), if skill in describing music has a musical outcome, then it will be manifest in that musical outcome and need not be separately assessed. If it has no musical outcome, then we have no musical reason to value it, and it should not be assessed, at least not under the title Music.

The 'composing, performing, listening' trichotomy is gravely inadequate as a way of categorizing musical activity in general, and therefore as a guide to curriculum and assessment planning. The trichotomy should be removed as the basis for the national music criteria for examining pupils at 16+ in England and Wales. It is indefensible that courses based entirely on the creation of music are to be refused the title Music.

8.7 Implications for music education

If the teacher's principle mode of understanding pupils' music is imaginative participation in their creative process, this tends to confirm the view frequently expressed, that an essential aspect of a teacher's own education must be a broad base of real participation in creating music:

"Before embarking on a career in schools, student-teachers should have personal experience of improvisation, composition and arrangement in addition to the expected instrumental skills ... they should be aware of the range of twentieth century music and have a knowledge of the most recent trends." (Paynter, 1985, p.6)
Ritterman (1984, p.186), in calling for the delineation of common broad areas in the initial training curriculum to provide "a basis which would facilitate further professional growth", did not mean the imposition of "externally imposed standards", but rather the need for teachers "to have experienced for themselves learning situations of this [exploratory] kind." (ibid.)

The evidence in the thesis would also tend to support Glynne-Jones' view (1985, p.102) that in preparing for their professional role teachers and their tutors should be mindful of the relative priority of the middle of the teaching process (see also 8.2).

"... more detailed attention needs to be given in initial training to the range of highly skilled interventions needed in the variety of activities which constitute a music curriculum. For example, coaching strategies, incorporating individual challenges in group coaching; questioning techniques, incorporating questions requiring not only recognition and recall but also imaginative thought and extension and variation of ideas; presenting models, and giving information in a manner which makes them accessible to the learner; leading discussion and drawing attention to alternative possibilities both verbally and in sound ..."

I think that the relative priority of the middle of the teaching and learning process suggests in turn that a relatively higher priority might be given to in-service education, both in our thinking and in the deployment of resources. For it seems likely that only with the development of substantial experience of children's music-making, will teachers be in a good position to develop their ways of thinking about it.

The Schools Council Project Music in the Secondary School Curriculum provided models for the development of professional competence and insight through networks of communication between teachers. Its director John Paynter (1982, p.31) recognized "... a need for a strong underpinning of educational philosophy" in the context of dealing with change; teachers must have the opportunity "to reflect deeply on the purpose of their job", and there should be "... more opportunities for reflection, reading and discussion as a recognised part of a teacher's working time".
The evidence accumulated since then has only served to underline those needs, and the rate of change has increased beyond anyone's expectations. There are many hopeful signs that a vigorous 'dynamic of practice' is taking shape in the development of the sort of teachers' skills I have been discussing, although there is still little sign that the resources necessary for the full flowering of this process will be made available.

In the past, it was sometimes suggested that the secondary school music teacher's typically unpaid commitment to organised activities outside working hours is acceptable because of her/his relatively light load of 'marking'. However, the investigations in this thesis support the idea that there is a very great deal to be understood in pupils' music. If so, then insight into pupils' music may develop substantially by careful listening to and analysis of their work, and reviewing tape recordings should also become recognized as part of the music teacher's normal working hours. This may be expected to contribute substantially to developing the teacher's key ability to 'analyse on the hoof' (see 8.2.7).

Solbu (1985, p.56-60) maintained that courses for performers and for teachers should continue to have quite different contents and forms of organisation, basing his argument on a crude form of the 'composing, performing, listening' trichotomy. But his view has been challenged in practice by courses which attempt to integrate performance skills into the totality of musical interaction with client/audience/pupil (Kushner, 1985; Renshaw, 1985 and 1986). While no-one would deny the important distinction of roles within music performance and education, it looks as though these roles can no longer be reduced to two, and as the implications of this unfold, there will be a need for a continuing review of the ways in which we recruit and educate those involved in the music education of young people.
8.8 Implications for music education research

It is doubtless a blessing that a wide variety of methodologies flourish in our field (see Swanwick, 1983), although Hoffer (1984, p.15), in outlining present trends in music education research, has indicated economic and structural reasons for what he considers a "contradictory and disappointing situation".

This thesis adopts the method of musical analysis and conceptual clarification (see 7.2), without claiming an exclusive 'rightness' for that way of working. Nevertheless, I do think that there are implications about prioritizing lines of further research that might be fruitfully explored.

The case studies presented evidence of the existence of whole complex structures in children's music, and evidence that teaching strategies might be importantly influenced by deeper understanding of the particularities of those structures. If this is accepted, then it will be important to pursue research strategies as well as teaching strategies which address that heart, that wholeness, that particularity. I cannot dispute that there is a sense in which all research must address the universal rather than the particular. But if we perceive the need to study the whole living being of music making, as well as artificially isolated parts thereof, then we must not exclude the possibility that the crucial features of musical creation will always be the unanticipated ones, and that prediction may have to be content to remain at a fairly high level of generality. Of course, there is a precedent for deepening understanding by study of the whole particular, in the long ethnographic tradition of the social sciences; in the case of music, the requirement for wholeness may be greater than in most other fields.

In this light, some remarks may be made about priorities among other lines of research which seem to be indicated (see 7.2 and 7.3). It seems particularly important to have thorough music-analysis studies of individual compositions, of younger and older pupils' work (see A.1 - A.6), of music by pupils from a variety of cultural and social backgrounds, and of the work of young people in educational contexts other than the typical whole-class
music lesson. It will be valuable to have longitudinal studies of the way particular pupils' music develops and progresses; Bunting (1987, p.25-52) has already made an important contribution here. It may also be very important to have studies which compare two or more teachers' 'ways of thinking' about the same music, and studies which examine in detail the musical content of a teacher's interaction with a group of pupils across a period of time.

I mentioned that we know little about the social dynamics of group interaction when pupils of this age work together in music lessons, and research about this could be instructive; the teacher needs to support fruitful ways of interacting, and she/he must be ready to assist any pupil who is rejected or merely carried by the group. But I do not know whether such research will prove to have an importance beyond that; 'how it was made' does not necessarily reveal 'what it is'.

We also know little about what music is known by pupils, and some attempts at comprehensive study of a child's previous musical experience might be interesting. But no amount of research will uncover the totality of what went before - after all, the child has been hearing music for a great deal of the last eleven years or so; and one of the bits not uncovered by the researcher might just be the bit crucial to the pupil's present musical action. In any event, we must not assume that an account of a composition's precedents would amount to an understanding of the composition. This would be 'explaining away', not explaining. While a knowledge of the pre-formed bits and pieces which are sub-structures of the music may contribute to understanding, it does not get to the heart of the matter, which is the newly created whole structure.

I began this chapter by quoting an educator who takes his strength as such from being also a creative writer. I conclude by referring to a complaint of Papert (1980, p.188), who is at once an educator and a scientist, leader of the team that invented the innovative computing language LOGO:

"In current professional definitions physicists think about how to do physics, educators think about how to teach it. There is no recognized place for people whose research is really physics, but physics oriented in directions that will be educationally
meaningful. ... It seems to be nobody's business to think in a fundamental way about science in relation to the way people think and learn it. The concept of a serious enterprise of making science for the people is quite alien."

Papert himself has demonstrated ways of transcending those limitations, calling his goal "Mathland" (ibid., passim). I suggest that we need people in Holbrook's and Papert's spirit, people who will research music as music in ways that will be educationally relevant. We need to get away from concerns centred on how things happen now, towards researching new ways to build 'Musicland', a learning environment in which musical insight, musical response, musical creation will thrive anew, because musical decision-making is nourished as an everyday, unconstrained way of thinking.
As I explained above (see 7.3), the examples studied in Chapters Four to Six were made by pupils in the age range 11 to 14, and my only claim to a firmly established thesis is in regard to that age group. However, I suspect strongly that similar conclusions apply across a broader range, and in this appendix I present six examples as evidence for the truth of this suspicion, without claiming that they are conclusive on their own.

Davies collected Rain Song, "a spontaneous outpouring by a three-year-old in a nursery class during a play session with a guitar", and her commentary (1986, p.279-282) is extremely interesting. She shows how the girl drew elements from a known song and from vernacular 'pop' conventions, to extemporize music which revealed aspects of her feelings about normal childhood frustration of wishes. But Davies also demonstrates that the song has an essentially artistic mode of significance.

She points out the musical relationships linking the three phrases sung to the words "Then I 'ad nothing to do about it" (see Ex.32, p.187). They are united by pulse and by overall shape, but each is slightly more intense than the one before. The high pitch of the third "do" note is further intensified by inflection. This leads to a fourth phrase, whose musical relatedness to what went before, like an A - A - A - B conclusion, is confirmed by the patterning of the words. Despite the "micro-intervals characteristic of infants" (p.280), the girl ends by sliding down to an accurate tonic on the very last note. The abbreviation by one crotchet of the second phrase in this passage gives a sense of being rushed, matched at the end of the third phrase, which it may not be too fanciful of me to hear as imaging the mild powerlessness of the situation presented. All that said, however, such a description of the music ends by pointing beyond itself; when one returns to the recording, one hears that the full set of musical relationships transcends the description.
So there does exist a whole set of complex relationships between sounds, which may plausibly be attributed to non-explicit, musical decision on the part of the child.

Moreover, I suggest that these musical relationships, although shorter-term than most of those discussed in Chapters Four to Six, are no different in their general semantic function. By reference to what has previously happened and to what may come, they bring past and future into the virtual present, and so create an

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image of consciousness-time. Davies shows that the child has articulated (and so I would argue learned) something about her "feelings which might not be explored in other ways" (p.281).

An infant's conscious life may be hugely rich in comparison with the means usually available for him/her to articulate it; I think it important that Davies has pointed out the possible "liberating effect" (p.281) of music in this expressive regard, and the possible unnecessary inhibitions that might be imposed by "prescribing limits" (p.282) on the musical vocabulary the young child is to use.

Of course, there are important differences between this singing and the pieces composed by older children. Although the girl twice reifies what she does as 'a song' ("I know a song about that", "I'm singing a rain song"), it has plainly not been planned, and is not executed, with an overall view held in any way fixed in the mind. It is the music perceived as an activity that is called 'a song'. Here even more than in the older pupils' pieces, it is plain that 'wholeness' exists at a level other than that of a 'work'. Davies shows that the girl resorts to nonsense syllables and to speech, when inspiration fails; the image of consciousness-time as it were peters out and then resumes.

Nevertheless, I think it fair to say that one can hear operating already in this song by a three-year-old the central features of musical insight, creation, and learning discussed in Chapters One to Three. "Art is the surest affidavit that feeling, despite its absolute privacy, repeats itself in each individual life." (Langer, 1967, p.64)
A.2 'Fantasy'

*Fantasy* (two takes — recorded examples A.2(i) and A.2(ii)) was made by 8/9-year-old pupils of St James' Church of England School, Bermondsey. The teacher was Muriel Squires.

The opening parallel thirds rise, and this creates progression, although at first the music is fairly bland. But the thirds continue to rise while more thirds are added above in a descending pattern, and from bar 6, chromaticism adds to a strong sense of progressing tension.

Ex.33

The chromatic harmonies result from playing what look like parallel thirds (a technique previously known to these pupils), but on a scale with a Gsharp/Aflat inserted between G and A. The top A of the diatonic xylophone was removed to make room for the bar to be inserted in place. I suspected that this extraordinary scale had originated in a fortuitous disarrangement of the bars, but the pupils were adamant that "When we got the instrument, it didn't sound right; so we tried all the sharp ones, till we got the right sound."
The two-fold increase in pulse, along with the glissandos and the dissynchrony of the fast repeated notes, unite to intensify the urgency still further.

Three firm knocks open the piece, and seem to end it, placing the intensity of feeling within a frame of secure regularity. But finally the fast repeated notes break out of the frame; the drum is abandoned so that the xylophone can play an intensely discordant cluster of three notes, made still more awful by a crescendo.

That this structure of intensifying feeling finally breaking its bounds is a chosen structure, not the mere outcome of lucky chance, is evidenced by the coherence of the direction in which the changes across several musical parameters lead, and (perhaps less crucially?) by the pupils' explicit insistence that their music was the outcome of listening and choice.

Although more extensive evidence is called for, the example does tend to confirm that children of this age creating music are engaged in an activity of essentially the same sort as their older brothers and sisters. Musical thought, autonomous from any words or notation which may accompany it, has brought into being a structure of 'wholeness' which is an order of virtual time. Creation and skill learning are united in an act of insight which is ultimately about the self as consciousness-time.

During the recording, I noted (from the pupils' body language, and from listening to rehearsal performances) that the first sound on the wood-block was not intended as part of the music. So I proposed recording a second take. The drummer said speculatively "I think I'll play the maracas this time." The pupils tried this, and after a little discussion reached the solution heard on the second take.

It is interesting that these primary school pupils' reaction to my invitation to record again was to plan changes in instrumentation. They assumed that the thing to do was to re-make the music. Of course, there is a well established overall plan, but the pupils considered their plans to be subject to alteration. It
would be interesting to discover when and how pupils come to assume that music should normally take a finally fixed form. I suspect that the way we organized composition projects at Boldon Comprehensive School—always to culminate in a recording (see 3.5), may have given the pupils an implied message of this sort. If so, there is no reason to deduce that pupils must always or normally undergo this shift in attitude.

A.3 'Glimmer and the Metal Men Stars'

This piece was made by 10/11-year-old pupils at Bessemer Grange Junior School, Dulwich. The teacher was Shampa Bryson.

It has a kaleidoscopic quality, with a slowly changing interplay of timbres and rhythms. The first bars (Ex.34) are linked by a one-bar ostinato rhythm, but this is taken into a quasi-sequential falling pattern over four bars ('a'). The next bars seem at first to be a varied repeat of the four-bar falling idea. The rhythm is the same, the falling idea is the same, although movement within each bar is in thirds, and by steps not leaps. But expectation is surprised by exact repetition of the two-bar phrase 'b'. Then all is repeated, so we may be led to expect an ostinato eight bars long; instead the xylophone moves on to new material, so the unit of thought is revealed to have been sixteen bars.

Ex.34

When the metalophone counter-melody (Ex.35, p.192) enters, its repeating length may appear to be two bars, but again varied repetition surprises expectations, in this case giving a firmly conclusive four-bar structure. But then octave transposition makes eight bars the unit of musical thinking after all.
When (after some time) the lower xylophone part (Ex. 36) enters, the tune is a mirror inversion of 'a', but rhythmically varied. And because, at least at first, this is repeated exactly as a four-bar ostinato, the inversion of 'a' is heard with 'b' as well as with 'a' itself.

What is musically important here is not so much the differentiation of phrase lengths counted in number of bars, however intriguingly the listener's expectations may be surprised, but rather the consequent richness in reference forwards and back at any moment of listening. The listener's memory links each moment to a range of different past moments by a range of different likenesses and differences. And anticipation forges similar links to the future. Perhaps it is because past and future are made to be 'present' in this complex way, that we may speak here as elsewhere of the creation of virtual time.

Some might feel that the pupils need a more organised formal structure. The opening promises considerable differentiation of texture and phrase-length, and while there are further intriguing moments, it is not clear that they are related to each other. The pupils had plainly planned to end with Ex. 35, but they had devised no way of getting smoothly into it.

On the other hand, it might be that these pupils' style is meant to be hypnotic-static. Certainly, as with the older pupils' music, it is in the 'wholenesses' which do exist, in the piece's successes, that the teacher's suggestions for further work may be rooted.
Two 14-year-old girls near the start of their CSE course recorded this song. However, I noted at the time that the composition was largely the responsibility of just one of the two, who also did a lot of work on it at home.

La-la-la-...

I believe in you, Jesus.
They won't let you down,
And though my heart feels sorrow and sore,
They believe that we don't know.
Sing this song and it'll come true.
Oh Jesus, we love you.

Can you remember so[?],
John, he baptized you.
A bird came down and made a sign,
Jesus, peace will come true.

La-la-la-...
Oh Jesus, peace will come true.

Jesus, please forgive me now.
I know that I've done wrong.
They told me no harm would come,
And look what they have done.

I feel the fire inside me now.
It's burning hot. What have they done?
I feel the fire inside me now.
It's burning hot. What have they done?

I believe in you ...

A bird came down and made a sign.
Oh Jesus, peace will come true.

The song effortlessly relates the dove that appeared at the baptism of Christ to the dove of peace. At the same time it relates sin to the crucifixion and to the fire of hell. But above all it relates peace to love, to forgiveness, and perhaps even to the healing power of music itself ("Sing this song and it'll come true").

These unities are articulated not only poetically, but also and perhaps principally musically. Thus the soaring vocal line of the verse and the painful vocal line of the recitative are each restricted almost entirely to the same range of a fourth (but using
all the semi-tones and some smaller intervals within!), along with the lower tonic.

The accompaniment uses just three chords, A, E, and D. Indeed, the harmonic basis is further unified, in that they always appear in the pattern A - E - D - E. However, the pattern is heard at three different rhythms; eight beats to each chord at the start of the verse, two beats to each chord in the second part, and four beats to each chord after the recitative. The pain of hell is related to this change in rhythm, and to an increase in tempo, which in turn is maintained through an unexpected five bars on the dominant, leading to the return of the first verse.

The sudden gaps in the chordal accompaniment, when the guitars are struck instead of strummed, but when the melody flies on, point us forward to the absence of harmonies in the recitative section, when the knocking may even relate to the nails in the cross. I am indebted for this suggestion to an unknown colleague in discussion at the course "Music 11-18; Extending Horizons" at Bretton Hall College, 22/3/85. In addition, each of these gaps points forward to the absence of chordal accompaniment for the two lines added to the end of the return of the first verse.

The 'catches' in the voice in the recitative (inflections impossible to notate accurately, but see Ex.37) create a silence near the start of each four-bar phrase, which then proceeds legato. This lop-sidedness relates closely to the sudden disjointedness of the rhythm, to the flattening of the sixth, and so all together to the jarring pain and guilt of the words.
The exalted transformation of the melody in the return of the first verse (see Exs.38,39) relates to the other features of that verse already noted. A 'blue' G natural now becomes G sharp, and the overall shape is modified by the semi-breves going peacefully down, not intensifyingly up. If one imagines those melodic shapes the other way around, the outcome would be ludicrous, because it would not match (as does the pupils' solution) the particularity of the transformation with the overall progression and meaning of the song.

Ex.38

Ex.39

I know of no experienced music teacher without anecdotes about pupils who fail in most areas of the curriculum except conspicuously in music. Nevertheless, it may still be worth remarking in the present context that the main composer was a member of the 'remedial' class (The arrangements necessary for her to attend the CSE music group at all proved difficult, as the timetable had assumed that members of that class would be unable to attempt CSE courses), because what one finds in the song is evidence of an act of intelligence of great complexity.

My own response to this song has lost none of its intensity after many hearings. These pupils' insight into the way consciousness may pass through time, specifically as though through fire to healing, may have been for them a learning about self. But
I believe it may also be, for any that listen sympathetically, a genuine revelation about self. It is a unique revelation, not because it is the product of rare or extraordinary talent, but because there is so much to be revealed about consciousness-time that everyone can show us something new.

A.5 A twelve-tone piece

In this 'O'-level class, I modelled the idea of making a melody comprising all twelve notes of the chromatic scale. For homework, each pupil was asked to make a piece using that technique if she or he wished. But as always, the instruction was "listen and decide". Serial technique was not discussed before the homework was presented in the following week's class.

This pupil decided to use a tonic pedal throughout, as though to provide a secure anchor for what may have been his first excursion out of tonality. (He had joined Boldon Comprehensive at the start of his fourth year from another school, and although he was an accomplished violinist, clarinettist, saxophonist and jazz improviser, he had not the experience of other sorts of composition, shared by the other pupils in the class.)

The first twelve-tone tune might be considered a modified chromatic scale, but the pupil's other decisions ensure that it has musical direction. I have labelled the melodic units as 'a', 'b', 'c' and 'd' (see Ex.40, p.197). Thus 'a' is immediately repeated, but with the interval extended and the first note shortened. 'c' can be heard as an extension of 'b', both as regards length and as regards interval. 'd' represents a recession, in regard to rhythmic on-the-beat-ness, in regard to upwardness and span (it contains the first downward step within a melodic unit), in regard to firmness of internal tonality (the previous three units consisted of notes with clear tonal relations with each other; 'd' insists on the tone-semitone pattern so often used by Britten in tonally disruptive contexts), and in regard to dynamic.
The tonic pedal then undergoes inversion in both senses. Although the second tune starts with the same two notes as the first, it immediately jumps to the top of its octave range, in order to move downwards in a similar way to the way in which the first tune had moved upwards. Just as the first tune had culminated in the tension of an upward-tending semitone, so the second drives downward to the flattened supertonic. The pupil has clearly felt the relevance of melodic inversion to atonal work, and perhaps some
form of more exact inversion might be suggested? In fact, the tune has only eleven notes, but it is difficult to argue that this detracts from the music.

The return of the first tune is more intense, with an added octave in the bass tune, a curtailed introduction, subtly changed rhythms, more varied dynamics, and with the right-hand octaves still inverted. So again there is a unity of decisions, binding into a unity the relationship between the first section and its modified repeat.

So, as in the younger pupils' work, one finds that musical achievement lies in the wholeness of decisions uniting many relationships of sound into a coherent structure. Moreover, it is in the light of that wholeness that the teacher may discover ways of helping. The use of canon, perhaps inverted canon, is one possibility that seems strongly suggested by the two-part texture, by the fluid rhythms, and by the presence of inversion. The interest in inversion suggests that serial techniques might be discussed as a possible starting point for the next assignment. Again as in the younger pupils' work, the act of creation appears closely linked to an extension of technique.

A.6 An improvisation

These pupils first improvised together during a 'Holiday Course for Young Composers' at Boldon Comprehensive School, and they decided to continue to meet once a week at lunchtimes, as the 'Improvised Music Group'. Of the six pupils who were present when this recording was made (the fifth or sixth meeting of the Group), those playing flute (aged 16), alto saxophone (14), and piano (16) were more experienced as performers, than those playing clarinet (16), tenor horn (14), and trombone (13). The saxophone player is the same as the pianist in A.5 above. In the absence of a score, I refer to events in the music by their approximate timing from the start.

On this occasion, no plans were settled beforehand, although the pupils had sometimes improvised within an agreed
structure, for example playing a set of duets in a fixed order. I think it is clear that they draw on that experience in creating their new piece, so that the absence of explicit advance planning does not preclude very detailed planning as the piece proceeds. For example, it begins with a piano and flute duet. The piano plays a short arpeggio into a chord (Ex.41); then again; then just a chord. The flute plays a single note to each of the first two chords, then a short phrase to the isolated chord, so that the players as it were exchange roles. The saxophone's melodic fragment (Ex.42) is closely related to Ex.41, and it is immediately taken up by the flute. The flute and saxophone continue mutual imitation and transformation of ideas, taking into account both melodic shape and dynamic inflection. The clarinet, tenor horn and trombone are careful not to disturb the two-part texture by joining in, until a deep piano chord suggests they do so.

Ex.41

Ex.42

Perhaps the most striking thing about the recording is the intricacy of this sort of micro-structure. There is a particularly complex moment at 0'45", when a piano melodic fragment is verticalised into a staccato chord. The flute responds with a staccato note. The piano chord, and the flute note, are then each played tenuto. The players all hear the appropriateness of following this delicate passage by a thickening of the texture, and a crescendo, from 1'00" to 1'15". This is intensified by piano trills; which, however, then signal a sudden stop. Only the clarinettist seems taken by surprise.

At 2'15", the gradually rising pitch and intensifying rhythm of the piano chords, moving upwards to join the high flute notes, is complemented by the entry of the trombone near the bottom of its register, but with a rising phrase. This upwardness leads to downward movement in all parts, mostly using motifs based on Ex.42, and culminating in the piano's transformation of a perfect fourth
into an augmented fourth (Ex.43) at 2'45". That melodic intensification of downwardness, combined with the addition of the lower octave, is taken by all the players as the culmination of that section, and they move on to something more even in both pitch and intensity.

Ex.43

These decisions are made as the music goes along, but they seem to be the same sort of decision as those discussed in Chapters Four to Six above. They result in the creation of complex 'wholenesses' of relationships of sound, whose coherence (I claim) does amount to an image of time passing, the "primary illusion of music" (Langer, 1953, p.109). It is plausible to account for those coherences neither by chance nor by 'intuition', nor indeed by verbally explicit decision making. The only acceptable explanation is musical thought, transcending any verbal thought which accompanies it.

Among the many skills deployed and perhaps extended by their creative use is that of maintaining a coherent atonality, by playing notes outside whatever scale may have been implied by the previous passage. The clarinettist's technique is not always quite adequate to this, and it is interesting to hear the others' vigorously atonal response to her (transposing) C major scale at 1'15". It is difficult to pass without comment the pianist's musical sensitivity and modesty; clearly very accomplished technically, he subordinates that technique to the emerging overall structures of sound.

One can readily detect a correspondence of textural and motivic decisions, creating a coherence of direction at almost any point, but it is harder to argue that the players achieve a satisfying overall structure. It is true that the piece begins and ends with a piano and flute duet; the motif of Ex.42 is pervasive; and, arguably, the fourfold pattern of gradually thickening texture
followed by silence or by single strand is a unifying structural idea. Despite this, I think one is left with the impression that the piece might well have been shorter or longer, and that its end was determined by a coincidence of silences rather than by anyone's musical decision.

The tape might be used as a resource to bring to light details of the decision-making that happened too rapidly during the performance itself to be recalled. This could draw to other pupils' attention the procedures used, and could also form the basis for the Group to undertake more explicitly planned work later. The teacher might suggest that more time be spent on each idea; each relationship of sounds which emerges. The teacher might also suggest that a return to previous ideas later in the piece (not just to previous motifs, but to previous ways of using motifs), with a readiness to respond to any fellow-musician heard to do so, would help to cohere the overall structure. The pupils might or might not consider some advance decision-making about overall structure appropriate to their future improvising.
<table>
<thead>
<tr>
<th>Example number</th>
<th>Title</th>
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<th>Date</th>
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<td>4.1(i)</td>
<td>'Crazy Horses'</td>
<td>4 boys</td>
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<td>Autumn 76</td>
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<td>&quot; &quot; (take 2)</td>
<td>5 boys, 2 girls</td>
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<td>'The Whole Wide World'</td>
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<td>1SW</td>
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<td>Ostinato piece</td>
<td>4 girls</td>
<td>1A</td>
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<td>'Escape'</td>
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<td>'Jack'</td>
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SIDE THREE

6.1 'The ...'
   5 boys
   GS
   13/11/84
   363

6.2 'Nightfall'
   4 girls
   GS
   10/2/83
   369

6.3 Unnamed piece 2
   4 girls
   GN
   29/3/83
   465

6.4 'Night'
   5 girls
   GS
   24/5/83
   587

6.5 'Santa Conquers the Martians'
   5 boys
   GS
   10/1/84
   278

6.6 'A Dedication to Beethoven'
   4 girls
   GE
   10/10/83
   006

6.7 Unnamed piece 3
   4 girls
   GE
   10/10/83
   120

6.8 Unnamed piece 4
   5 girls
   GS
   1/7/81
   378

SIDE FOUR

A.1 'Rain Song'
   1 girl
   [2]
   -
   -

A.2(i) 'Fantasy'
   3 girls
   [3]
   9/6/86
   005

A.2(ii) '' (take 2)
   -
   -
   023

A.3 'Glimmer and the Metal Men Stars'
   3 girls
   [4]
   1/7/86
   -

A.4 'A Bird Came Down'
   2 girls
   4th yr Autumn
   CSE
   82
   -

A.5 A twelve-tone piece
   1 boy
   4th yr Autumn
   CE
   84
   -

A.6 An improvisation
   4 boys,
   2 girls
   [5]
   13/12/84
   005

[Note 1 - 1963 'overflow' tape; Boldon Comprehensive School]

[Note 2 - from Davies (1966); (c) C.U.P., reproduced with permission]

[Note 3 - Miss Squires' class (8/9 year olds); St James' CE Primary School, Bermondsey]

[Note 4 - Class 4H (10/11 year olds); Bessemer Grange Junior School, Dulwich]

[Note 5 - 'Improvised Music Group' (a voluntary ensemble of 13 - 17 year olds meeting at lunchtime); Boldon Comprehensive School]
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TRADITIONAL, Banana Boat Song

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