Role -Taking in Free Improvisation and Collaborative Composition

Jacqueline Sarah Walduck

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Part II

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Abstract

Role-taking, the adoption of solo, accompanying or punctuating roles by a given part or parts may exist in any form of music.

In Part 1, I have argued that the structure of free improvised pieces can be articulated in terms of player-functional or material-generative roles taken by ensemble members, and that these roles may, in turn, reflect the interpersonal dynamics of the group. The first four chapters uncover possible roles, and propose a methodology for mapping the structure of improvised pieces.

Part 2 is a portfolio of backbone compositions - compositions written for one or two instruments with the intention of adding further parts in collaboration with other musicians. The compositions, including the process of their realisation, make use of the roles uncovered in Part 1, leading to musical structures suggestive of long-term or large-scale human interaction.

The technique is expanded to encompass interaction with another art form - film. The final piece in the portfolio demonstrates how the two media interrelate by means of an awareness of role-taking within and between them.

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Introduction: improvisation and collaborative composition at the end of the Twentieth Century.

If the landscape of Western Art music performance was to be defined with reference to improvisation, there would be a dip at the end of the nineteenth century and the begining of the twentieth. A decline in improvised art music during the late nineteenth century was followed some twenty-five years later by the rise of a new strain of music which increasingly employed improvisation in its performance practices. This music was jazz, sounding its way from humble origins to the powerful echelons of the Classical concert hall, as classical composers such as Stravinsky, Milhaud and Tippett copied elements of its styles. Later on, the art of improvisation itself was incorporated into the concert works of a number of American and European composers, and improvised performance now seems to be edging its way back onto the concert platform of a variety of venues, for a variety of audiences.

What amounts to a dip in the landscape of Western Art music performance has had crater-sized ramifications for those engaged in musical study: improvisation made its comeback to public music performances early in the twentieth century, but has not made a significant mark on the widespread, institutionalised study and research into Western musics until the latter part of the century. Hence, since its reintroduction into the performance traditions of Western Art music, improvisation has presented an intriguing set of possibilities and challenges to musicologists and composers.

It offers something that classical music, traditionally notated and fixed before the moment of performance, does not: a live exploration of sound

during music performance, in which performers can play with musical ideas or respond to each other's material in real time. Since the music consists largely of intuitive responses to a flow of ideas, it necessarily offers players a freedom of expressive utterance. For composers who incorporate improvisation into their works, there is the possibility of another musical mind enriching the original ideas, players bringing a spontaneous expressivity to the music otherwise unimagined or not notatable. Improvisation as a working tool offers composers the chance to discover or refine ideas by playing with actual sounds, not just written symbols.

Composers from "classical" or academic backgrounds such as Stockhausen, Cage and Ligeti have made use of improvisation in their works, and in the wake of what might be termed the jazz "tradition", its canon of works, methods and a self-aware written history and commentary, has come a line of composers whose work, though not constrained by an adherence to jazz styles, embraces improvisation in its processes of devising music and performing it.

So useful is the art of improvisation, that I believe it is returning to its deserved place in the field of contemporary music making. However, music analysis literature has yet to catch up with improvised music in a wholly successful way. The literature so far has concentrated on: jazz solo as theme and variations (Lichtenstein, 1993), pitch class sets in music therapy improvisations (Lee, 1991), cognitive models of the generation of improvised music (Clarke, 1988, 1992; Pressing, 1987, 1988) and much has been written on the culture and practice of improvisation (Bailey, 1992; Solomon, 1986; Sudnow, 1987). Essentially group improvised pieces have not as yet been analysed successfully by using those traditional methods which have as their central aim to uncover organicism, as in the work of Schenker (1969), Saltzer (1962), Forte (1973, 1978) and so on, or treat music as if it were a language, (Ruwet, 1987; Nattiez, 1990).

Whittall's (1992) article exploring the relationship of music analysis to human science considers how Foucault's (1970) human sciences; psychology, literary and cultural studies and sociology and therefore hybrids such as music analysis, inadvertently derive analytical models from the three natural sciences. In Foucault's *Order of Things* (op.cit.) these are biology, philology and economics. Whittall suggests that while there are models that reflect the structures of psychology and hence biology (the

"organic" models listed above are examples), and linguistics, hence philology (semiological theories), none reflect economic theory. This depicts man seeking out his desires, thereby "giving rise to the notion of *conflict*, and by way of containment of that conflict, to that of *rules*" (Whittall, 1982: 35).

Not quite modelled at natural science level, but taking leads from the hybrid human science of social psychology, the analysis in Part I uncovers the musical *interactions* of improvising musicians, exploring how structure can be described in terms of musical role-taking. The analysis in this section refers chiefly to Free Improvisation (improvisation with no explicit *a priori* rules). Through a focus on role-taking, the analytical methods used also uncover organicism and conflict.

If the reader is tortured into submission by the detail of the argument in Part I, the following terms of surrender are requested:

1 Henceforth consider the idea of interaction in any statement of definition of group improvisation.

2 If ever tempted to analyse group improvisations, do not ignore the proposed analytical methodology and model of role-taking.

3 When listening to or playing in group improvisations, become aware of player interaction as a driving force within the music making, and consider using the proposed model as a set of resources to communicate your intentions when playing.

The central thrust of this work is that interaction, particularly role-taking, is crucial to the structure of collective free-improvised music.

Part II presents a portfolio of collaborative compositions, which make use of the idea of role-taking. The pieces are **backbone** compositions, in which a part for one or more players is composed and other players devise their own parts during a fleshing-out process. In the mid 1980's, Peter Wiegold developed the practical techniques of backbone composition; they were researched further by Tim Steiner (Steiner, 1992). Far from being a *cantus firmus*, the backbone has a different generative character. It gives the piece a central essence from which the ensemble members improvise and develop their parts, building in any direction, but always led by an overall shape and

dynamic. This process of developing parts, the realisation process, derives from the working practice of many jazz and rock bands, although my aim is to draw on the expressive characters of the players without imposing any stylistic constraints.

There are seven backbone pieces presented in this thesis. By being clear about the interactive (role) possibilities of the starting material in each one, I have been able to introduce some intricate ideas while giving non-restrictive space for collaborators to add their influences[1].

Consider the vibraphone backbone in Score 1, *Garden Garden.* The material ranges in intricacy from simple pulses at the opening to the frenetic melody that follows shortly after. Giving these two ideas the roles of background and solo respectively enabled the realisation ensemble and I to make sense of the backbone and to improvise with its musical ideas, producing a piece which is soundly-structured, not just a string of responses.

L'Amore d'Alfredo (Chapter 5, Score 2) gives a clear stylistic lead, although the players were asked to work with the intense emotionality behind the piece rather than be constrained within a style. The piece fulfils an early ideal that backbones could be as beautifully-structured as fully written out pieces, and the players are led through its intricacy by responding to the given solo material as well as to formal ideas such as repetition, contrast and "spiral" forms.

Structural techniques are developed further in the pieces in Scores 3-5, *The Gathering Doubt, Circus* and *String Soundscape.* In these pieces, ways in which the given material could be handled during the realisation process are also explored (Chapter 7).

Fruit from the research is borne out in *The Dark Box (of my shutting heart)* (Score 6), in which interaction is at the heart of the generation of material - the finished piece traverses seamlessly from backbone to free improvisation and back again.

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[1]Scores 1-7 in Volume 3 are not the final compositions, but the bare backbones awaiting realisation. The finished compositions are either the recordings or video tapes enclosed with this thesis or live performances of the realised backbones.

Lastly, in *Splatt!*, a collaboration with a film maker, the interaction between music and pictures is explored by investigating the roles taken by each medium.

Imagine yourself at work with the backbone in Score 1. Imagine how the backbone sounds, or play it through. Allow imaginary sounds to enmesh with the backbone.

Then listen to the realisation on DAT 1, track 1. Here is the result of a collaboration with **The Neighbourhood**, a quartet of the following personnel: Lincoln Abbotts, flute; Sean Gregory, keyboard; Paul Griffiths, guitar; Jackie Walduck, vibraphone.

Almost certainly there will be differences between this and your imagined realisation. Each version is marked by the creative energy of its realisers. The version on DAT 1 is finished with the artistic stamp of the band and enriched by **The Neighbourhood's** sound and identity.

Here lies a double-edged challenge to traditional notions of composition: the piece was composed with the specific intention of leaving space for other musicians to contribute to its final form, yet the piece has not been composed by committee as in popular notions of group composition[2]. There is an integrity to the finished piece that comes from the composer's overview, and the fact that collaboration takes place *after* the backbone has been completed and a musical identity has been established.

At its best, the process makes for a vitality borne of the combination of clear compositional ideas with the spontaneity and expressive potential of improvisation.

In the following thesis, the model of interaction in Part I provides a grounding for the collaborative compositions in Part II, in order to bring about improvised contributions which reflect a clarity of intention without being stylistically constrained.

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[2]The National Curriculum for Music specifies that, at key stages 1-3 in performing and composing tasks, "Pupils should be given opportunities to ... use sounds ... individually, in pairs, in groups or as a class.

1 What is Improvisation?

Why Define Improvisation?

> Improvisation is always changing and adjusting, never fixed, too elusive for analysis and precise description; [it is] essentially non-academic ... any attempt to describe improvisation must be, in some respects, a misrepresentation, for there is something central to the spirit of improvisation which is opposed to the aims and contradicts the idea of documentation.
>
> (Bailey, 1992: ix).

The elusive character of improvisation, and warnings against the perils of its study in an academic way have been well-documented. One reason for this is that there seem to be as many different conceptions about improvising as there are improvisers. While the exact nature, characteristics and limits of improvisation may never be absolutely agreed on, there is a basic assumption that there must be a central definition or essence. Bailey (1992) states that the main characteristics of improvisation apply to all of its manifestations. However his exploration of these characteristics is in the context of particular idioms, and he never does illustrate the same in the different.

"Improvisation" is a term rarely used by improvising musicians - they refer to the idiom they play: jazz, funk, free or whatever. The ad-hoc or thrown-

together connotations of the term seriously misrepresent the years of preparation and dedication brought to improvised sessions, and certainly when Bailey's book was first published (1980), the term itself was often avoided. It comes as no surprise, then, that the few attempts to define the word, have come from an academic rather than a performing community (Sorrell, 1992; Solomon, 1986).

However, there is much to be gained from seeking an identity that encapsulates such a broad range of idioms, not least of which might be to allow paths for connection between different methods, styles and subcultural values. Far from being a rebellious stance, the persistent refusal to define improvisation upholds traditional notions of analysis as atomistic, mechanical and self-contained.

An attempt to define improvisation is also an attempt to communicate some of its joys and its nature to someone with little actual experience of it in any form. The commonly-held belief that you can only really understand the nature of improvisation by taking part, while probably true, also sets up a problem. If taking part is one's only access, and this is not possible, or it takes a long time to feel part of a process, this attitude sets up barriers of exclusivity: those in the know and those in Hell. The process is a bit like learning to meditate. You only really learn by doing it. But meditation techniques are made accessible to newcomers by teaching or communication in terms relevant to their understanding or culture. Improvisation is not just about a process, but also about the generation of artistic products; if improvised pieces are to exist as autonomous pieces, they should be studied as products: not only as part of a subculture, or as a process but as an ever-expanding body of music.

In defining improvisation, an approach is needed which acknowledges the myriad of definitions or understandings without subsuming these within a higher unity. The current chapter will argue for a Wittgensteinian family resemblance; a "family of structures more or less related to one another" (Wittgenstein, 1976: 32). It will seek a central identity by looking for the nature of the family resemblances and explore the blurred borders of the discipline, where improvisation meets composition or interpretation.

The type of improvisation at the centre of the explorations will be free improvisation. This is for several reasons. Firstly, it seems to be the purest,

most unpredictable of improvisation genres. It emphasises in-the-moment flexibility, and cannot be properly defined in terms of its idiomatic rules or constraints, since any player could do anything at any time. In concentrating on the spur-of-the-moment aspect of improvisation rather than *a priori* idiom, this chapter will attempt to challenge some of the values of Western music and those types of analysis that measure music in terms of its deviance from or adherence to norms.

Lastly, this is the type of improvisation of which I have the most experience, and which informs the research and compositions in this thesis. My intention is to reflect the personal nature of improvisation by a personally-informed consideration of the literature currently in existence.

Towards a Definition.

For most writers attempting to define the word improvisation (Sorrell, 1992; Bailey, 1992; Treitler, 1991) a dictionary is the first port of call. Definitions here seldom get beyond phrases like "immediate composition" (*New Grove Dictionary of Jazz*) or "The creation of a work while it is being performed" (*New Grove*). Though these give a broad idea, they lack precise definition, and do little to communicate the nature and spirit of improvisation.

Treitler (1991) in an investigation of Medieval improvisation goes deeper, tracing the etymology:

> "Improvise" conveys a negative, from the Latin *improvisus* ("unforeseen"). (Without the negative, Latin has left us "provide", which, looking ahead, is what we would like to do for our children, for example.) And so dictionaries give us such definitions as "to perform without preparation".
>
> (Treitler, 1991: 66).

He goes on to point out that the use of negatives implies an exception to something more grounded, planned and prepared; that something is composition. Hence the term "improvisation" is reserved mainly for cultures in which composition and improvisation exist as separate spheres.

Echoing Treitler's *improvisus*, Neil Sorrell considers the use of the word in everyday speech, "conveying something that is insufficiently prepared and of no lasting value" (1992: 776). Examples are given of an improvised shelter or speech, which can be made (improvised) using readily-available materials. Compared to a house or political speech, a bivouac or party conversation would not be expected to last forever. Even so, at the time of their creation, they could be extremely useful physically or rewarding emotionally. Thus they can be seen to have a transient value.

Sorrell's use of the phrase "lasting value" is rich in its ambiguity; he could mean that the improvised object is seen to have little value *because* it does not last - a value judgement from a culture that treasures ancient houses, antiques and art and prizes its cultural heritage above artistic experimentation. He could mean that the value of the object at the time of its use does not last - however, experiences such as making friends at parties or building one's own shelter are seldom forgotten, building self-esteem and resonating with other related experiences. In which case the original value of the object itself can be re-packaged as the value of a trace left by an experience. Sorrell's equivocal use of the word also sums up the status of improvised musics within the British musical establishment; works are seen to be of a lesser value because they are not preserved for eternity as scores, and the art of improvisation is seen by some to be of greatest value in education rather than the concert platform, in which a learning process may be perceived as more important than an artistic product.

Either way, the shelter, party conversation and improvised music are all characterised partly by the use of readily-available material and the quality of impermanence.

The nature of impermanence in music is not as clear-cut as it may at first seem. At first glance, improvisation does not seem to be impermanent at all. Pieces have been recorded mechanically, the recordings stay in permanent existence and can be extremely worthwhile, serving an aural tradition. Moreover, the recordings maintain their identity as recordings of

improvised pieces. The identity would be lost if performances were repeated note-for-note from transcriptions - the performance process would emphasise the reproduction of predetermined events rather than an intuitive response to current events. Improvisation is essentially a creative process in which musical material is generated, developed and responded to.

Christopher Small (1980) has pointed out that in literate traditions, performers may be replaced for different performances without changing what is considered to be the music. Berio's *Sinfonia* is still the *Sinfonia* whether the vocal parts are sung by the Swingle II or Electric Phoenix. Expressive nuance changes, but the pitches, durations and dynamics at the macroscopic level broadly conform to what is written in the score. In this case, repeated performances remain recognisable in terms of the conventions of Western notation; that is in terms of an ideal "performance". As there is no ideal existence of freely improvised pieces, (only concrete existence), repeated improvisations differ greatly, even if their aesthetic aims stay the same.

Impermanence of improvised pieces therefore rests on the fact that it is impossible to reproduce ideal improvised pieces rather than the notion of recording and playing back actual events. As has been explained, any value judgement deriving from the everyday use of the words "improvised" and "impermanent" can be attributed to the pervasiveness of Western Art traditions and the perceptions of their adherents. What "impermanence" does convey positively is something of the transforming and flexible quality of improvisation mentioned by Bailey in the quotation at the beginning of this chapter.

In an ever-adjusting climate, freshness and originality must surely play a part; these distinguish improvisation from playing from memory. Larry Solomon has probed this area, posing the following question: if discounting the idea of playing from memory is taken to an extreme, would it include contrivance of a style or idiom? Would the definition have to exclude jazz or baroque ornamentation? Certainly there was a good deal of contrivance in the jazz world of the mid to late 1980s, in which be-bop revivalists such as Tommy Chase and Courtney Pine quoted riffs, phrases and even whole solos from their predecessors. These players still considered themselves to be improvisers, even though they emphasised authentic reproduction rather than fundamental originality.

The quest for originality pervades many of the cultures of improvisation, especially "free playing". Solomon's (1986) documentation of the polarity between the exploration of new material and the conformity which gives rise to collective identity as a group evolves outlines a process familiar to many improvising ensembles. The article was written during a decade of philistinism, populism and as Bailey (1992) has said "shrivelled imaginations". Where Bailey has seen free improvisation as resilient and irrepressible (though underground), Solomon's article evokes a stagnation and lack of originality his own group was obviously feeling very strongly. Limping through this arid landscape, the group was tending towards an ongoing refinement of ideas. He describes an inclination towards eliminating "unsuccessful" ideas and re-using successful ones - the antithesis of openness and discovery. Rather than being a ruthless, deliberate process, the implication is that this was an unconscious, evolutionary one - Solomon uses the term Darwinian.

While exploration and discovery are essential to maintain the freshness of improvisation, this often occurs within a framework of traditional and formal knowledge. As Steiner has pointed out (1992), improvisation embodies intuitive and formal processes which

> function with reference to a basic experiential understanding of music as well as to a more conventional learned or objectified understanding of music.
>
> (Steiner, 1992: 79)

Even without *a priori* idiom, a free improvisation may at any time become idiomatic, rhythmic, tonal or modal. In these cases certain traditional processes come further into focus and intuitive ones work within the appropriate learned or objectified framework.

This is not to say intuition becomes suppressed when there are formal conventions; it is seen as a valuable resource in all kinds of improvisation. To "let go" and still remain within musical conventions requires a solid understanding of and thorough training in the characteristics and techniques of the idiom as well as a flexible approach to using them. The key, as pointed out by Sorrell (1992), is that a good improviser can absorb and move within idiomatic frameworks freely, rather than manage a somewhat

unimaginative cultural appropriation, which never seems to reach beyond a superficial and unauthoritative imitation of style.

Sorrell sees known frameworks as extending beyond the individual to embrace the audience and context of improvisation performances.

> What the improviser and audience share is an understanding of the models on which the performance is based. They also share the belief that the models transcend the efforts of a single musician who can only dip a cup in the ocean ... [improvisation] does affirm individual creativity, but within the constraints of communal values and expectations.
>
> (Sorrell, 1992: 785)

This helps to explain why performances of improvised musics tend to attract small, knowledgeable audiences. There is a certain amount of truth in the above statement, though idiomatic and cultural boundaries can be extended. Herein lies a challenge for the avant-garde; how to push music forwards when the audience largely wants to affirm its knowledge of pre-existing musical models. Sorrell also uses the idea of shared expectations to argue against any truly free improvisation:

> So-called Free Improvisation, which was prevalent in the West in the 1960s and 1970s eventually followed patterns that conform to more traditional kinds of improvisation ... finally the improvisations themselves began to acquire an idiom that logically militated against its claim to be truly free.
>
> (Sorrell, 1992: 785)

In my own experience, things have moved on since the 1970s, for these days free improvisation is no longer tied to the avoidance of all patterns, becoming at times modal, tonal, or rhythmic, sometimes contriving or parodying idioms when it feels intuitively right to do so. The term usually means that there are no explicit *a priori* rules, not no rules at all.

The effect of an audience (and other performers) on improvisations is not just with respect to a shared knowledge of models. The company of other human beings makes improvisation an essentially social process. It is at once an expression of individuality and an expression of the relationship between the individual and the ensemble. One manifestation of the social aspect of improvisation is for ensembles to establish a group identity, as

described above. An individual player's work can conform to the unspoken identity to varying degrees. He/she may also be conscious of deliberately conforming or dissenting, the musical results of which have a direct impact on the shape of the improvisation (see Chapters 3 and 4 for a fuller exposition).

Individuality is manifest in another way among improvising musicians, in the cultivation of a personal sound or "voice" on the instrument. This is not merely the icing on the cake, but a central aspect of playing, stemming partly from the basic, exploratory nature of improvising. Music psychologists have commented on the essential expressiveness of all music performance (Clarke, 1992; Sloboda, 1993). In all kinds of improvisation individualised nuance is developed to create a sound that is expressive in itself as well as serving to express musical structure[1]. Compare the later vocal style of Billie Holliday to that of a classical singer for example.

The performer/instrument relationship has also been taken into account by Bailey (1992), Clarke (1992) and Sudnow (1983). Generation of musical material is so fast that players often take "the line of least resistance" (Clarke, 1992: 791) in order to circumvent technical difficulties on their instruments. The result is that technical limitations can be a deciding factor in choosing musical paths to express an idea, leading to the accumulation of habits that become part of an individual style (always open to expansion). Sudnow (1983) gives a detailed account of learning to play jazz piano. Already a competent pianist, his method of learning to play jazz was based initially around teaching his hand different chordal or melodic "formulae", which would fall fluently under his fingers as he played. By the end of his account, he speaks in terms of finding "good notes ... everywhere at hand, right beneath the fingers". The account shows a shift in emphasis from playing by motor skills towards an aural flexibility, but little is explicitly written up about the influence on his playing style. However, Sudnow illustrates two useful points; firstly that his mastery of manual (as well as aural) skills was at the root of the process of learning, and secondly even when he became highly skilled, his description of facility was still in terms of *finding* notes beneath his fingers, emphasising the significance of tactile as well as aural fluidity. Clarke and Sudnow describe a phenomenon which Bailey (1992) refers to as the player's "tactile experience" of playing the

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[1]Barthes discusses the "grain" of the voice in his essay of the same title (Barthes, 1977).

instrument which actually "establishes much of the way [the player] plays" (Bailey, 1992: 97).

At the end of the twentieth century, we live in an age of information, with a wealth of stylistic and formal techniques at our fingertips. During the process of improvisation, these can be recognised and responded to instantly (with sincerity or irony), and discarded almost as instantly if desired, whether the responses are objectified or intuitive. It is also possible to be in an ensemble in which you did not recognise formal conventions, and in which your responses would range from communicative successes to hit-and-miss estimates. Either way, you would still be contributing to the improvisation, and as Steiner has stated (1992) improvisation can be a great social leveller; the music-making can embrace stylistic misunderstandings, and make them meaningful either by a process of affirmation or mediation, or by allowing differences to coexist and shape the music.

While the background of learned knowledge does not help to *define* a performance as improvised - in Western culture, it would seem to bring it closer in common with non-improvised musics - it is part of the process and product of most improvising situations. As far as the search for the defining characteristics of improvisation goes, the embodiment of formal and intuitive processes is clearly part of the essence of all improvisation. However, these same processes are at work during almost all kinds of musical performance, and particularly in the process of *interpretation* of written musics. The concept is therefore part of a central essence of improvisation, but not an analytical definition, as it does not draw the difference between all kinds of improvisation on one hand and all kinds of performance on the other.

The processes of improvisation and interpretation are closely linked. Since any interpretation involves a degree of improvisation, and improvisations are often interpretations of given pieces (as in improvisations on jazz standards, for example), could they be seen as opposite ends of a spectrum of pieces with free improvisations at one end and interpretations of strictly-determined pieces at the other? (Figure 1.1).

Taken alone this does not give the whole picture. Musics at both ends of such a spectrum and at every point in between may or may not also be

defined by reference to formal techniques and the generation of new material.

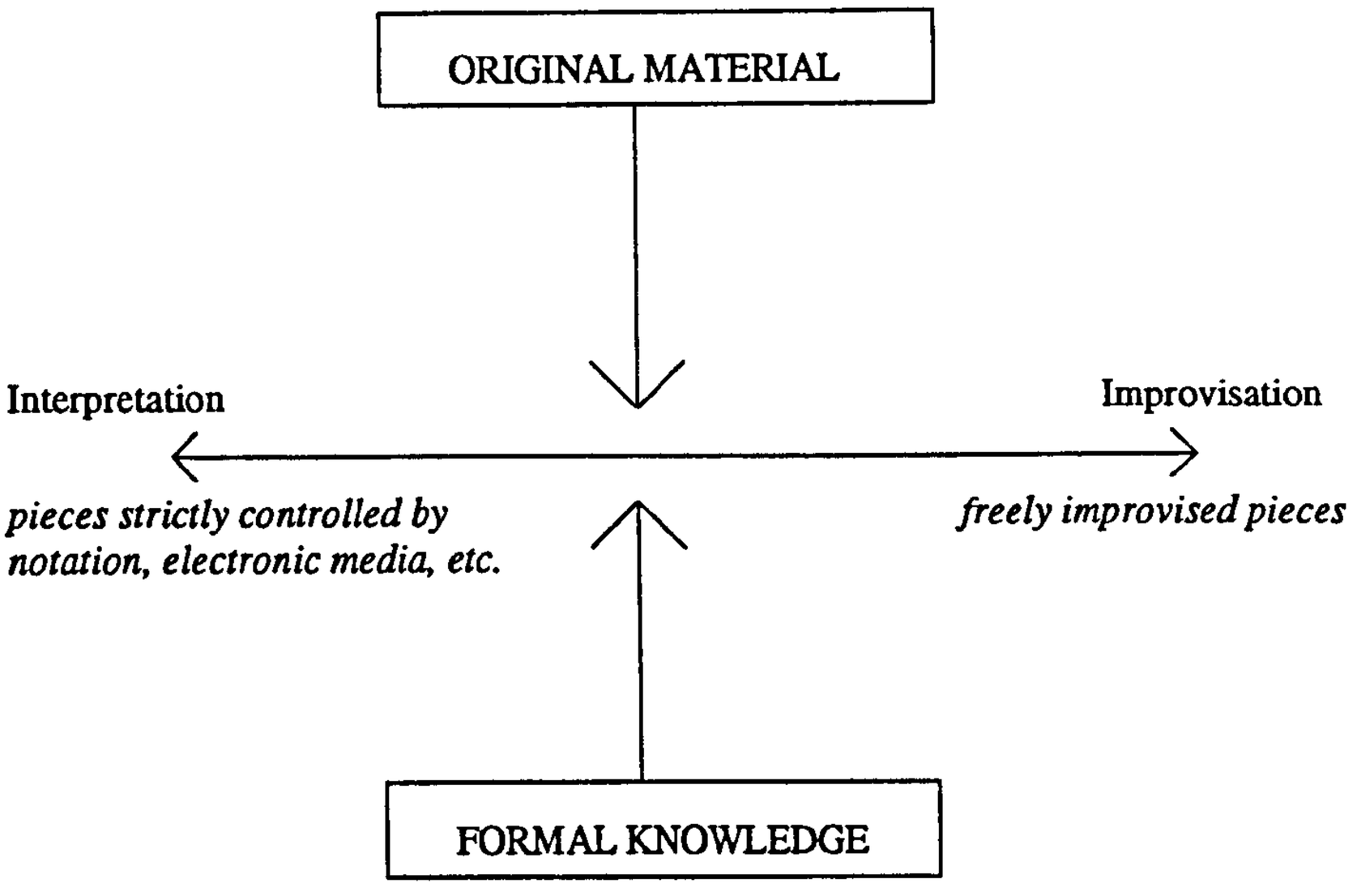


Fig. 1.1. A theoretical interpretation-improvisation spectrum.

The spectrum in Figure 1.1 is shown as having a variable relationship to these two factors. With pieces controlled by strict adherence to idiom, for example in Baroque figured bass realisation, formal knowledge takes on a stronger relationship to the spectrum. On the other hand, in the realisation of Cage's *Variations II*, generation of material is by musical interpretation of the distances between dots and lines on sheets of clear plastic dropped onto a floor. The process is one of interpretation, rather than unstructured improvisation. The score sets up a realisation of the dots and lines which is carried out note-by-note, with relationships between each parameter of each note serving to *separate* the notes from each other rather than to draw them into melody-forming relationships. This could be said to be within a post-war avant-garde idiom, but from the players' point of view the *choices* of notes are by interpretation of a score, not by adherence to a known style outside the score. A result is that the original material takes on a stronger relationship to the spectrum and formal knowledge takes on a weaker one. Both examples are interpretations of scores involving different kinds of improvisation. It would therefore be impossible and futile to measure which of the examples contained the greater degree of improvisation.

Ultimately the spectrum is not an accurate representation; the relationship between improvisation and interpretation is not linear, and the two areas are not in bi-polar opposition. An increase in the degree of improvisation does not necessarily lead to a decrease in the amount of interpretation. Further, consideration of the degree of strictness or freedom (the horizontal axis in Figure 1.1) does not define either improvisation or interpretation, neither can it quantify the amount of improvisation or interpretation in a piece. Given this network of relationships little would be gained from an attempt to glean information about improvisation from a quantification of the "amounts" of improvisation and interpretation in different genres.

The other activity with which improvisation has close links is composition. In comparisons of the two improvisation often comes off worse, its results seen as lacking the polish and integrity of fully composed pieces. Sorrell argues that an improvised performance is limited "to what one musician can actually conceive and play ... thereby lacking in complexity" (Sorrell, 1992). This does not take account of the fact that improvisation is often a group activity, open to what several musicians can conceive and play, which has the possibility of being richer than the conceptions of a single composer. The fact that improvisation is rarely a solo activity indicates the fundamental importance of the presence of other players. Sorrell may be referring to the solos of individual players. This would be to ignore the interactions that take place between soloist and ensemble - a bit like just picking out the tunes in an opera. Improvising soloist or opera singer are certainly at the centre of an audience's attention, or at least are the focus of musical activity, but the music consists of substantial material behind the soloist or singer.

Most committed improvisers know the expressive and timbral possibilities of their instruments or voices more intimately than most composers, and are able to bring to their work more detailed and "personal" playing than many composers specify. For example, the playing of both the classical Indian flautist Hari Prasad Chaurasia (Chaurasia, 1995), or jazz pianist Cecil Taylor (Taylor, 1989) is rich in personal style, and displays few technical limitations.

A second red herring is to argue that conscious revision is the key differentiating characteristic. This is seen by Sorrell as the main difference between the compositions and improvisations of a composer such as Beethoven, who was known to be an accomplished improviser but who also

spent years refining short themes. Listening to all kinds of improvisation, it is possible to hear revisions and reworking of musical ideas within a single improvisation. And by observing or taking part in an improvising ensemble over a period of time, it becomes possible to recognise the types of idea people have, and the ways in which players reintroduce ideas in different contexts. At a broad level, this helps to define a player's style. It also illustrates that ideas are reworked over extended periods of time. On the other hand, composers may on occasion write without the need for revision or editing; this is the popular conception of Mozart's working methods. What an audience may hear in any musical performance is something that has been generated quickly or something that has been reworked, either over a period of time or in the heat of performance. Though it is more likely that composed works will have been revised and improvised works will contain some material that has been generated at the moment of performance, the difference only works at a general level. It gives a flavour of the difference, without defining the difference precisely.

With generative processes at work in composition and improvisation, cognitive models shed further light on the nature of the processes of improvisation and composition (Clarke, 1992; Pressing, 1988; Johnson-Llaird, 1988). Figure 1.2, derived from models proposed by Johnson-Llaird (1988) and Clarke (1992) shows a simple cognitive map illustrating the generative processes of improvisation.

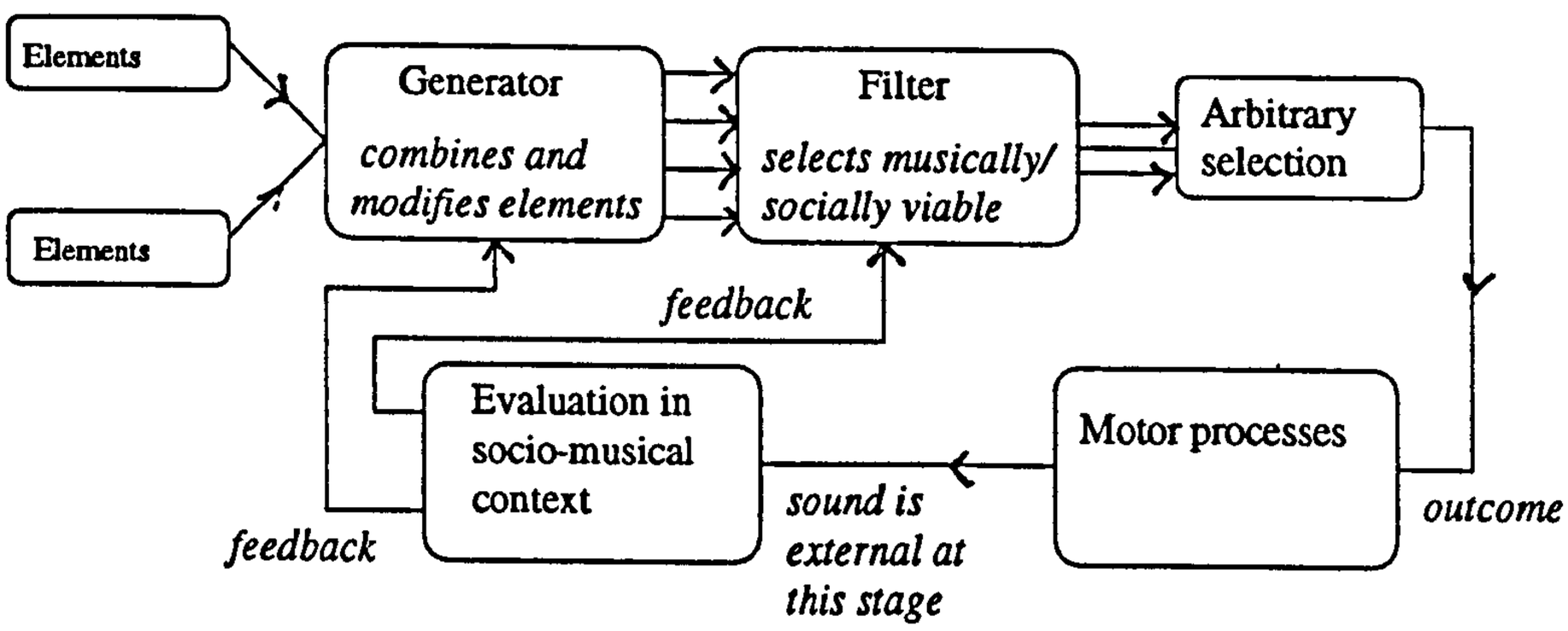


Fig. 1.2. Cognitive map showing generative processes of improvisation, after Clarke (1992).

In Figure 1.2 "Elements", which could include all possible notes, simple rhythms, instrumental effects, and simple combinations feed into a generator, which combines and modifies them. Ideas from here are then filtered for their musical and social viability (what is acceptable in the group culture), perhaps including idiomatic viability. Degrees of originality, polish or refinement could exist in end-products of either composition or improvisation, but the in-the-moment generation of material in improvisation means that the next stage, that of selection of viable alternatives, must be intuitive rather than pondered. The final musical output in improvisation is evaluated in terms of its social and musical context as it is heard, not usually before it has been heard. Information from this evaluation feeds back to earlier stages in the process, the stages of generation of possible ideas and filtration of these ideas.

This is a simplification of an extremely complex process, and should certainly not be regarded as a detailed representation. My intention is to raise two issues. The first is that, while evaluative processes must feed back to generative and filtering stages for both composition and improvisation, with improvisation evaluations take place *as the results are heard.* This is in a dynamic and largely unpredictable musical space which is also a social space. Here more than ever can improvisation be compared to conversation, not because as in semiotic models music is like language, but because musical discourse is like social discourse.

When people engage in conversation, similar processes take place. Thoughts, responses and word-strings are generated, possibly assessed for viability, and evaluated within the immediate social context (partly) on the basis of the responses of other members of the group. Whether a person persists in a line of conversational behaviour if he/she does not get the expected or desired response depends on the individual's sensitivity, persistence or love of conflict. This can lead to increased or decreased interaction; the person could feel accepted, try a different tack or feel spurred to persist with the original one. In these simple terms, there are remarkable similarities between the processes in social groups and free improvising ensembles. When new musical ideas are introduced, they may or may not be responded to (by imitation, accompaniment, duetting). Some players are comfortable to persist with the idea, some return to the idea at a

later stage, and some withdraw the idea, which is characteristic of Solomon's process of group conformity.

Lastly, in listening to music, it is sometimes possible to hear whether a piece has been composed or improvised; the two processes can bring about different qualities of performance. While many Western Art pieces aspire to bring about tighter, more unified structures, players are often tighter and more unified, ensemble unity sometimes brought about by a conductor. Given a greater degree of structural freedom, improvised pieces often have a quality of roughness about them, not necessarily bad ensemble playing, but ragged edges which do not shepherd every single note back to a central fold.

The same initial generative processes can produce improvised or composed pieces. In spite of this, regarding improvisation and composition as simply different outcomes of the same motor programme (improvisation = instantaneous composition) ignores the differences that arise the moment the generated material emerges through an instrument or on paper.

There are cultural, evaluative and musical differences separating the two areas, but countless similarities between the processes and products of both. There are also many pieces which use combinations of composition and improvisation, of which the seven backbone compositions presented in Part II are the tip of the iceberg.

Improvisation Family Resemblances.

Improvisation is a nebulous concept. It has no hard edges, yet is broad enough to warrant a more complex definition than "instant composition". There are identifiable central features which communicate the nature and spirit of improvisation. Some of these are:

> intuitive and learned processes, intuitive and learned understandings of music;
> idiomatic, instantaneous, prepared, impermanent, contrived, spontaneous, original, unpredictable, responsive.

All forms of improvisation embody permutations of these and other characteristics, resulting in a network of criss-crossing correspondences. The correspondences also cross over into other kinds of musical activity, such as composition, performance, listening, and interpretation.

Wittgenstein proposed in his later work that there is no single concept, no "pictorial" meaning behind words. Words obtain their meaning through use within language. This is clearly demonstrated when one tries to conceptualise improvisation. It compares very well with Wittgenstein's consideration of the meaning of the word "games":

> Look for example at board-games, with their multifarious relationships. Now pass to card-games; here you may find many correspondences with the first group, but many common features drop out, and others appear. When we pass next to ball-games, much that is common is retained, but much is lost. - Are they all "amusing"? Compare chess with noughts and crosses ...
>
> (Wittgenstein, 1958: 31).

And so on. Wittgenstein's family resemblance seems to be the most fitting model for an all-embracing concept of improvisation. Beyond being merely descriptive - it gives a structural model - it is also satisfying because it is non-reductionist. Improvisation as a concept and as the label for a set of subcultures has a rich and complex identity. To attempt to articulate this identity is to attempt to affirm and share some of the values inherent in the culture. These values have long been encrypted through the rituals of jam sessions and gigs, or encoded into pieces of music or the language surrounding the subcultures.

Rather than *separating* improvisation from the related activities of interpretation and composition, teasing out some of these values into the crude light of Chapter 1 has helped to draw *connections* between improvisation and the other two areas of musical activity. Also, it has become possible to see some common values between different kinds of improvisation and the tradition of Western Classical music; for example, mastery of the instrument (in jazz and free improvisation); mastery of climax

(jazz soloing); timing (rhythmic interplay, or the exposition of a raga during the *alap* in North Indian classical music); rhythmic precision (funk). It has become possible to articulate, or perhaps reiterate some differences; deliberate non-mastery of the instrument (some free players, particularly during the 1970's); refusal to reproduce pieces note-for-note (jazz solos, free), unevenness of tone, or distorted tone (jazz, rock); refusal to stop playing - not giving a definite stop time for a gig, and hence refusing to pander to a commercial concept of gig-as-product; the collaborative composition of material (most pop, rock and jazz bands use improvisation during the composition process, if not the end product).

On the level of personal identity, one can feel resonances with some aspects of the culture of improvisation more than others, and through this work notice connections with other musical cultures. In the excitement of a gig or festival, one can find oneself swept along as if in a huge river: it is better to find an eddy and remain there, looking around at what else there is (outside the river itself) rather than drifting unthinkingly downstream only to end up in a backwater.

One problem with most of the recent considerations of improvisation is that they overlook or neglect completely the importance of interactive processes. Sudnow's account is almost entirely based around his private practice, though he was playing in a jazz trio at the time; Sloboda (1986), Lichtenstein (1988) and Kennedy (1987) focus on the art of jazz *soloing*, and Sorrell's attempt to discriminate between improvisation and composition on the grounds that improvisation is limited to the spur-of-the-moment creative and technical resources of a single musician is way off the mark. While it may be appropriate for cognitive models to be based around the processes within individuals, the notion of "the individual" seems to be something of a Venus fly-trap for musicologists dealing with the subject of improvisation. Perhaps the cult of the individual remains a seductive influence; perhaps the complexity of groups seems too new. It is time to challenge the cult of the individual; social psychology has demonstrated that groups can be looked at in depth, and *as groups*. It is from this discipline that ideas for perspectives on group improvisation will be drawn.

When other ensemble musicians are mentioned in the texts above they are usually assigned the role of audience. True, the audience is an influential social factor as far as improvisers are concerned, particularly in the context

of evaluation and feedback, and the desire of performers to articulate shared models of music, but the dynamic relationship between one musician and another, exchange of ideas, sub-grouping, conformity and conflict as may be played out in improvised music will be the subject of this research. In order to grasp improvisation and, indeed, collaborative composition from an interaction-based angle, the focus will be on role-taking.

2. Roles in Music.

Role-taking may exist in any interactive situation as a means of exchange or communication. In other words, people in social situations, characters in plays or improvising musicians can interact through the roles they consciously or subconsciously adopt.

Roles in musical performances exist simultaneously on different levels. They can exist as player-functional roles (solo, countersolo, background), social roles (leader, follower, supporter) or dramatic roles (protagonist, hero, jester). The notion of *role* is usually connected to that of *character*, partly because of the theatrical connotation of both. In all three levels outlined above, there is a difference in meaning which facilitates a study of one but not the other: *character* describes the nature of the (musical/social/dramatic) part, whereas *role* describes its function. It is the functional aspect of ensemble parts that will be discussed in this chapter.

Steiner (1992: 93-100) has shown that interactive roles can operate as channels for communication between improvising musicians. The roles shown here are derived from his work, but a distinction is drawn between heckling and punctuating roles and will be explained later. I have also extended his notion of the "ignorant role" to that of a contrapart, which has a more specific function.

Effective roles.

I have defined seven player-function roles. These are:

1 Solo.
2 Background.
3 Heckle.
4 Punctuation.
5 Counterpart.
6 Contrapart.
7 Block.

A perfectly interacting ensemble with unchanging, always clearly-defined roles would be about as exciting as taking toast and tea (and if toast and tea can be exciting at certain times, the metaphor holds true). Exciting, or even well-defined music does not depend on rigidly adhered-to roles. However, before delving into the turbulence of conflict and chaos, it is necessary to examine those norms towards which effective roles must lean.

A good **solo** should be dramatic and worthy of attention in order to draw focus aurally. In terms of interaction it should stand out against the background, as Roger Dean has said (Dean, 1989: 50), to make contrast. In theory this is easy to define. In practice, the art of sustaining melodic or gestural interest over an extended period requires years of practice. For these reasons, this function seems to be the most readily understood and methodically practised in improvisation traditions.

A **background** should be solid and continuous, and should allow space for any solo parts. This means it should be less dramatic and more consistent in its texture than the solo; terms like "dramatic" and "consistent" are necessarily relative in this interaction. The task of a player contributing to a background texture is to blend with that texture. A background plays a complimentary role to a solo, but could either lead or follow it in terms of broad musical discourse; for example, either a soloistic or background part could initiate tempo changes.

It is possible that a background could exist without a solo part. Here, in theory, the part would be too bland to be cast as a solo, perhaps seeming to wait for something to accompany. One could equally imagine a texture of several background parts, no single one standing out as a solo; the music of Brian Eno (Eno, 1975) springs to mind by way of an example. The background label derives from criteria that may be relative and/or stylistic but cause a part to be understood as "behind" other parts.

Heckling and **punctuating** roles are connected in that they are clearest when that material is short and sparse. The difference lies in the placing of the material: punctuation is most effective when it comes at the end of phrases, breaks up long sustained notes, or starts off new phrases. It can function as a springboard or lift. Placed clumsily and played too loudly, it can block fluid solos or generate conflict. A simple example of which I have far too many memories is bad jazz "comping". Comping is actually a type of accompaniment in which a harmony instrument (guitar or keyboard) plays a bland, chordal background to a solo, based on the chord changes of the piece. This can work beautifully as punctuation if the backing chords are well placed, and the supporting function is carried out by the bass and drums. If the chords are mis-timed, neither the soloist nor the rhythm section are supported; at best the chords hang stagnantly in the air, and at worst the musical discourse is empty and confused - jazz hell.

Heckling parts, on the other hand, *could* come in the middle of phrases; in order to function clearly, they should contain some element of the material which they are heckling, which does give a feeling of sarcastic commentary. The function is neither to contrast with nor to break up the material, but to make an observation. Stravinsky is a master at this and uses the role to great ironic effect, for example in the *Three Pieces for String Quartet* discussed below.

The effectiveness of both roles lies also in the choice of material. Punctuating gestures tend to be short, accented and rhythmic. Heckles can be more of an aside; perhaps softer, with a muttering quality. Parts functioning in either of these roles maintain their identity by being short and repetitive. For example, a heckle that follows every change in soloistic material so that it is always changing begins to sound like a countersolo.

Counterparts, for example, countersolo or counterbackground, should be complimentary. Thus a countersolo is a solo part in duet with an already established solo part, in counterpoint to it. A counterbackground is a background part heard at the same time and in complement to a background. There is greater scope for counterheckles and counterpunctuations in collaborative compositions than in free improvisation, since here there is more time in which to devise counterparts that complement rather than diffuse the precise timings that give heckle and punctuating parts their function. For example, this would be achieved by contriving counterheckles to occur *at precisely the same time* as heckles.

Contraparts on the other hand are parts in their own world; contrasolos that contradict solos but are heard at the same time as them, contrabackgrounds that are heard against unrelated backgrounds. These roles have a solo, background, punctuating or heckling function, but are *ignorant* of the basic discourse, style, harmony, or rhythmic feel of the rest of the music.

A **block** is a provocative, interruptive role which somehow manages to disrupt the music. While a player's improvising may be described as *blocking* if they play without listening or leaving much space for other musicians, they may not actually be in a blocking role as defined here. In fact, it is likely that they would be in a contra role. Blocks according to this definition are a good deal less subtle, and differentiate between blocking *playing* which is merely ignorant and a block *role* which actually disrupts the music in a far less subtle way. For example, someone who plays emphatic and very loud clusters repeatedly on a piano might signal an ending to an improvisation; a kind of block that says "shut up"! The most extreme block I ever experienced was when a player began to throw chairs around the rehearsal space. This also caused everyone to stop playing.

Solo, background, punctuation and counterpart roles are generally complementary, whereas heckles, contraparts and blocks can be used to generate conflict. On the other hand, blocks and contraparts could themselves inspire complementary parts: a solo role that is in its own world as far as the dominant strain of the music goes (and therefore a contrasolo) may attract a complementary background. The contrapart may continue in its own way, regardless of its new background, or may be changed in order

to "respond" to its background, heightening the conflict and possibility of change in the music.

The roles listed here exist with varying degrees of subtlety in improvised pieces and also in fully notated pieces. Some of the issues raised will be illustrated in the following discussion of two pieces in which there is a high degree of role differentiation. These are the first of Stravinsky's *Three Pieces for String Quartet* and the opening bars of Birtwistle's *Punch and Judy*.

Stravinsky's *Three Pieces for String Quartet.*

The roles in the first of Stravinsky's *Three Pieces* are so clearly differentiated, they may as well have been written following a recipe. Throughout the movement, except for the first and last three bars, a solo role is taken by the first violin, and a heckling role by the second violin. The viola and cello together make a background texture. The high degree of differentiation is achieved by several means:

1 The solo is an ear-catching melodic part, using four pitches and three durational values. All of the material in this piece is cyclic, but the solo cycle is by far the longest, lasting twenty-three beats. Within the cycle, material permutes producing a whimsical folk-like melody (Figure 2.3).

2 The background, by contrast, follows a seven-beat cycle (Figure 2.1). Again there are four pitches, but the voicing creates a sparse, dry foil to the solo.

3 The heckle material (Figure 2.2) consists of sparse entries of one or two sets of four-note scalic figures. Its shape reflects the contour of the first four notes of the melody. The run of four consecutive pitches is a theme repeated at various points during the solo.

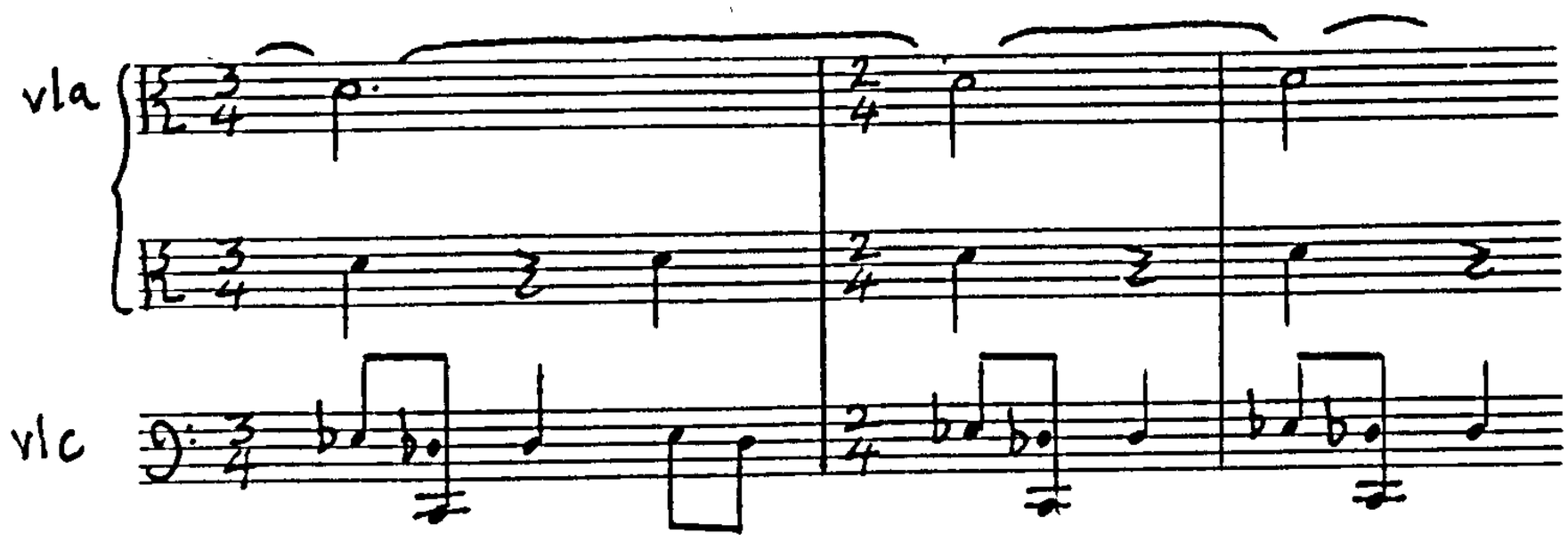


Fig 2.1 Background material

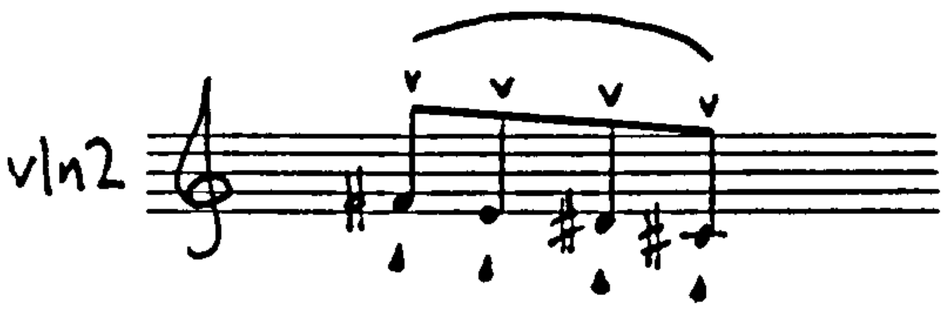


Fig 2.2 Heckling material.

Figure 2.3 shows the melodic cycle (which is repeated exactly) and illustrates the position of entries of the heckle by encircled numbers: 1 shows where the first heckle appears in the cycle, 2 shows its next occurrence, etc.

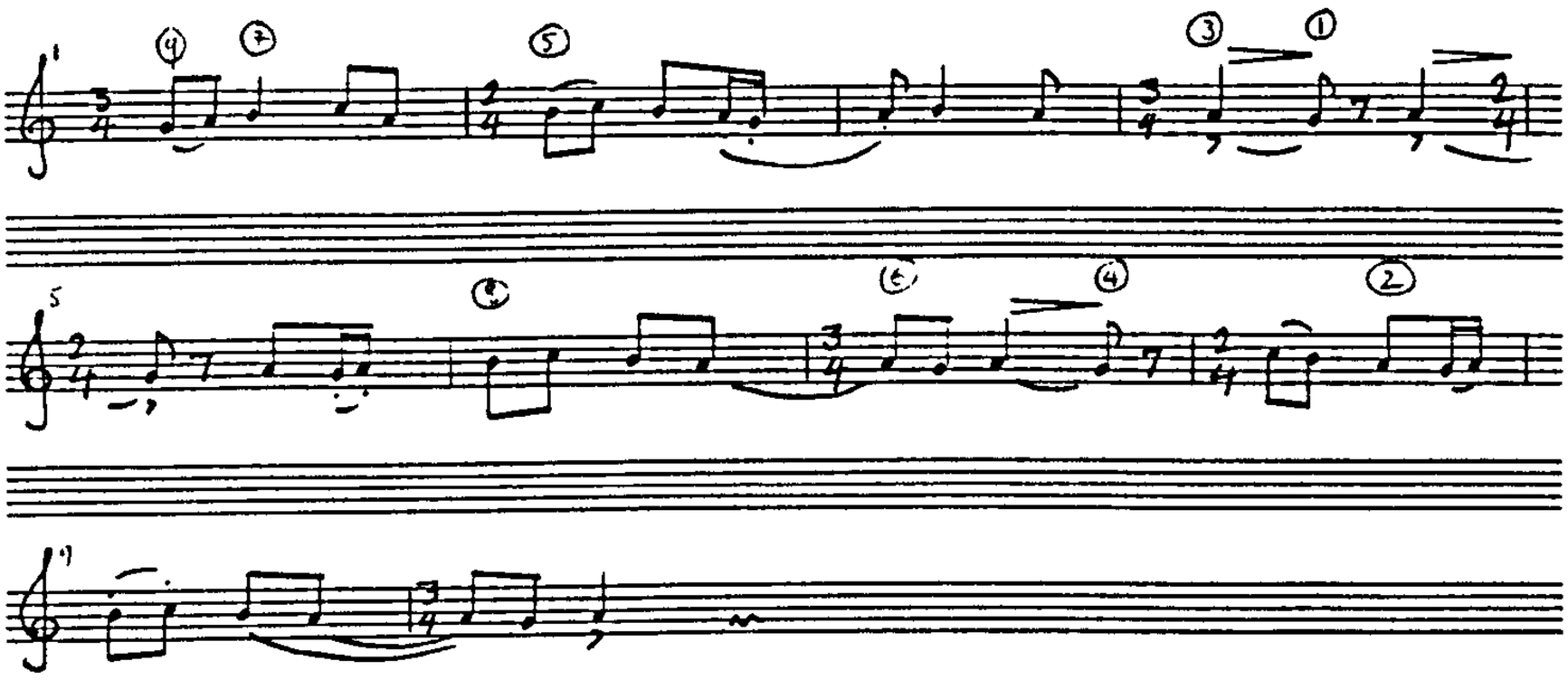


Fig 2.3 Melodic cycle; encircled numbers show the position of heckle entries.

Conflict between the solo and heckle is generated in terms of harmony and in terms of roles. In harmonic terms: consider that G is the "tonal" centre of the solo and F-sharp is the "tonal" centre of the heckle. This serves partly to differentiate between the solo and heckle which are otherwise (registerally and timbrally) close. The harmonic conflict thereby generated is underpinned by the choice of pitches for the background; the set C, D, C-sharp and D-sharp contains the "dominants" of both tonal centres.

In role-playing terms, conflict is achieved by the placing of the heckle material. This is positioned in different places in relation to the repeating melody (Figure 2.3). Thus the first time the heckle is heard is at the G of bar 4 in Figure 2.3, the second time at the third quaver of bar 8, the third time in bar 23 of the score, which corresponds to the first beat of the fourth bar in Figure 2.3. From the analyst's point of view there is some semblance of order: the odd-numbered entries come earlier in the phrase at each appearance, and are four quavers long. Successive even-numbered entries also occur at increasingly earlier points within the second part of the melody, and are eight quavers long (the heckle material played twice in succession). At the surface level events seem more ambiguous. The first heckle seems to come at the end of a phrase, and would thus function as punctuation, except for the reiteration in the solo of the final two notes of the phrase:

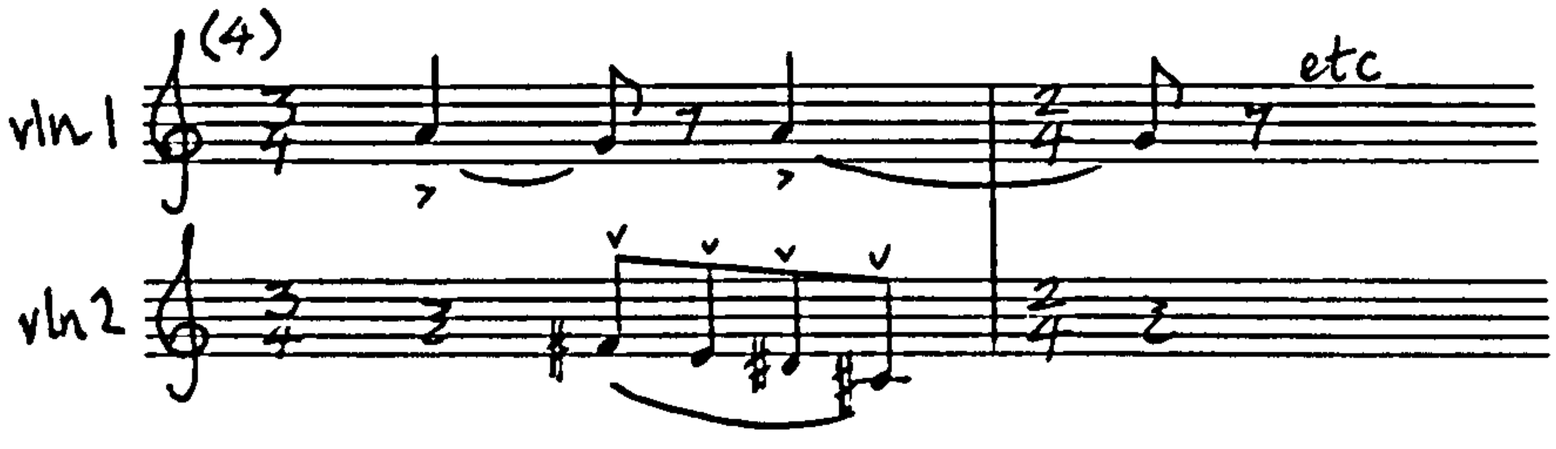


Fig 2.4 The first heckle and solo response.

The gesture is firm and gently insistent, not quite leaving enough space for the heckle to be fully heard. Next time the heckle enters, it is in its (more insistent) eight-note version, but unexpected and somewhere in the middle of a phrase. This is a bit like a low-key power struggle - not the high drama of a classical sonata, but the low drama of family bickering and attention-seeking. There is no build-up, no increase in tension as conflicts are intensified - here the tonal areas stay as they are, and the heckler mutters

and niggles away, simply moving in relation to the solo. Finally the heckle entry coincides with the beginning of the solo. The solo swiftly winds up, and the piece ends. There is no real, wholly gratifying solution, but a simple, clipped, unresolved ending.

Using the analogy of conversation, the heckle is like a heckler to a speaker; an attempt is made to put him in his place; he is then ignored, and left to continue regardless. He is always there, insistent, but not loud or bold enough to interrupt the solo. However, just as water can wear away stone, the heckle in this piece contributes to a disruption of the regularity of the background 3/4, 2/4, 2/4 meter as clashes between the seven-beat cycle, a twenty-three-beat melodic cycle and an irregularly placed heckle are played out.

The Prologue to Birtwistle's *Punch and Judy*.

The roles in the Prologue to Birtwistle's *Punch and Judy* are also quite clearly differentiated, though the material is less consistent. Faster block changes necessitate a rapid establishment of roles, and in the first eight-bar block, in which there is some ambiguity, the results are explosive.

The main solo role is taken by the trumpet (Figure 2.5). The directness of the gesture cuts through the ensuing chaos, and repeated pitches become a theme of the whole piece.

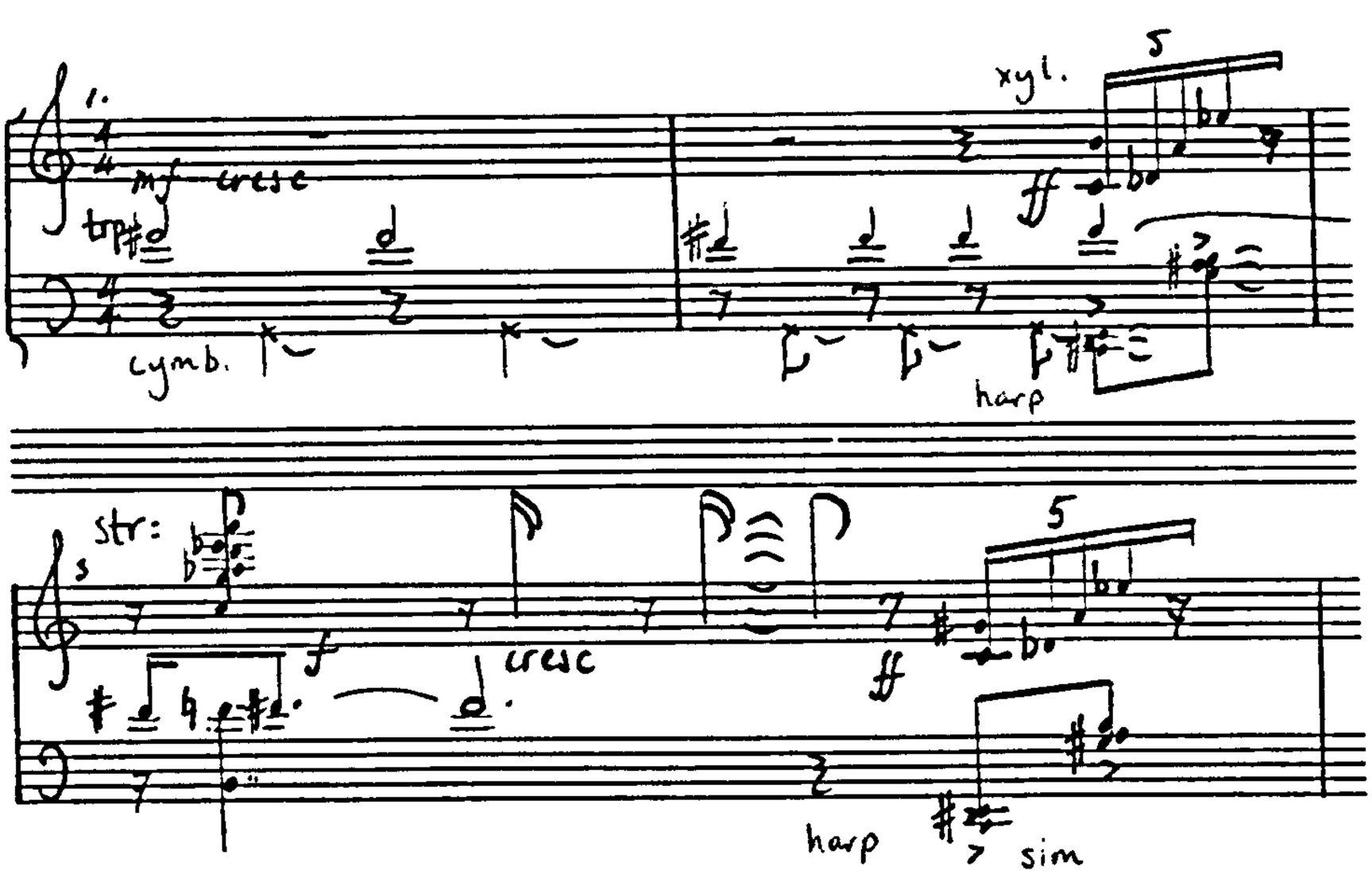


Fig 2.5 Opening trumpet solo, Birtwistle: *Punch and Judy* bb 1-3.

The cymbal part can be seen as a background to the trumpet, while the xylophone part takes on a punctuating role, "shadowed" by the harp. Here, in these first eight bars, the punctuation *is* given space to be heard, coming at the ends of string or trumpet melodic units.

The trombone entry goes almost unnoticed in bar 3, but becomes a miniature solo in its own right. Its syncopated rhythm, growing out of the string rhythm of bar 3 conflicts with the straight rhythms already set up by the trumpet and cymbal (Figure 2.6).

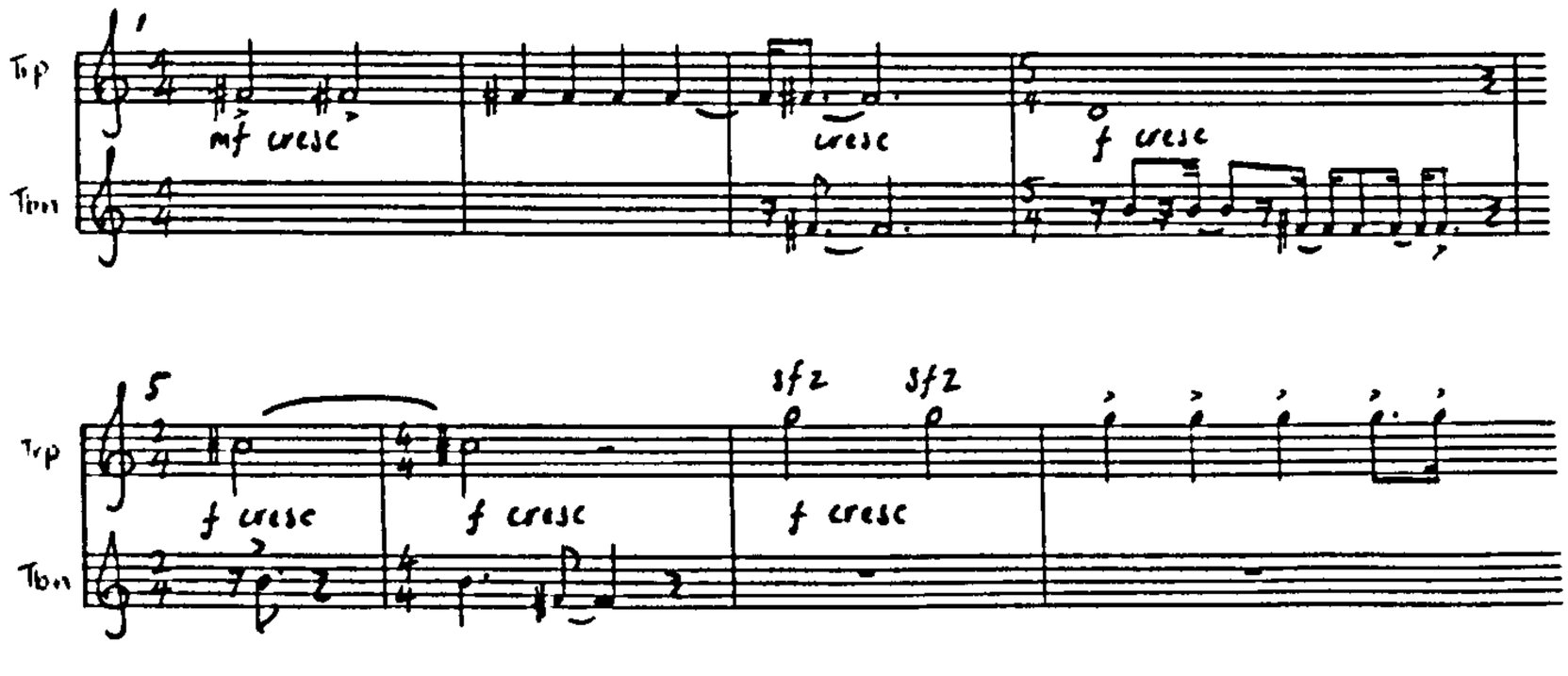


Fig 2.6 Trumpet and trombone melodies, Birtwistle: *Punch and Judy*, bb1-8.

The pace of the music makes the trombone part seem to be of a different rhythmic world. What draws the two parts together, to the author's ears, is the matching of phrase-lengths. Although the trombone and strings are introduced in bar 3, each unit of melody is brought in in relation to the trumpet solo. In some ways the trombone solo could be said to be a countersolo to the trumpet part. Rhythmically, it could be seen to have an ignoring role (contrasolo), as it creates a new rhythmic world, rather than complementing the trumpet solo in any traditional sense. The conflict effected by this is heightened by the addition of percussion noise in bars 4-5. This is scored as "bells", and is the cue for the character Choregos to open the shutters of the hut on stage, but it has been recorded by the London Sinfonietta (Birtwistle, 1989) with loud chaotic clatterings, bells and whistles.

Conflict from Role-Taking.

Both pieces use roles and role-taking to set up order and complementarity, and also to introduce an element of conflict. In any interactive situation, outcome lies somewhere between the opposite poles of conflict and co-operation. For example, in tonal music conflict and resolution have often been achieved by tonal-harmonic structures; particularly by the delay of the perfect cadence. Small (1980) has suggested that this emphasises the private experience of the listener - the listener in drawn into, and identifies with a dramatic argument which is finally resolved. The listener not only bears witness to the resolution, but must have sufficient memory or aural perception to be able to relate the final cadence to the opening material. The whole piece must be heard, not just the ending and, when the final chord has been heard, the experience is complete and the listener may return to the real world.

The nature of conflict in the two examples here is different. It is achieved partly through interactive musical roles. A brief analogy has already been drawn between musical and social roles. It now seems appropriate to include musical conflict and small-scale social conflict in this analogy.

The conflicts arise from a clamouring for attention between solo and heckle or solo and countersolo/contrasolo in the Stravinsky and Birtwistle respectively. There is no attempt either to resolve or intensify the conflicts over the course of both short extracts, they are simply shown to be there. The observer is less drawn into an intriguing drama, and does not need to remember the beginning and any unfolding turmoil in order to appreciate the ending. One must simply watch the clashes and not hope for a perfect world to emerge. The lack of final resolution lessens the separateness of these pieces from other musical experience; in other words, they are less self-contained. Rather than the listener being drawn into the music and identifying with it, the musical discourse seems like another ongoing drama within the epic structure of life; the listener may bear witness to it at some point, like sampling a soap opera, but there is no personal identification with the totality of a musical struggle as it heads to its "inevitable" conclusion.

Unlike the drama of a Classical sonata-form movement, conflict here is played out at the surface level of the music. It may be uncovered by studying a short fragment rather than only being understood by looking at large-scale tonal workings of complete movements *vis-à-vis* Schenker. Of course this will not give the whole story, but the conflict can be understood as it is heard at a particular moment of the piece. And since there is no deep role-playing scheme operating at a background level, as Arnold Whittall has pointed out (Whittall, 1982) the role of the analyst becomes similar to that of an archaeologist: to uncover what is there, rather than to search out organicism. There is no requirement to reduce the material to some master plan, simply to look at the function of one part with reference to the whole at a given time (a short length of music).

All of this has direct relevance to free improvisation and those forms of collaborative composition which involve improvisation as part of the compositional process. Functional roles can serve as channels for communication between players. Indeed, Steiner (1992) proposed that modes of communication can be seen as the mixture of roles lasting while that mode is in operation. For example, one of Steiner's modes might consist of a solo and block, another might consist of a solo and three heckling roles. In directing musical energy through a certain channel, (solo, punctuation) a player has a means to communicate intention to others in the

group, and also a means of understanding how his/her part contributes to the whole.

Further to this, players should not feel constrained by role-taking. Though this can work with any improvised idiom, a rigid adherence to a particular role, or to a strict application of the role concept could itself become a style full of rules and constraints, rather than being a means of communication.

The musical examples here were chosen precisely because the roles in them are clearly differentiated, thus they illustrate the basic roles and their combinations simply and clearly. In reality, there may be a good deal more ambiguity in the precise function of a particular gesture; one could imagine a series of transforming roles that a part may fulfil with the same sort of material within a given piece. At best, then, a knowledge of roles and their musical functions can form a technical resource on which an improvising musician can base an intuitive response to musical discourse.

In much improvisation training there is an emphasis on understanding and effectively responding to material in order to achieve clarity, either in terms of idiomatic accuracy or structure. In the pieces discussed above, it would appear that form can be articulated by changes in material, and also by the roles played out. The following chapter will analyse the relation between the two. Part II looks at whether this has an application in the directing of ensembles towards backbone realisation.

3. Role-taking in Improvisation

Current analytic thought about improvisation often focuses on generative processes rather than the musical results. This is particularly true of collective free improvisation, about which there exists very little analytical or theoretical material (see Clarke, 1988; Steiner, 1992). The situation stems partly from a reluctance to dabble with holy processes, as improvisation is seen by Derek Bailey (Bailey, 1992) and others as defiant of analysis, and partly from an undervaluing of improvised music as Art object. In other words, free improvisation is considered more fun to do than to listen to, and more interesting academically as a skill than as a means to beautiful music. In many cases this may be true. The result of this attitude is that improvised pieces are still seen as throwaway objects. Not only have a lot of babies been thrown out with a lot of bath water, but there is still a good deal of misunderstanding about the nature of improvisation.

Music analysis can make a contribution to this debate by examining precisely what the debate is missing - an analysis and structural model of *musical* processes. While analytical methods continue to adapt in response to a changing musical environment, there has been no completely satisfactory way of analysing free improvisation. The processes and musical results of jazz improvisation are covered with varying degrees of illumination by Kennedy (1987), Pike (1974), Lichtenstein (1993) and others. However, a fundamental difference between jazz and free music reflected in the analytical approach is that jazz refers to harmonic and

stylistic norms, whereas free improvised music may not. Therefore, Lichtenstein's formal analysis of John Coltrane's improvisation on the piece *Giant Steps* treats the work in terms of the elaboration of motifs first occurring in the head or written opening and closing melody. Kennedy refers to stylistic codes and the creation of solos from memorised fragments of material in the Hot, Swing and Be-bop traditions. Pike discusses jazz solos in terms of organic development, and gives the theme and variations as a formal model for solos lasting for several cycles of the underlying chord sequence.

A further problem with much of the current literature, including the three articles above, is that the work has looked at the improvisations of *individuals*: whether jazz solos or improvisation in which one player has played alone (for example Pressing, 1987, 1988). Clarke (1988) and Steiner (1992) have provided ground-breaking analyses of the interactive *processes* of group improvisation. Drawing on their ideas, the following chapter will outline a methodology and structural model for the analysis of collective free improvised music.

Two short improvisations will be analysed in terms of musical roles taken by members of the improvising ensemble, to uncover the structure of the music in terms of these roles.

Firstly each piece will be interpreted in terms of the player-function roles taken by the players. These could be any permutation (selection and combination) of the following:

solo: from jazz and rock terminology; a part standing out from the background because of its drama or melodic intricacy. Two or more solos may coexist.

background: a blander, more simple or repetitive part. This could be an ostinato, drone or texture. It could be an accompaniment in the strict sense of "being with" another part, or simply act as a foil.

punctuation: a part in which short fragments of material interject in the spaces (gaps or held notes) of another part.

heckle: repetitive fragments are placed *against* another part, not in spaces or at the ends of phrases, but in the middle of phrases to cause conflict.

counterpart: a part in counterpoint to another part in the same role; e.g. a solo and countersolo, punctuation and counterpunctuation. There is an implied status hierarchy here; two solos of equal status would be two coexisting solos, but a solo and countersolo implies a lead solo and following or answering countersolo.

contrapart: a part in its own world contradicting the flow of the music. For example: contrasolo - a solo part that clashes with or works against other parts, not necessarily other solo parts. A contrabackground would likewise be a background part contradicting other parts.

block: a part which is blocking and interrupting.

Conflict may be generated by heckling, blocking or contra roles. The method therefore highlights the pieces in quasi-dramatic terms of conflict, resolution and co-operation.

The second analytical approach is based on similarity between musical ideas; taking *all* parts into consideration, musical utterances are arranged into thematic groups. Connections between thematic groups are drawn to form sets of similar or connected groups (Figures 3.4 and 3.14), producing a loose hierarchic structure of musical material. The way in which the material unfolds is then traced through each part, resulting in a reading in terms of how the material generated by each player contributes to and functions towards the whole piece.

The pieces were produced consecutively, with four of the players common to both pieces. Thematic connections between the two pieces can be noted, but have been disregarded here. The object is to look at the pieces as autonomous sonic objects, rather than the "learning" question of what people take from one experience to another.

Improvisation 1

Improvisation 1 was produced by a group of four music undergraduates at City University and myself. The only constraint was that it should last for one minute. No harmonic or rhythmic ideas were discussed, but the degree

of focus and harmonic connection is probably due to the fact that the group had already been playing for an hour or so. An additional group member, not playing here, timed the piece and gave a visual signal for the last five seconds.

The piece was recorded and has been transcribed (Figure 3.1 in Volume 2) to give a graphic approximation of what happened; Western notation can only ever point the way to a musical occurrence such as this one. While it is possible to analyse in detail computer-notated improvisations produced under studio conditions on MIDI-compatible equipment (Pressing, 1987), I wanted to work with what the group produced on their own instruments. For the purpose of this argument, what is presented in Figure 3.1 is as close as possible to the music, with no deliberate alterations or omissions. More importantly, the best means of introduction to the piece is by listening to it on DAT 2, Track 1.

Before proceeding, some explanatory notes on the transcriptions in Figures 3.1 and 3.11:

> Note-heads in the form of an x indicate approximate pitch location of "dirty" or unclear notes.
>
> Absent note-heads for groups of semiquavers (or shorter) indicate an imperceptible number of separate pitches, combining to form a gestural run.
>
> Vertical dotted lines show an implied barring articulated by the two-quaver figure in the tuba part. These were put in as a transcriptional aid, and though to the author's ears the piece sounds (irregularly) barred, this preconception does not affect the analysis.

Figure 3.1 illustrates the roles played out in the piece. For example, the role of the tuba for most of the first page is that of a background. Although the part begins with an arresting gesture, its repetitive nature gives it a background status, as the ensemble parts around it change and develop. Other parts change their material and their functional roles. For example, in the first few bars, the vibraphone functions as punctuation to the tuba. As the interjections increase in frequency, the part begins to merge with the background. Just after this, the saxophone solo breaks down; the entries become slightly less frequent, and the saxophone ceases to be placed in its

own metric space. The result is that it stands out from the background less and eventually becomes absorbed into the texture.

The music is at something of a crisis here. The timing of the tuba entries has become less predictable, and the uncertainty of the players in how to maintain the established pulse is reflected in the "pokiness" of the playing; people play less, with a slightly looser adherence to the underlying pulse. This latter characteristic can be *heard* form the recording but does not actually show in Figure 3.1. The tightness is affected, I assume, as the players listen more carefully to where to place their entries. When the oboe brings in a downward run (just before the first pause on the score), the tuba stays on the high D-sharp, which seems to be the beginning of a new texture. The poky background texture rapidly breaks down again (top of the second page), and becomes a series of punctuating figures grasping at the thinning material, until the anguished wail from the saxophone in the fourth bar of page two.

New soloistic material is ushered in by the oboe, and a new set of roles is soon established. The solo is taken over by the saxophone, the vibraphone returns to a background role, as does the tuba. The oboe and flute heckle the saxophone solo, threatening to mask its rhythmic clarity.

Here the improvisation was brought to an end artificially. It would be interesting to see whether real conflict would have developed between the three wind parts - what seems to happen in the last bar is a battle, within the established style of the piece, for the last utterance. This is indicated not so much by the number of times the players add just one more note, which they hope will be the final one, but by the emphatic articulation used by the oboe and saxophone players.

The structure could thus be read as articulated in terms of establishment of norms, and crises brought about by deviation from these norms, or unfulfilled expectations. At the beginning of the piece and after the pause, a clear "up-beat, down-beat" figure in the tuba provides the basis of a background texture. This establishes a grounding or norm which we basically expect to continue. As the music evolves, the texture breaks down. After each breakdown, new roles (and new soloistic material) are secured. Change arises from crisis. What is surprising and unpredictable is whether everyone changes what they are doing, and to what extent.

Improvisation 1 illustrates two levels of change: at the pause bar, the oboe and flute break away from the poky texture, but the saxophone, vibraphone and tuba revert to it. In the fifth bar of page two, almost all of the players change roles and material, causing a complete shift in the feel of the music.

The thematic analysis of *Improvisation 1* yielded eleven thematic groups, outlined in Table 3.1, and shown on the score in Figure 3.2. Segmentation in Figure 3.2 is by clusters of notes in each part, each cluster taken as a musical thought or idea, regardless of whether they would be considered as discreet ideas in cognitive terms.

A thematic inventory:

Group	Defining Characteristics.
A	Up-beat followed by two quavers, shape: (low-high). Length of up-beat and pitch interval between the two quavers varies.
B	Notes of longer duration than one quaver, played tenuto or legato (since short, marcato figures are a central feature of this piece). These may or may not include ornamentation.
C	Single quaver surrounded by at least two quavers' rest on either side in the same part.
D	Two very short notes on the same pitch followed by a semiquaver on a higher pitch. Notated variously as : , etc. Isolated gesture.
E	Two notes on the same pitch followed by a quaver on a lower pitch. Note-values of the first two may vary: it is the pitch contour which defines this group.
F	Two quavers, low-high.
G	Two quavers, high-low.
H	Two quavers, both followed by quaver rests, same pitch.

Group	Defining characteristics
I	 Two quavers, same pitch.
J	 Runs or scalic figures, rising or falling, note values shorter than or equal to one semiquaver. The overall gestures may be of variable length.
K	Short figures of three to five notes, no consecutive repeated pitches, arch-shaped gesture: 

Table 3.1 ***Improvisation 1*** **Thematic inventory**

Simple processes of transformation between the groups, for example fragmentation or inversion, are shown in Figure 3.3 by solid lines connecting the thematic "boxes". Looser connections such as the similarity in length between groups D and C are shown by dotted lines. Degrees of relatedness between groups begin to emerge, and with this the idea of links in chains of transformation.

Group B, for example, is defined by its contrasting tenuto articulation, rather than rhythmic or gestural connections. It has little thematic connection with the rest of the material in the piece, except through ideas B_5 and B_7. These two figures are part of group B, but serve a mediating function between group B and groups E, A and K (Figure 3.3).

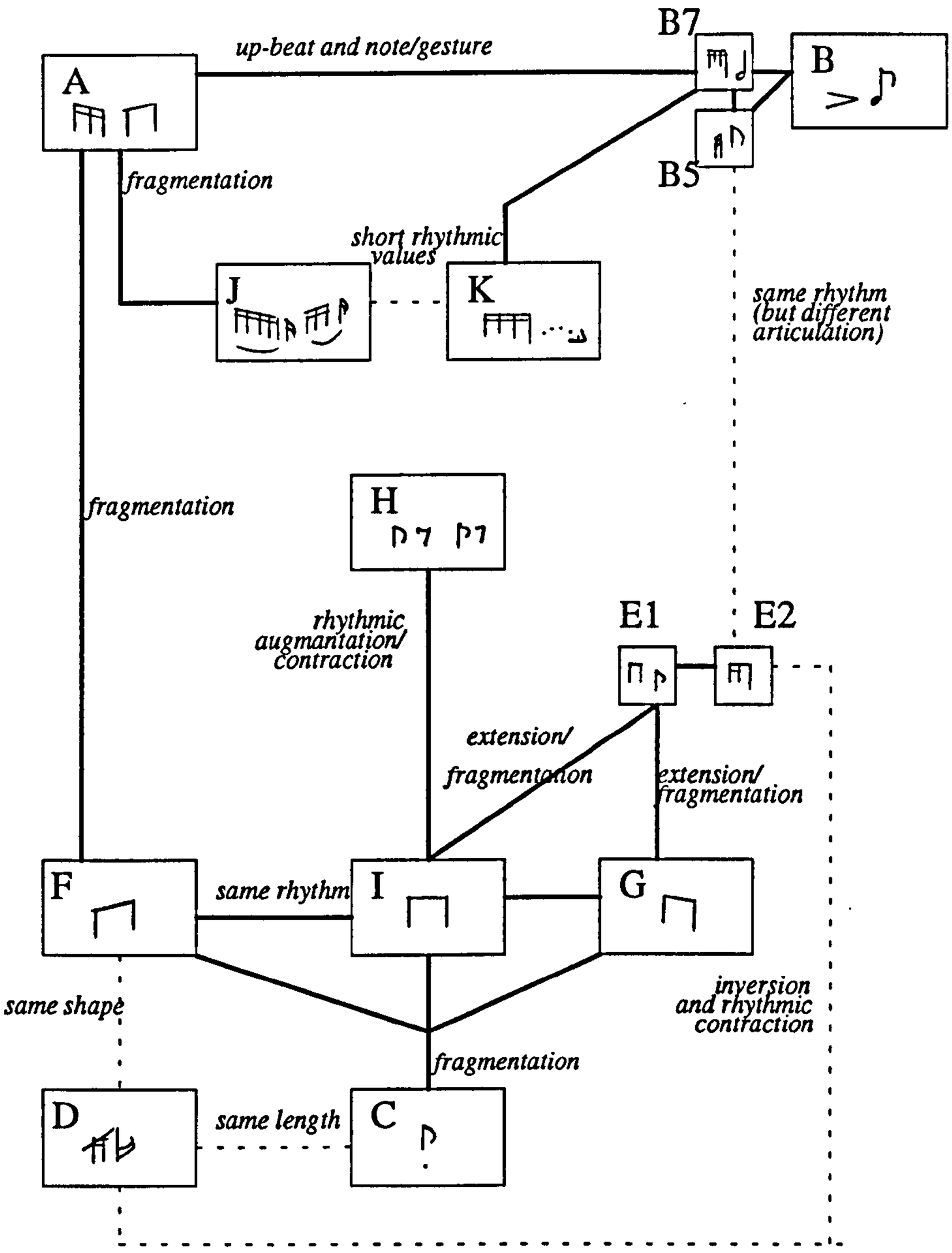


Fig. 3.3 Groups related by single transformation or close thematic connection.

If Figure 3.4 is considered, the process of mediation comes across even more strongly. For instance, group F mediates between groups G, I, C, E, H, and group A in the sense of being like a stepping-stone, or functioning as a link in a transformation process. The two quavers (low-high) must be

isolated from the rest of the A group gesture before their shape or rhythm can be changed.

Closely connected thematic groups are collected into thematic sets (Figure 3.4). In the case of the B group, the material is quite loosely related, and apart from the mediating figures outlined above, separate from all of the other ideas. It has therefore been dealt with separately, and has been *subdivided* into two sets, b' and b". The rest of the material (i.e. not group B) can be connected to the A group idea from the tuba.

Mapping the sets onto the score gives a second level of thematic analysis, shown in Figure 3.5 (Volume 2). The structure has also been expressed in terms of dominant sets (Figure 3.6).

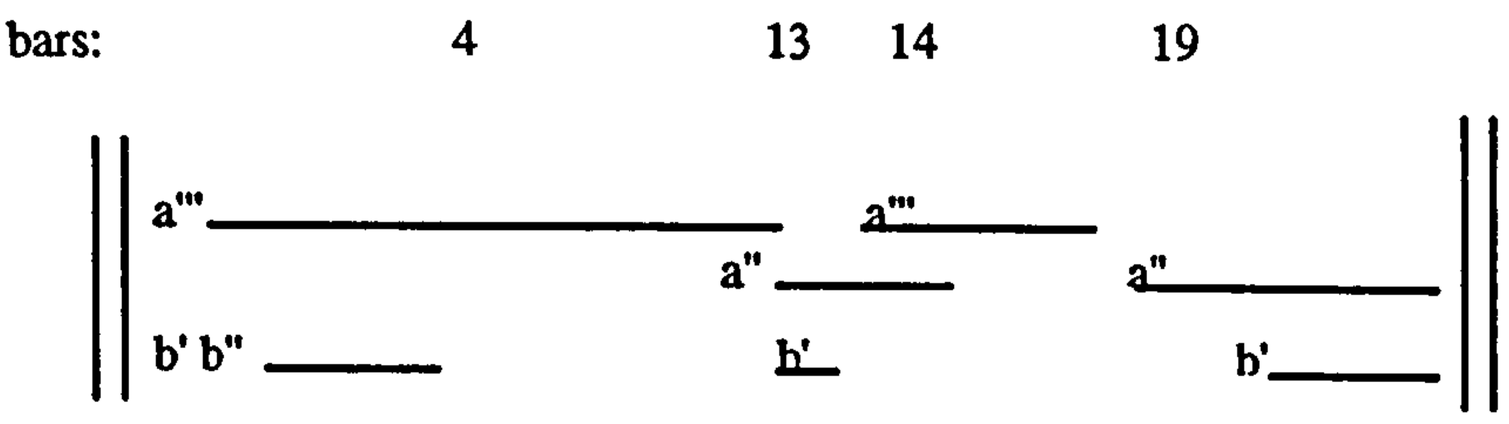
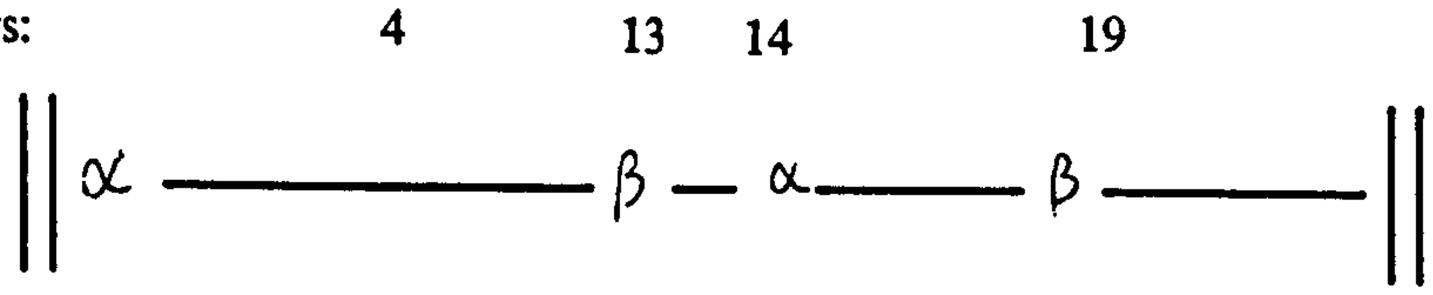


Fig. 3.6 The structure of *Improvisation I* expressed in terms of dominant thematic material.

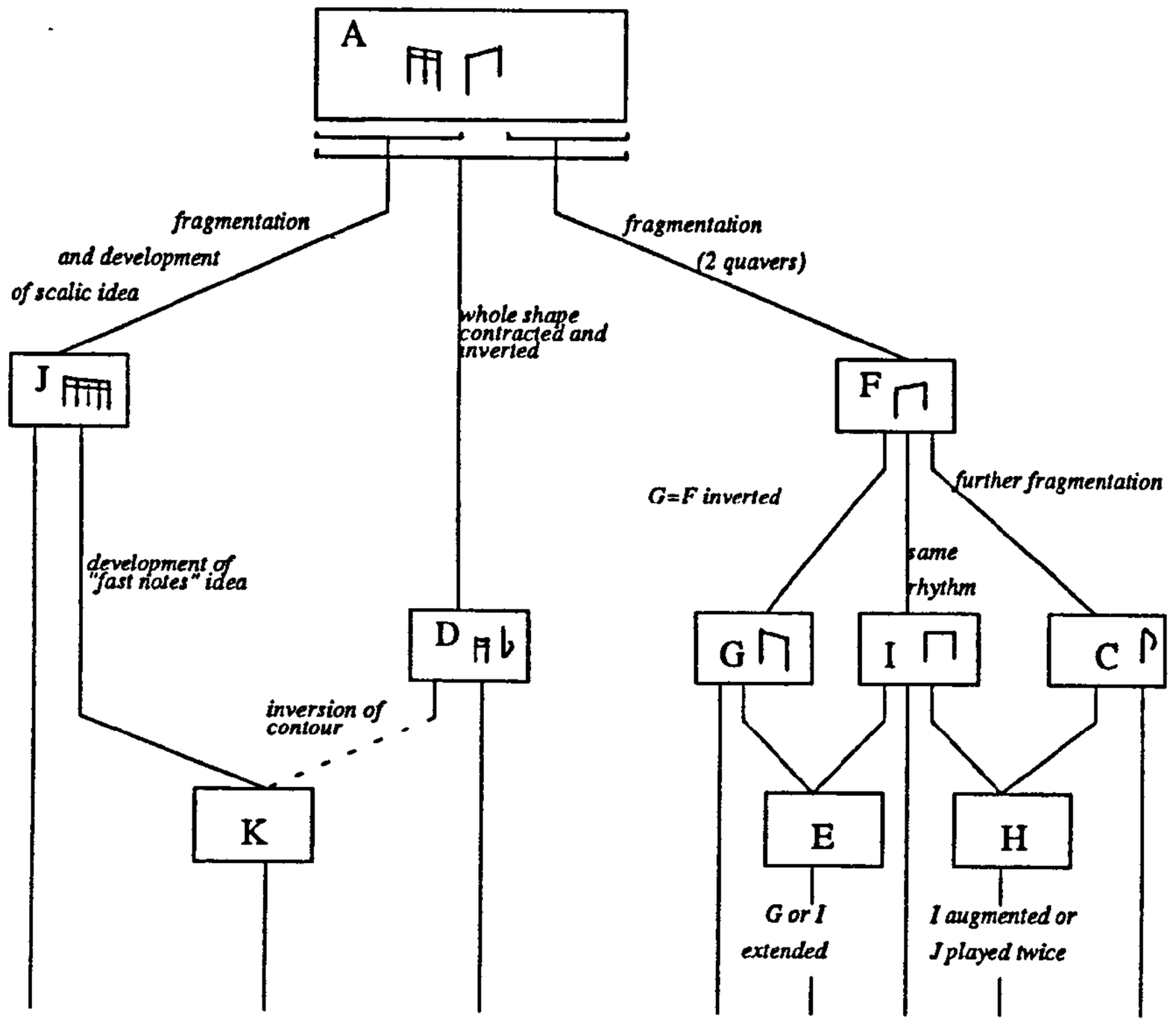
If the sections in which b' set and a" set material occur together are called " α", and sections dominated by set a''' material are labelled "β", the structure may be reduced further to:



where α ≡ a''' plus other material, β ≡ b' and a".

Fig. 3.7. *Improvisation I* reduced further.

a) A-group thematic transformations

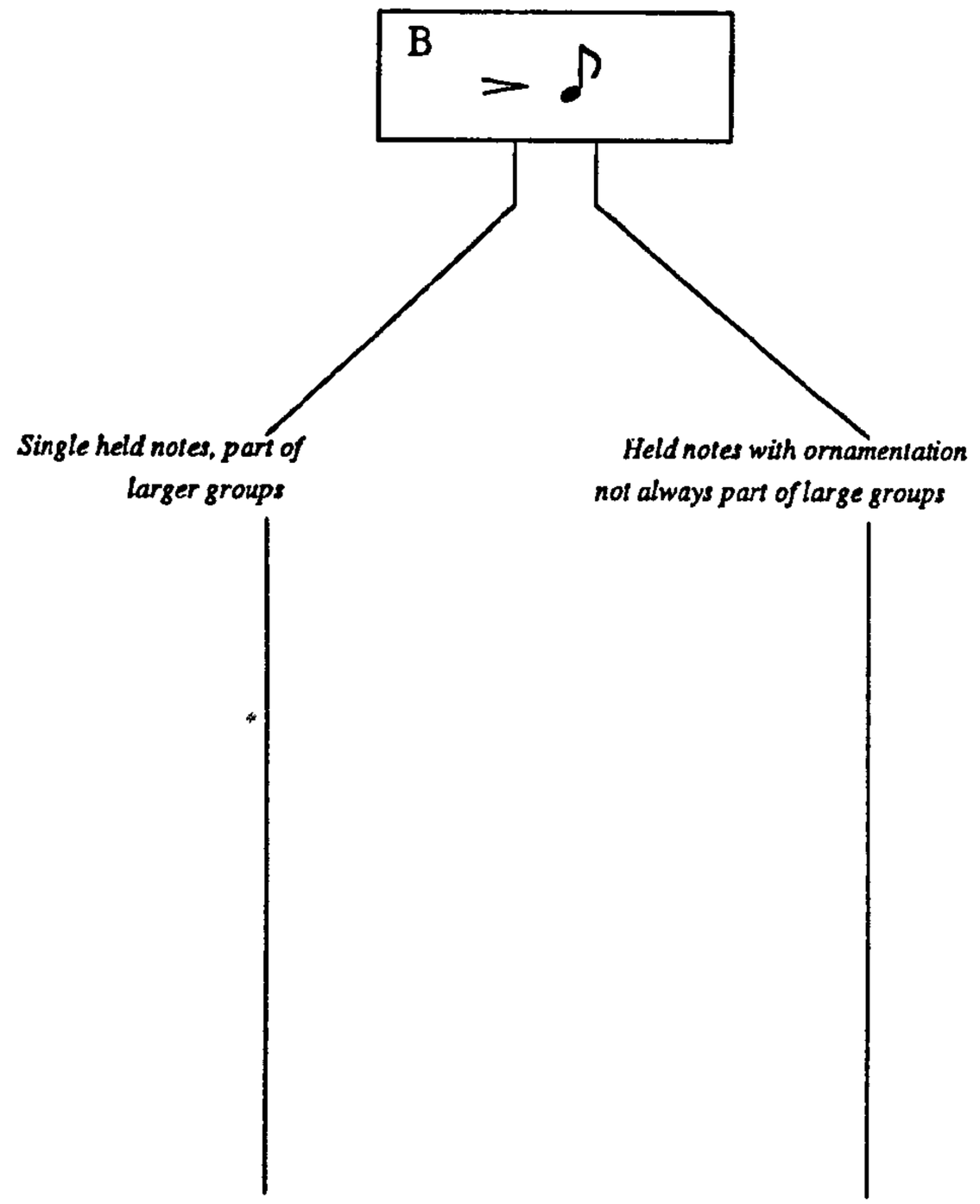


a'
(J, K)

a"
(D).

a'''
(C, E, F, G, H, I)

b) B-group sub-divisions



b'
(B1, B2, B3, B6, B8
B9, B10, B11).

b"
(B4, B5, B7).

Fig 3.4 *Improvisation I* thematic sets.

The piece could almost be described as having a binary-type structure which is played twice. Although there is no underlying tonal pattern, the pattern in the analysis above has been derived from *thematic* recurrences. What is striking is not the closeness of reproduction of binary structure, but that the improvisation has a recognisable architecture, that in the heat of the moment of invention, players should collectively create a recognisable shape.

A culturally rooted explanation is relevant here, in that all of the players are from a background of Western classical and popular musics which inform their improvisation. Common cultural influence is apparent, whether or not the musicians were conscious of shared models. Perhaps knowing whether this was a deliberate invocation of A-B-A-B is less relevant than to see that this illustrates Steiner's theory (1992) that improvising musicians generally function with reference to instinctive and learned responses.

Though fruitful, there are problems with this reading of the piece. The interpretation derives partly from the analytical method itself, which has already gone a long way up the path of A/not-A opposition. In doing so, much of the multiplicity of thought has been reduced out of the analysis. To interpret the bar after figure 1 on the score as a small B section ignores the continued influence of a''', and the addition of a larger quantity of a' material in the flute and oboe. Doubtless, in the context of a longer piece, the development and evolution of ideas would shift the interpreted structure away from a simple binary-times-two.

More usefully, thematic material may be traced through each player's work, in the light of both musical structure and hierarchic structure of ideas. For example, the tuba stays consistently with the A-group until reference 1 on the transcription. The player returns to more of the same until the sea-change at reference 2, then in keeping with the new texture, he plays no more of it until the last bar (the trill perhaps mimicking a baroque cadence). The function of this part is to provide a metric grounding - led by the up-beat/down-beat idea on which the first texture rests. This is also the basis of the structure as interpreted above. The reiteration of a single complex idea such as a motif serves to focus the group and prevents the improvisation from wandering. In other words, the tuba plays a rooting role, both at metric and structural levels.

The oboe responds to the tuba with contrasting B material, then joins in the basic texture with ideas from the H, C and G groups. (There is some additional material in the oboe part that can be heard on the recording, but was unclear enough to defy transcription). At bar 12 in Figure 3.5, the player introduces more contrasting material, this time from group J. It is possibly he who initiates the change at bar 20; the change in the tuba material is probably in response to the sustained E in the oboe from B_7.

The part is characterised by spontaneity and a wide palette of material. For much of the piece, this performer adopts an ice-breaking role; he is the second person to enter, with the main contrasting idea. He brings in another new idea at bar 12 (group J is from a different set), ushers in the new texture at bar 20 and is quick to latch onto the K material in the same bar. At other times in the piece, the oboe plays a supportive role joining other established ideas, or introducing closely-related rather than contrasting material.

The saxophone brings in most of the ideas from set a'": groups E, F, G and I. After bar 4, having introduced E, linked to G and I (Figure 3.4), she fills in the evolutionary links through G and I to F. Having introduced an idea, she then assimilates this into the rest of the piece through a process of mediation.

From the above analysis, a new set of roles begins to emerge. These function with reference to the unfolding of material and include the following:

1 Ice-breaking: introducing completely new ideas. This applies to material from groups A and B.
2 Contrasting: groups B and J.

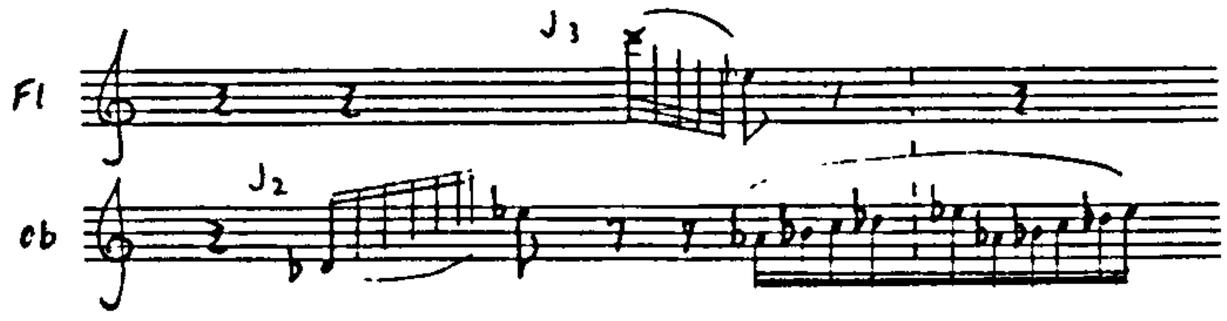


Fig. 3.8. *Improvisation 1*: Group J material, bb 14-15.

3 Rooting the structure: achieved by reiteration of A-group material.

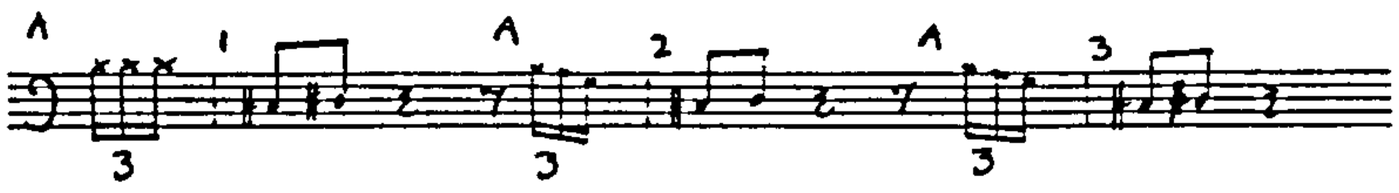


Fig. 3.9. *Improvisation 1*: The opening Tuba part.

4 Mediating: achieved through groups J, F, G and C.

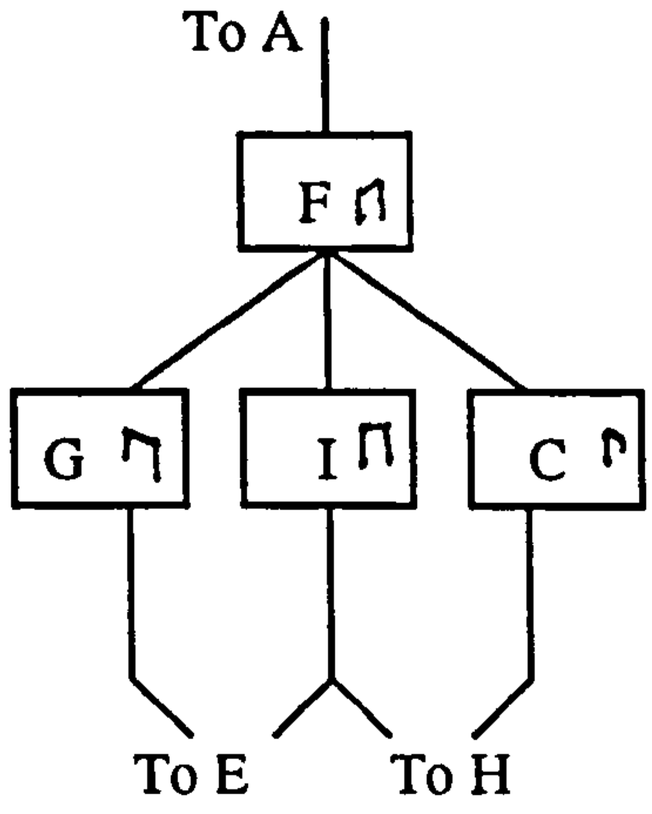


Fig. 3.10. *Improvisation 1*: relationships between groups F, G, I, and C.

5 Supporting: by copying or restating an idea; this occurs when different players use ideas from a common thematic group, as the oboe and flute players do in Figure 3.8.

All of the above reflect social-interactive processes which take place as people interact in groups. As roles they indicate how players interact

through the musical material of a piece. This in itself stresses the relevance of player interaction in the generative processes of improvised music, and the fact that it is the social worlds of players, not just internal worlds of lone individuals that have some bearing on the musical outcome.

Improvisation 2

The second piece in this study, *Improvisation 2*, was in fact produced immediately before *Improvisation 1*. It is characterised by a richer set of interactions which raise further issues, and so is discussed second. A pianist replaces the flute player, and the only specific limitation was that the piece should last for two minutes. A recording can be heard on DAT 2, Track 2.

All rhythmic values and placing in Figure 3.11 are approximate, since there was no (audible) underlying regular pulse. Synchronised events have been indicated by vertical dotted lines.

The role-playing analysis (Figure 3.11) takes the soloistic interplay between the players as its starting point. Once a solo has been established, other parts are seen in relation to it. This applies particularly to the labelling of counter and contra parts. A case in point lies just after reference 2 on the transcript. The vibraphone is playing a countersolo, which the saxophone blurs with rhythmically unrelated material which is placed concurrently. Since it conflicts with the established discourse, the saxophone role is that of a contrasolo. On the other hand, at reference 4 its role changes from one of conflict to centre-stage, as its placing is no longer at odds with the exchange between the tuba and vibraphone.

The chief mode of discourse for the first part of the piece is one of exchange. This begins with the saxophone, oboe and vibraphone. At reference 1 conflicting material gives the piece an edge of uncertainty, which is heightened as the roles of the saxophone and oboe change from contrasolo and heckle to contrasolo and contrabackground. Although the roles of heckle and contrabackground both generate conflict, the conflict arising from a contrabackground is *continuous* and *sustained.* The solo exchanges are reintroduced over this in the vibraphone and tuba at reference 2, and the improvisation continues in two layers.

Just before reference 4, commenting material in the wind instruments initiates harmonic change. By reference 4 the tuba solo has transformed to a slow accompanying trill, and the vibraphone figure has contracted. The open space is taken by the saxophone, as described above.

The exchange continues between saxophone and tuba, joined by the vibraphone at reference 7. There is a short period without soloistic material; perhaps the most hesitant point in the piece, with just a saxophone heckle and the end of a contrabackground in the oboe. This is followed by the brief exchange between the tuba and vibraphone, using shorter fragments.

The material settles down here, and with that the roles become more consistent. The ensemble seems to interact in a different way; material that might previously have invited interaction, such as the piano contrasolo in three short phrases at reference 11, remains untouched. One explanation is that the group shifts gear after a certain amount of time, and priorities change from introducing new ideas to extending and developing material. This has its historical precedent in tonal developmental forms, for example, Sonata Form, as well as in popular forms such as extended mixes of dance music.

A second explanation has its roots in role theory from social psychology. The theory introduces the idea of role expectations; assigning a role to someone arouses expectations about the behaviour of that person. Thus, if the pianist has taken the role of background

("accompanist") in this piece, when he introduces soloistic material at reference 11, no one takes up an exchange, because no one expects to interact with him. They expect him to provide a backgroung over which other players might present solo ideas. Similarly, expectations can be linked to a player via the material associated with that role. The saxophone player, for example, has often introduced heckling or contra material with which none of the players have interacted. Therefore, when she introduces repetitive material before reference 11, the expectation is probably that the material will be impossible to make exchanges with, and the part remains unchallenged. At this stage it is not possible to tell whether the role expectations are tied to the function of the material, or the intragroup (social) role adopted by the player, or both.

It can be seen that each change in the instrumentation of solo exchanges is preceded by confusion or uncertainty, brought about by heckling or contrasolo material. Diagrammatic representation is as follows:

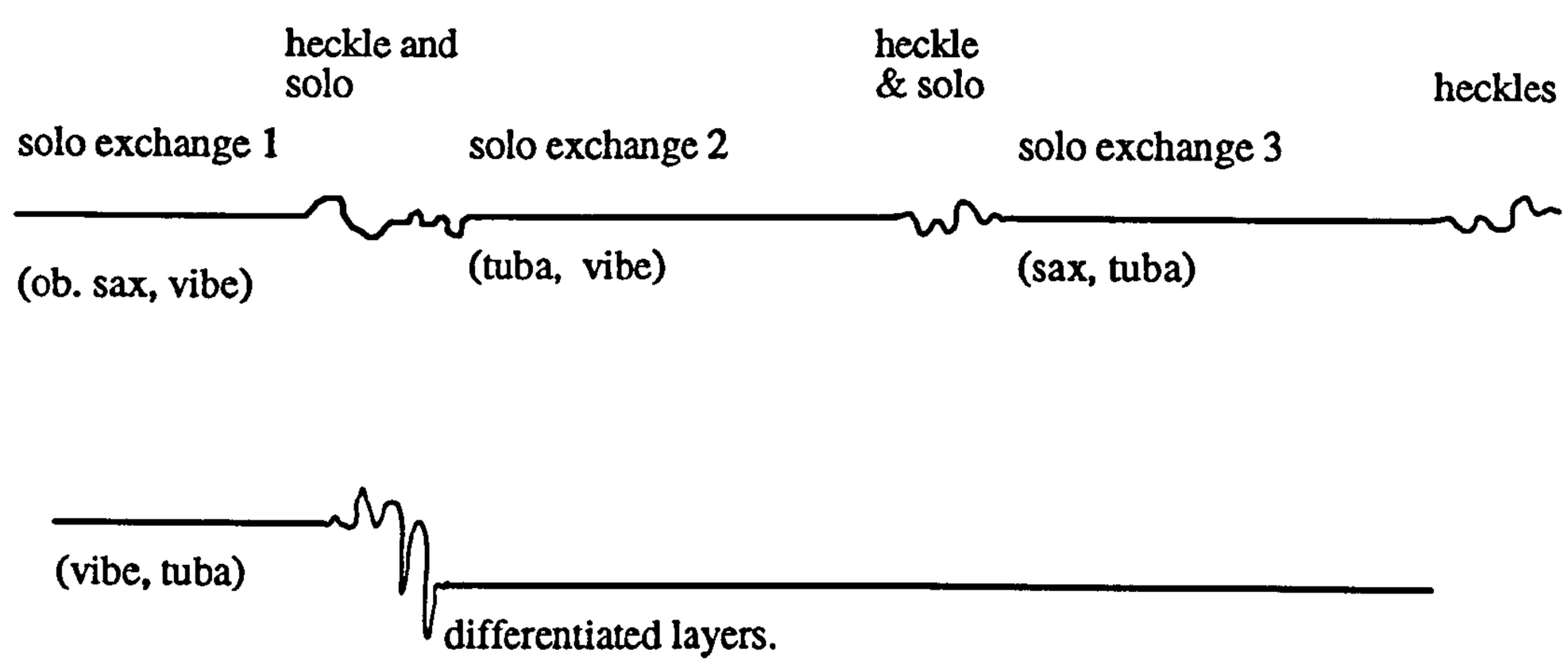
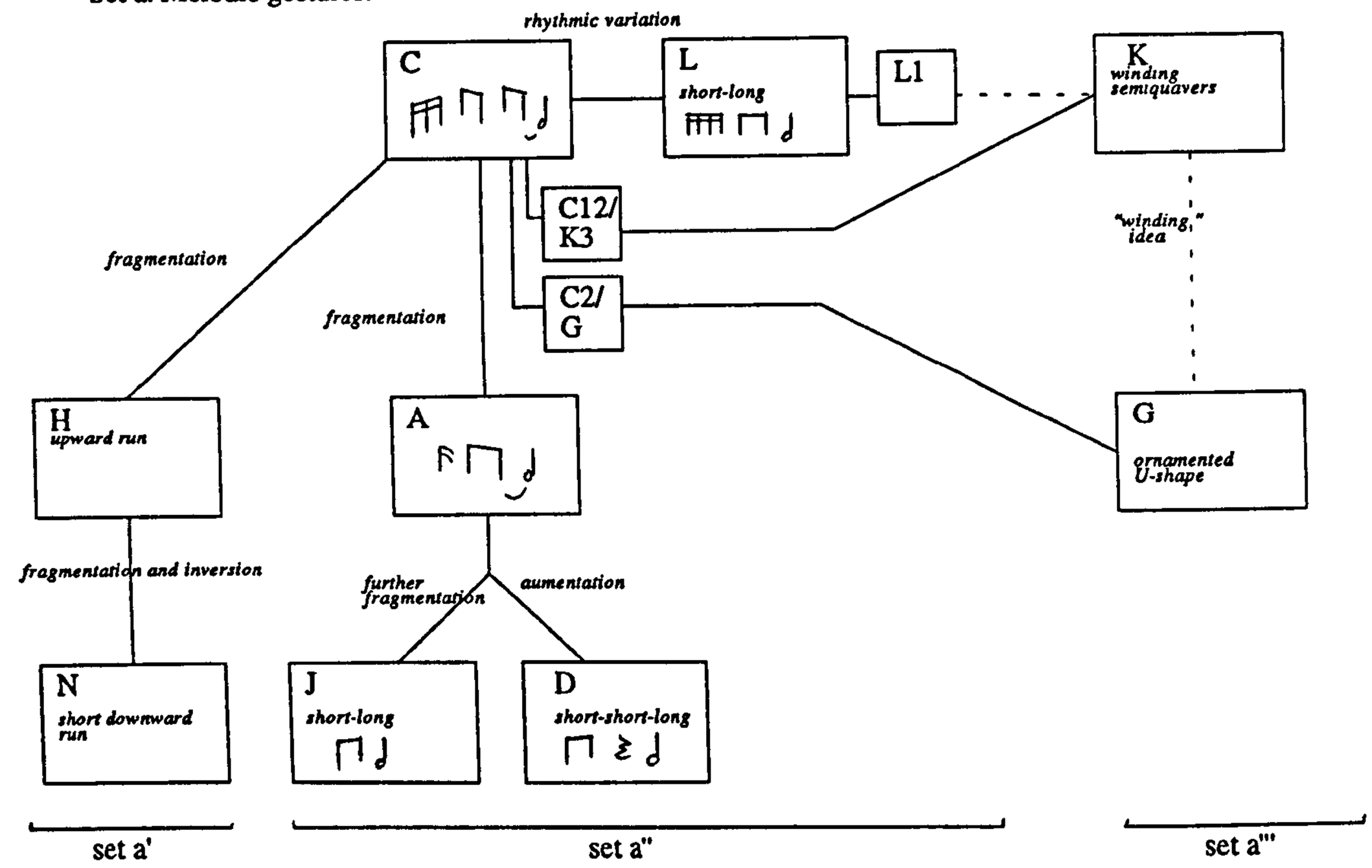
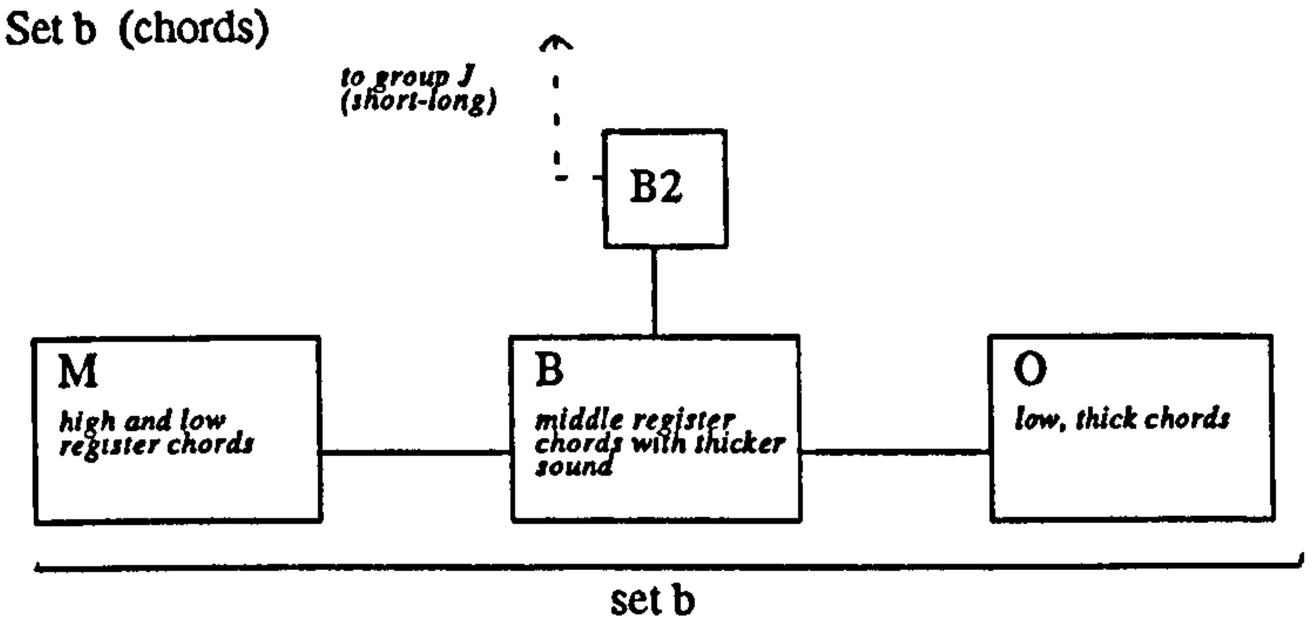


Fig. 3.12. Solo exchanges in *Improvisation 2*.

Set a: Melodic gestures.



Set b (chords)



set c: reptitive/static gestures.

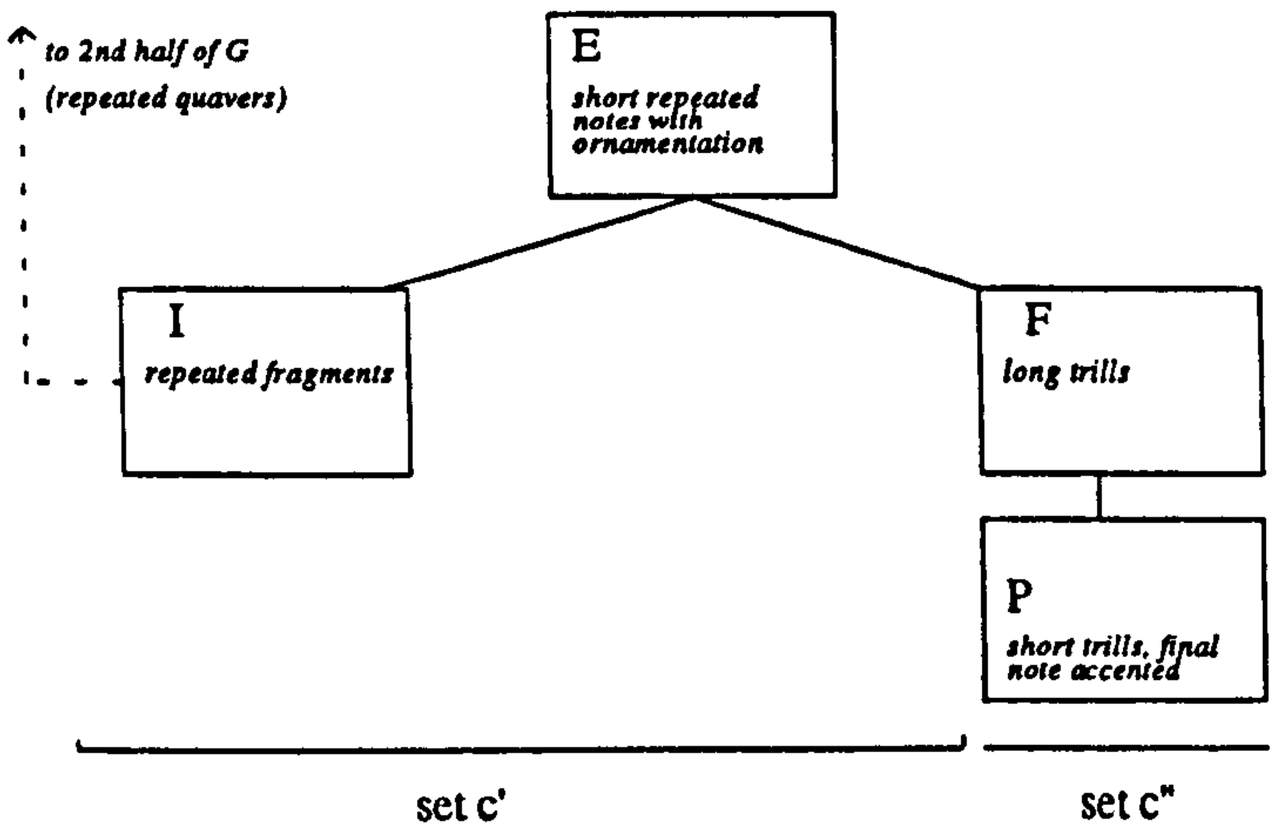


Fig 3.14 *Improvisation 2* thematic relationships.

Although the roles are in operation throughout the piece, there is a change in the *mode of interaction* for the last section, where the texture consists less of interchanging roles and becomes made up of differentiated layers. Within the differentiated mode exists a continuum of possibilities; at one extreme completely static unchanging roles; at the other an unhurried swapping and transformation of roles. A second mode is a mode of exchange: possibilities here lying between an integrated texture in which parts actually interlock, and a more leisurely exchange, such as the example in the first half of *Improvisation 2*. A third mode might be termed an homogenous mode. At one end of the spectrum would be all members of the ensemble playing in unison; at the other heterophony, in which a core melody is played out in slightly different ways by the ensemble members, as in Thai court music, or all parts contributing to a single texture - for example a texture of low trills.

An analysis of *Improvisation 2* based on thematic groups breaks down the material into sixteen groups of ideas, (Figure 3.13 in Volume 2). The piano part has been regarded in terms of gesture here, so that chords or groups of chords form groups B, M and O. Only the piano contributes ideas from these groups.

At the next structural level, the groups form three sets. As shown in Figure 3.14, these are identified by various qualities. Set a is characterised by dynamic melodic material, typically "open" or "closed" gestures. For example, ideas A, A_1 and C in the opening of the piece are open gestures, inviting continuation or response. "Closed" ideas come near the beginning of the tuba solo in the arched shapes of C_6 and C_{11}. The material from set c, on the other hand, is static, either because it consists of short repetitive fragments, as in I_1 in the saxophone part towards the end of the piece, or the ideas are based on unmoving trills. Where trills occur one after the other, as in the oboe part on the first page, they tend to be comparable in length to the longer melodic ideas. The ground is shifting quite quickly here, with the short solo exchanges described above, and this implies that the players are thinking short-term. They have not yet shifted gear to developing longer-term ideas,

but seem to be reacting to their immediate surroundings. On this basis, each trill has been regarded as an individual idea, rather than the string of trills being considered as the same utterance.

There seems to be no overall hierarchic structure between the three sets, and no central principle on which the material rests. A binary opposition such as a/not-a is inappropriate here. There are two reasons for this. Firstly there is no *single* differentiating principle between set a and sets b and c (not-a). Set b is different from set a because its material is chordal, consisting of progressions and isolated chords, whereas set c is different from a because the material is melodically static. Secondly, there are connections via mediating figures between sets b and a and between sets c and a. This surface-level cross-referencing undermines a sub-structure based solely on binary opposition between set a and the other two sets. The play-out of thematic sets is demonstrated in Figure 3.15, Volume 2.

Tracking the ideas through each part shows the presence of similar roles to those taken in *Improvisation 1*. The exchange of group C material between the vibraphone and tuba in the first two pages serves to root the structure of the piece throughout this section. The saxophone part is characterised by ice-breaking and mediating material, for example, on the second page, idea K connects group G to groups L and C. Even more persuasively, idea C_{12}/K_3 just before reference 7 mediates directly and fully between these two groups. The contrasting role occurs in parts using set c material, though on listening to the piece it seems that the most salient contrasts lie between changing textures rather than gestural details.

The chords in the piano part play a contrasting role, but in a different way. None of the other players either copy the idea of chords and clusters (which is only possible for the wind and brass players by multiphonics or humming and playing simultaneously), or mediate between these gestures and other melodic ideas. One exception lies in the saxophone part, which plays a sustained single pitch after reference 5 in the transcript. Apart from this and a couple of loose surface-level connections made by the pianist himself to the long-short rhythm of

group J, the chord ideas remain fairly detached from the ideas structure. The role played by the piano part is that of a dissenter. No one follows its gestural direction; however, there are strong harmonic connections to the other parts, and the placing of the chords is quite carefully related to the rest of the music, so it does not block the flow of ideas.

The dissent above is a passive one, in that the part does not generate conflict. In traditional terms, it plays a supportive, accompanying role, and harmonically the part works well with the rest of the improvisation. However it remains separated in the terms of this analysis.

The player remains in the differentiated mode of interaction throughout the piece, unlike the rest of the ensemble, who are in the exchange mode until well into the second minute. This seems to be brought about by several factors. It is partly due to the nature of the material he uses, which is difficult for the other players to imitate, or not as inviting for call-and-response type exchanges as the soloistic material. The consistence with which he stays with the chords sets up a background role, and with it the expectation that he will continue in this role, which relies on a continuous and uncluttered texture for its definition. In order to maintain the role and the piece, he mostly steers clear of the melodic material shuttling between the other players.

Here, the type of material used, and the way it is perceived by the rest of the ensemble, creates a link between the material-generative role (dissenter), the player-function role (background) and the mode of interaction. The case is not always as neatly defined. In the oboe part between references 1 and 3, the material-generative role is that of an ice-breaker as set c material is introduced, which becomes a contrasting role as the material becomes more familiar. The player-function role is that of a heckle, which becomes a contrabackground as it becomes more continuous. The player remains just about in the exchange mode. Though the background figure should serve to differentiate the oboe, keeping it out of the solo exchanges and heckles, the changes made by the player are frequent enough and carefully placed to fall just before or just after other exchanges. It is almost a fake exchange part. But the

exchange status is due to the placing of entries rather than to the type of gesture played.

Although some connection may be implied between the two sets of roles and the modes of interaction between players, it seems futile at this stage to analyse the relationship any further, and more elegant to conclude that all three frameworks exist simultaneously, and musicians improvise with respect to all three.

Summary

Role-playing takes place in group improvisations in terms of player function within the ensemble, and in terms of the generation of material.

The player-function roles (discussed fully in Chapter 2) are:

1 Solo
2 Counterpart
3 Background
4 Heckle
5 Punctuation
6 Block
7 Contrapart

Material-generative roles are:

1 Ice-breaking: introducing completely new ideas that become adopted or developed by other players.
2 Contrasting: using or developing ideas that contrast to the main thematic material.
3 Rooting: rooting the structure for example by repetition of a dominant idea.
4 Mediating: connecting ideas from different groups or sets.
5 Dissenting: using a contrasting idea to the dominant material that is not taken up by other group members.
6 Supporting: copying the idea of another *player*. Reiterating one's own idea serves a rooting function.

Group interaction occurs with respect to both sets of roles simultaneously, and with reference to the following modes of interaction:

> 1 Homogenous: an overriding characteristic of this mode is the similarity between different parts. The mode occurs in homogenous textures and heterophonous musics.
> 2 Exchange: a swapping of soloistic roles, varying in pace from tightly interlocked to leisurely as if question-and-answer.
> 3 Differentiated: clear differentiation exists between player-function roles. Roles may be static or changing. At the dynamic end of this continuum, with players changing and transforming roles, the mode tends towards the exchange mode.

The first of these modes is the only one which is defined by similarity of material in different parts. The other two operate regardless of whether the material introduced by the players is related thematically.

Structurally, it is worth noting that in both pieces change was brought about by crisis. In the first piece, the crisis seemed to be connected with an anxiety that the material was somehow about to collapse or dry up. In the second piece, uncertainty was brought about by material that conflicted with the dominant ideas, but was in itself static and possibly not leading anywhere. Threats to the continuity of a piece or to the flow of ideas are probably felt strongly in improvisation, particularly if there is a group feeling of shared responsibility for the music.

Finally the quasi-binary reading of the structure of *Improvisation 1* serves to underline that whatever the social, cognitive and other processes of improvisation, the music is grounded by the cultural backgrounds to which the participating musicians may refer intuitively or deliberatiely. It is both intragroup and extragroup processes that ultimately shape an improvisation.

Conclusion

Group improvisation is fundamentally interactive; through discourse musical ideas and roles unfold and are defined. In the case of player-function roles, this occurs markedly with counter and contrasolos, which can *only* be defined as such in relation to a pre-existing solo part.

Player-functional roles are identifiable by certain archetypal characteristics. Although there are no Platonic roles to which given solos, backgrounds or heckles refer, there exist certain norms towards which parts must tend. Solos tend to be salient within the ensemble, punctuations tend to be short, backgrounds tend to be less arresting than solo parts. However, to a certain extent, the identification of role characteristics must also be achieved by looking at the relationship of each part to the discourse within the piece, as well as to external yardsticks. Thus roles are also defined in relative terms; longer, shorter, more or less salient.

This paper has proposed three modes of interaction. There are no divisions between the three; in fact the edges remain blurred, although the essence of each one has been defined. These are intended to indicate the nature of the interaction, and are descriptive rather than explanatory. Derived from an analysis of the *musical* structure of *Improvisations 1* and 2, they underline that group activity, through the playing-out of roles within a mode (or modes) of interaction is a fundamental part of the process of the generation of material.

For this reason, models of the structure of improvised pieces must look beyond current examples derived from Chomskian generative trees (Clarke:1988). An attempt to do so from the hierarchic structure of ideas presented in this chapter falls down as follows:

Figures 3.4 and 3.14 may either be interpreted as unidirectional, reading from top to bottom, or as bi-directional. If they are read as

unidirectional, as if they were generative trees, the ideas structure does not correspond to the structure of the music. *Improvisation 1*, for example, opens with statements of material from sets a''' and b'. Moreover, lower-level ideas often occur before the ideas that in theory have generated them. On the other hand, this attaches new significance to the role of mediating material, as if unconnected ideas are awaiting mediation, and when it comes, the mediation relieves tension.

A more satisfactory reading of Figures 3.4 and 3.14 is a bi-directional one. The diagrams show connected ideas, and degrees of connectedness, with mediating ideas as stepping stones. This fits more comfortably with the order of occurrence of ideas in the piece in relation to their position in the hierarchic structure; after all, the hierarchy was derived when the piece was taken out of time, and bears no relationship to the sequential unfolding of events.

Either way, the connections to Chomsky's deep structures are weak. Group improvisations rarely grow from a single idea.

Clarke (1988) has proposed three generative models for improvisation: one is derived from a Chomskian tree, a second is based on the principle of chains of associative ideas, the third is modelled on the selection of material from a repertoire of ideas. He concludes that in reality, musicians use varying degrees of each of these processes in a single improvisation and that this work now needs to be combined with an acknowledgement of social and musical interactive processes which also shape collective improvisations.

Generative trees have almost always been used to model structures generated by individuals: sentences, tonal compositions (Lerdahl and Jackendoff, 1983), popular songs (Middleton, 1992). The model has to some extent been fruitful for the analysis of solo improvisations (Clarke, 1988; Steiner, 1992), and might even be a useful one for solo improvisers to aspire to. However, it seems far too organic and too individually-centred to fully apply to group improvisations.

The structures of pieces such as *Improvisations 1* and *2* do not result from the linear development of ideas within individuals. A significant amount of negotiation with and reorientation to other parts occurs. One result is that in *Improvisation 2* the playing is quite tentative, as players listen, copy and develop ideas. Another is that many attempts at solos fall short of deeper structural or melodic archetypes - generative structures, symmetric phrases - because they are challenged or pulled off centre by what the rest of the ensemble is doing.

This study has examined the group improvisations as autonomous art objects. Focusing on the music has demonstrated that interactive processes between the musicians have a fundamental relationship to the structure of the music. The set of material-generative roles have been given names which deliberately reflect social roles: imagine a committee meeting with its ice-breakers, mediators, supporters, dissenters etc.

Two questions are begged:

1 Are musical processes such as these influenced by the social processes occurring while the group plays?

2 Does the structure of the group, however that may be defined or interpreted, bear a relationship to the structure of the improvisation; if so what is the nature of this relationship?

To say that music is metaphor misses the point. The point is that structural models and analytical models for music that have taken their leads from biology and philology flounder in the face of collective free improvisation. A new paradigm, based on human interaction from sociology and social psychology must be developed.

4. Improvisation as Social Text?

We have
a microscopic anatomy
of the whale
this
is
reassuring.

William Carlos Williams.

The previous chapter shows how structure can be defined in terms of role-taking by members of an ensemble. An object defined by an interactive process begs the question: does the musical interaction bear a relationship to the social interaction of the musicians? If so, what is the nature of this relationship - in what ways do the interpersonal dynamics become played out in the music?

Case Study: *Improvisation 3.*

Improvisation 3 was created by students from the Music Department at City University. It has been analysed in terms of two sets of musical roles: player-function roles and material-generative roles, and then in terms of

how the members of the group described the current intragroup relationships.

The seven students who took part in *Improvisation 3* were interviewed after the event using semi-structured interview techniques. The interviews were carried out using the following methodology devised by Gary Ansdell (Ansdell, 1996).

(1) Each musician was played a recording of the piece and asked to give their immediate reactions.
(2) Then the piece was replayed and the interviewee asked to stop the tape each time they remembered what they were thinking at the time.
(3) For the third listening, the interviewees were given lists of musical-functional and material generative roles, and the piece was played once more. They were asked to comment on the occurrence of these roles in any of the parts, stopping the tape each time they did so.
(4) Finally, the subjects were asked to draw the musical relationships in the piece, and the interpersonal relationships within the group on that day.

All interviews were recorded.

A recording of *Improvisation 3* may be heard on DAT 2, Track 3, and the piece has been transcribed (Figure 4.1, Volume 2).

Player-function roles.

The pianist takes a background role, supporting the wind texture. His role becomes redefined as a contrabackground at bar 31 (Figure 4.1): the slowing of the pulse (marked *poco allargando* in the score) divorces him from the mainstream of musical ideas, so that while his clusters still function as a background they do not sit gracefully with the fragmenting wind texture. At bar 34 this breaks down becoming almost soloistic, as little else is going on. The final glissandi send a clear message that the piece is really over, and function as a block.

The pulsating synthesiser creates a second background - although both are thematically associated by means of contour, most of the musicians taking part in the piece heard them as co-existing but not related. It is unclear from the recording exactly where the synthesizer player stops his background role. However, at bar 27 a punctuating role is adopted and this remains consistent until the end of the piece. In comparison to the blocking piano glissandi, these are much softer gestures and are timed to complement rather than conflict with the flow of the music.

Initially, the oboe is the dominant wind part, taking the first solo role. In bar 6 an exchange takes place with the flute countersolo. A further exchange is offered by the alto saxophone at bar 9; this is blocked, and the saxophone seems like an intrusion - a contrasolo. Bar 11 sees further skirmishes. The saxophone entry here occurs at a place in which the oboe solo is based around the prolongation of a single pitch. Its stasis provides a foil against which the more dynamic saxophone may be perceived as the solo part. Against this, the flute merges with the background (this time, too, its rhythm is identical to the piano rhythm).

As the saxophone finishes its phrase in bar 13, the oboe part becomes slightly more elaborate, once again commanding the solo spot. The single held note in the saxophone at bar 13 may have occurred as a result. At bar 15, both saxophones enter; though the tenor is more low-key. Rapid entries are made by the flute, oboe and saxophones (bb16-17). The flute has been interpreted as punctuation followed by background, as the short florid gesture preceeds a less salient sustained high C. The oboe solo is followed by a countersolo on the alto saxophone, and the tenor role seems to be a background (to the alto, perhaps). However, the tenor part transforms into a countersolo to the oboe in bb19-20. The oboe is back in the solo role by bar 21. Though using identical material to that in its previous entry, the alto part becomes a contrasolo rather than countersolo, simply because of the conflict generated by its *timing* in comparison to that of the oboe part.

There is a moment's clarity as the tenor is unchallenged in the solo role in bb. 23-24. The following oboe entry sounds as if it will be a solo, but rapidly becomes a punctuation and counter-background. In bar 25 the two saxophone entries occur virtually together, as co-existant solos: there seems to be no hierarchy between them, until the alto conceeds to a background

role after one bar. At the end of the tenor gesture, a fall of one semitone occurs immediately after a triplet figure in the oboe, and neither part becomes well-distinguished from the overall sound (Figure 4.2).

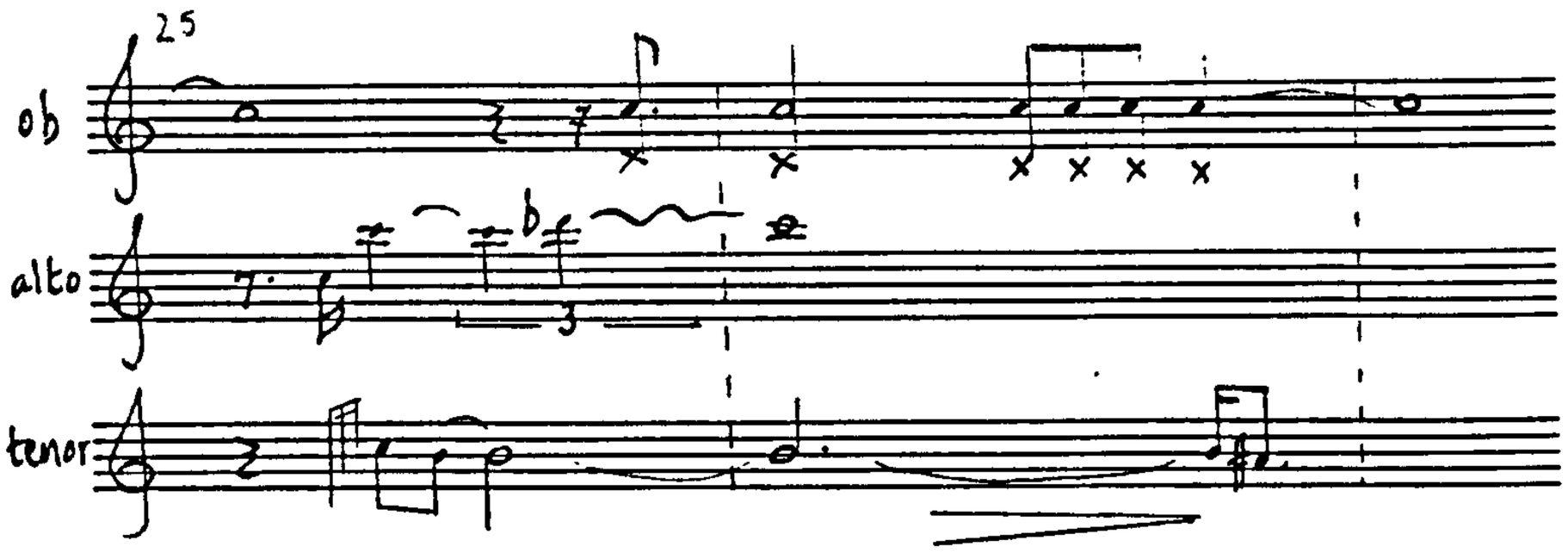


Fig. 4.2. *Improvisation 3*, wind parts bb. 25-26.

At bar 28 the texture begins to break down. The tenor part certainly begins as a fragmentary solo, but transforms to a series of punctuating figures by the end of bar 31, matching the oboe role until the oboist stops playing at bar 32. The alto background gains space and briefly becomes soloistic in bar 33 - whether this is really a fully-fledged solo is ambiguous since the player is doubling the piano accompaniment.

To add to the sense of declining order, the bongo player enters halfway through bar 32. As may be heard from the recording (DAT 1, Track 3) and seen on the transcription, the timing and content of his entry is unclear, in spite of the volume at which the player plays. This is a contrabackground, so removed from the established musical train of thought, that the relatively simple rhythm is difficult to make out.

Overall the piece sounds cluttered, and illustrates several examples of role ambiguity, in which a part may be perceived as performing more than one functional role, eg the alto solo/background in bb29-34, and role transformation, in which the functional role of a part transforms seamlessly; an example of this is the tenor solo which transforms to a punctuating part during the course of bb28-31.

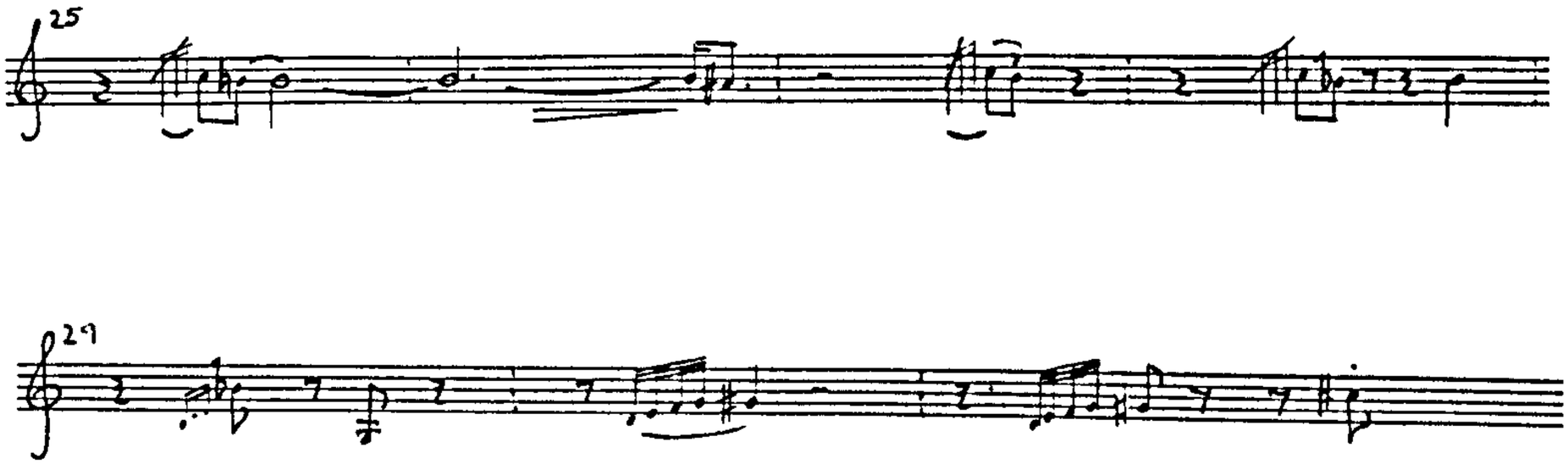


Fig. 4.3. *Improvisation 3*: Tenor saxophone part bb.25-31.

Much of the confusion is caused by positioning of gestures and entries: for example the two saxophones in bb.15, 17, and 25 use similar material, but the entries are on top of one another. In the case of such positionings, the second seems like an echo of the first, and therefore "behind" it in some way - as a contrasolo or background. A similar effect occurs between the alto and oboe in b.21. Roles here are undoubtedly defined by their context as well as by normative criteria.

The structure of the piece may be defined in terms of the changing roles in the wind parts. What occurs is a battle for the solo role, which is held at first mainly by the oboe, taken over by the tenor saxophone, and finally given up completely, as the texture is made up of short punctuating figures. Not all players follow the changes with changes in thematic material, and not all players shift roles at the same time as changes in the soloist. However, a prevalent aspect of the role-playing is the wind "battles" for solo spot against a stable keyboard background. The ways in which the oboe and tenor soloists handle their roles: the relentlessness of the oboe, and the tenor yielding to fragmentation, has a strong influence on the responses of the other wind instruments. Changes in soloist will be placed at the heart of the role-playing analysis in this chapter.

Material-Generative Roles.

The material-generative roles were uncovered using the methodology set down in Chapter 3. To summarize, the structural relationships between different thematic *groups* (A, B, C etc) are illustrated in Figure 4.4, and the way in which the five deeper level *sets* (I, II, III etc) occur in the music is shown on the transcription in Figure 4.5. While most of the thematic ideas are "organically" linked - related in terms of transformations such as inversion, augmentation, diminution, fragmentation - there are ideas linked by concept: held notes lasting for two or more beats (eg groups A and P to the left of the page) or static pitch prolongation (eg groups M, L, AA, J to the right). Group E(ideal) represents an ideal fragmentation of group E; no such motif actually occurs in the piece, but many ideas are connected to the second part of E.

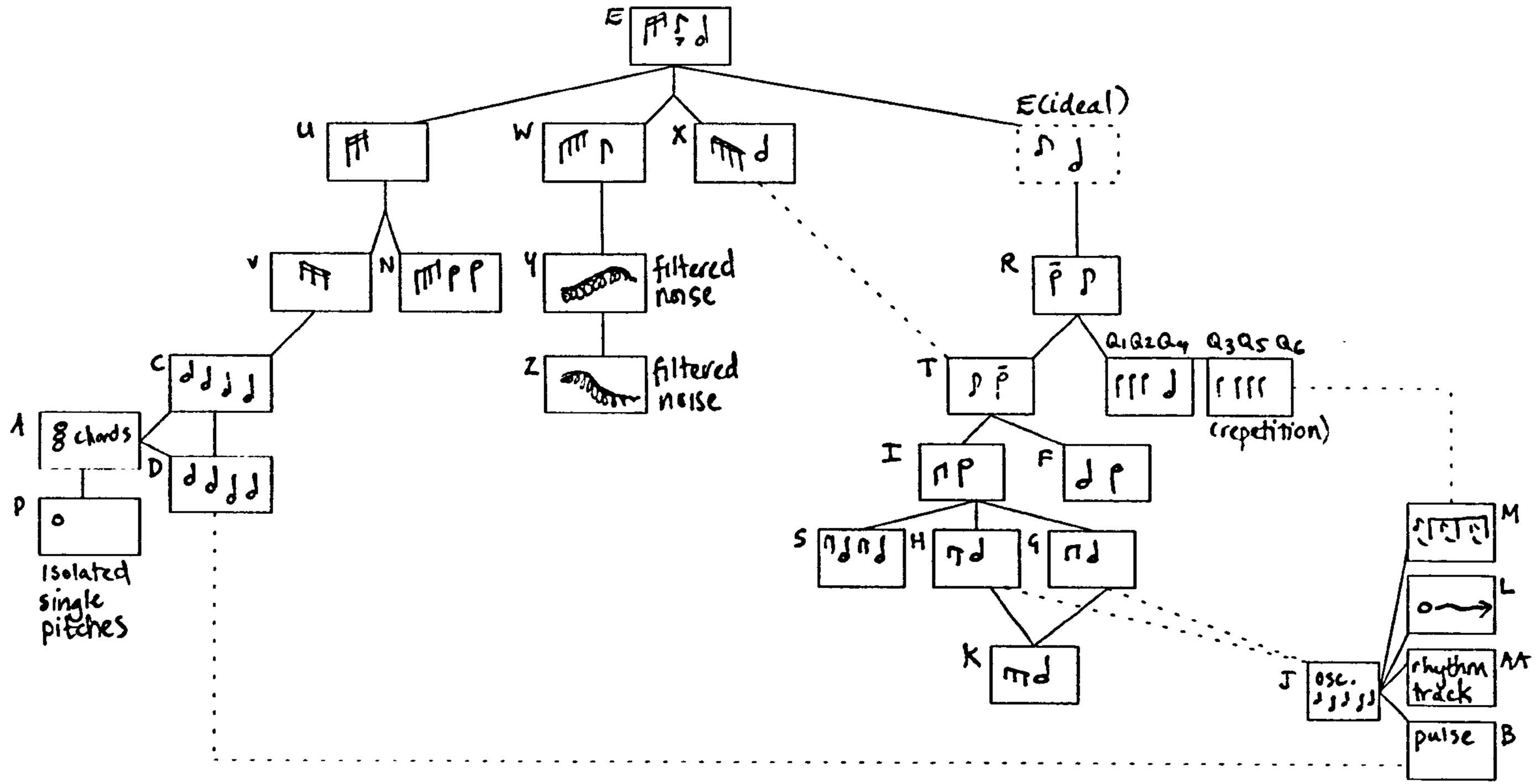
Tracing through the thematic material in each part reveals the following set of roles.

The pianist's material remains consistently with groups A, C and D. At bar 25 he also supports group F, and at bar 31 he supports group Q. However, his overall role is to *root* the structure; his part changes, broadly, at the same time as the changing material in the wind parts.

Similarly, the synthesizer player adopts a rooting role at the begining of the piece. It is not clear from the recording exactly at which point he stops. His later contributions, which begin at bar 27 might be termed strictly as a dissent, since they are developments of group W which are not taken up by other players. However, although they are represented as developments on Figure 4.5 they are gesturally very close to the W-group, and in fact function as a support to the W-group.

The oboist ice-breaks into bar 4 with new thematic material from sets III and IV (Figure 4.5). Although this is grounded by the melodic shape of the overall phrase (D1) which links it to previous material, it is not a direct gestural development and is therefore interpreted in terms of its constituent gestures as ice-breaking. The thematic material moves through groups G and H to K, a dissent that none of the other players follows.

conceptual relationships ——— organic ——— conceptual relationships



set I — A, P

set II — N, U, V, C, D

set III — E, W, X, Y, Z

set IV — F, G, H, I, K, Q1, Q2, Q4, R, S, T

set V. — B, J, L, M, Q3, Q5, Q6, AA.

G and H together form J1 (bb. 8-10), which gives rise, by association rather than generative development to the prolongation of pitch by oscillation in L and M. These are later taken up by other players, and the player functions as an ice-breaker once more. He continues in this role jumping as it were to the left-hand side of Figure 4.4 introducing groups N, U, V, and W. Group X (bar 22) is loosely connected to group T and therefore could be considered to serve a mediating function.

By bar 22 (of 34+) this player has ice-broken sets II, III, IV and V, and in the piece as a whole all but three thematic groups have been introduced. My impression is of a manic throwing-in of ideas; little organic growth takes place after the forging through to groups L and M, and once ideas have been ice-broken, filling in the steps to higher links within the organic part of the structure seldom happens. From the player's point of view, the part consisted of a sustained "sound", and not a carefully-conceived melody. Its essence and continuity lie in its relentless energy.

Nevertheless, the energy does not seem to derive from interaction with the other players, and runs out of steam around bar 25. The drive for new material ceases, and the player remains with groups U, V, W and I, the first three of which all use scalic material. His material-generative role has changed to a supporting one.

The alto saxophone player introduces groups I and T, which link the oboist's G and H group material to the central E-group. This serves a filling-in function, rather than a mediating one; the part fills in links between related ideas in the oboe part, rather than mediating between different ideas in two or more other parts. This is further reinforced by an immitation of the oboist's G material:

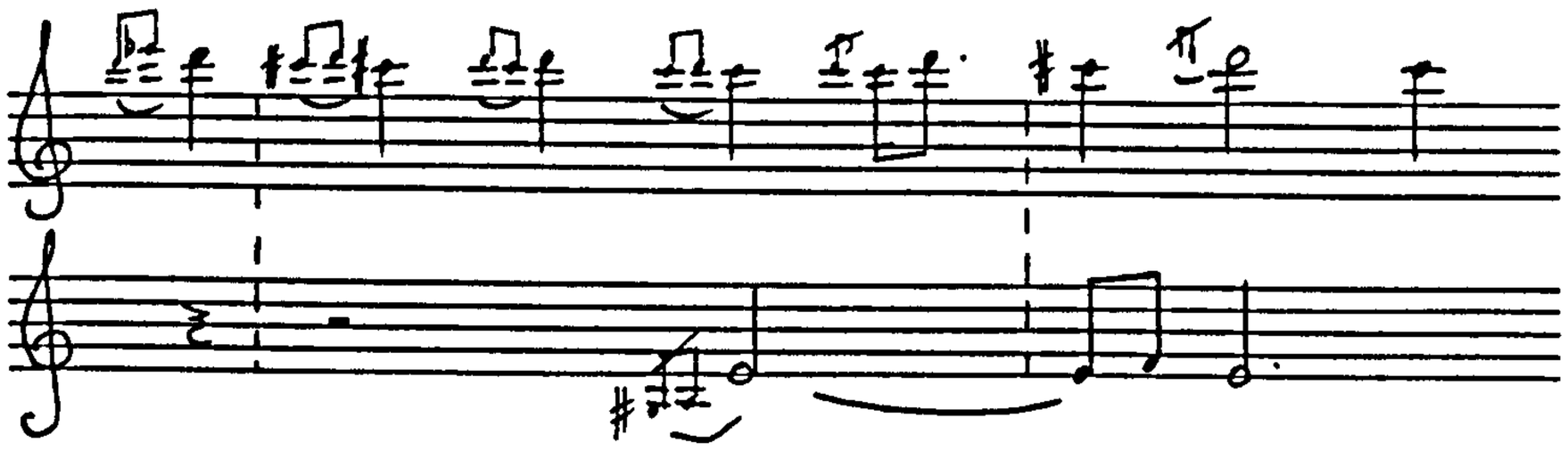


Fig. 4.6. *Improvisation 3*: The oboe and alto saxophone at bb.8-10.

The player stays with Set IV material until bar 26, by which time the other wind players have moved on. The part then has a secondary function of helping to root the structure of the piece. However, the rooting is not very insistent, and the part does move on rather than staying put at bar 29. From here until her last utterance, she takes over the pianist's material, supporting the opening idea (Group C) as the piano moves with the changing wind parts.

The tenor sax player is silent for some time, entering with the powerful mediating figure Q1/R1, which connects not only Groups Q and M, but on a higher structural level sets III and IV.

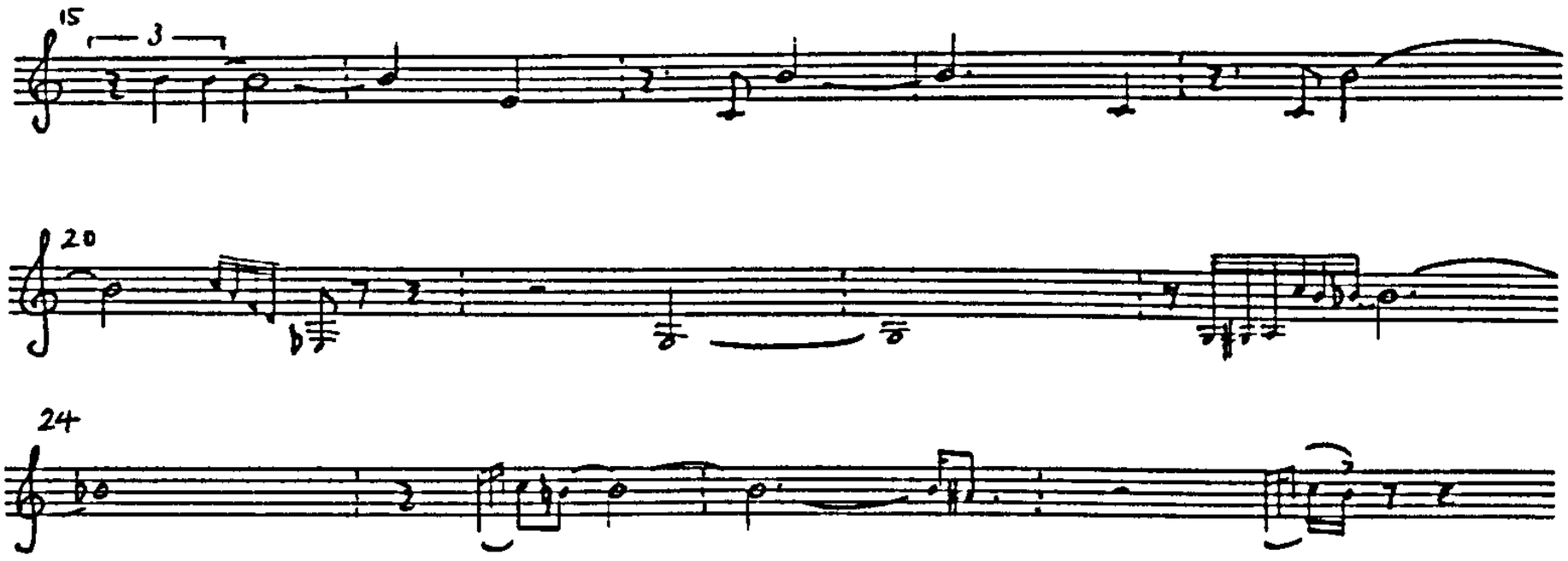


Fig. 4.7. *Improvisation 3*: Tenor saxophone part bb.17-27.

Similarly, the player's use of Group T provides a missing link between groups I, G and H which have coloured the oboe and alto saxophone parts in the previous few bars, and E(ideal).

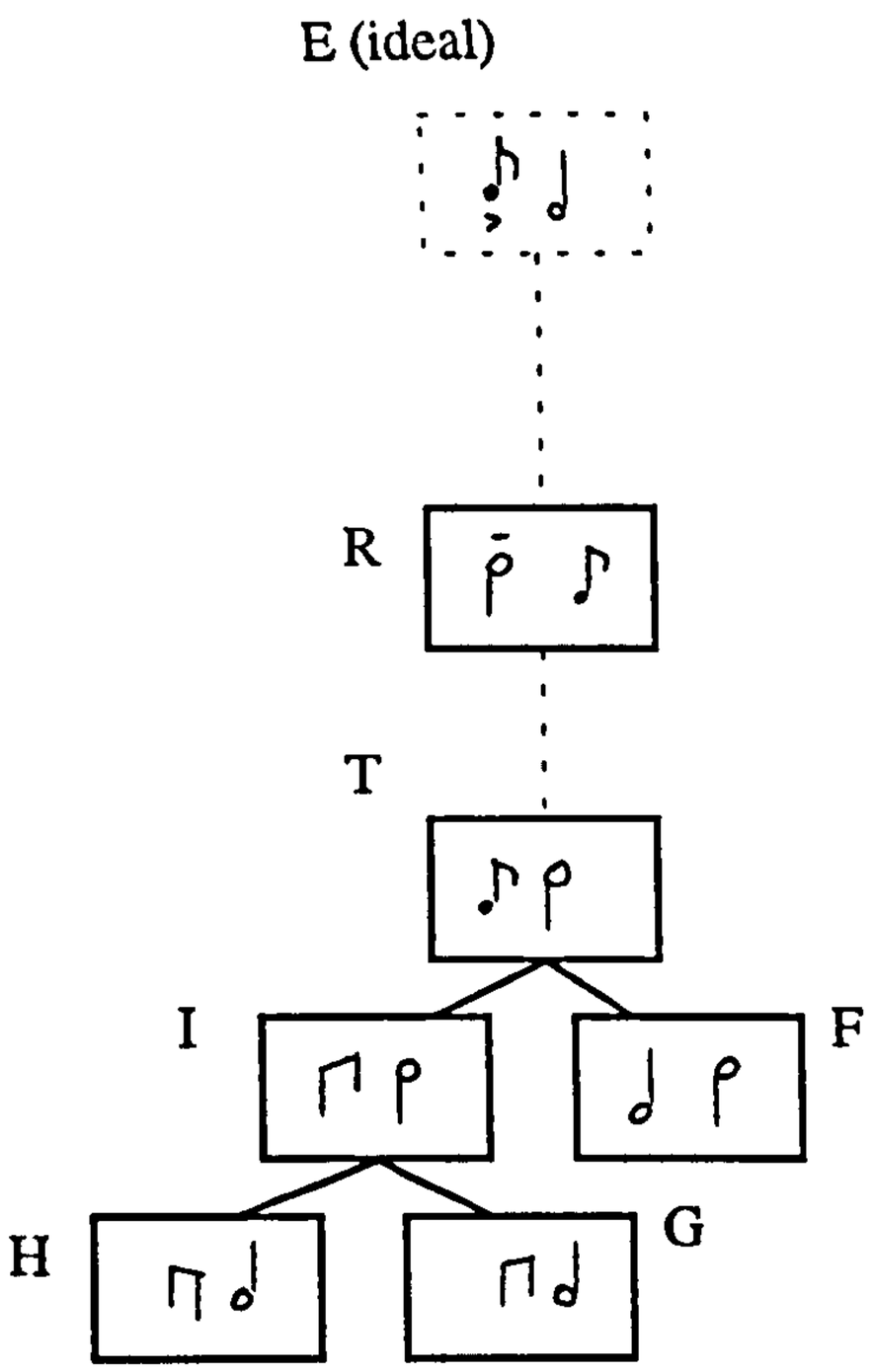


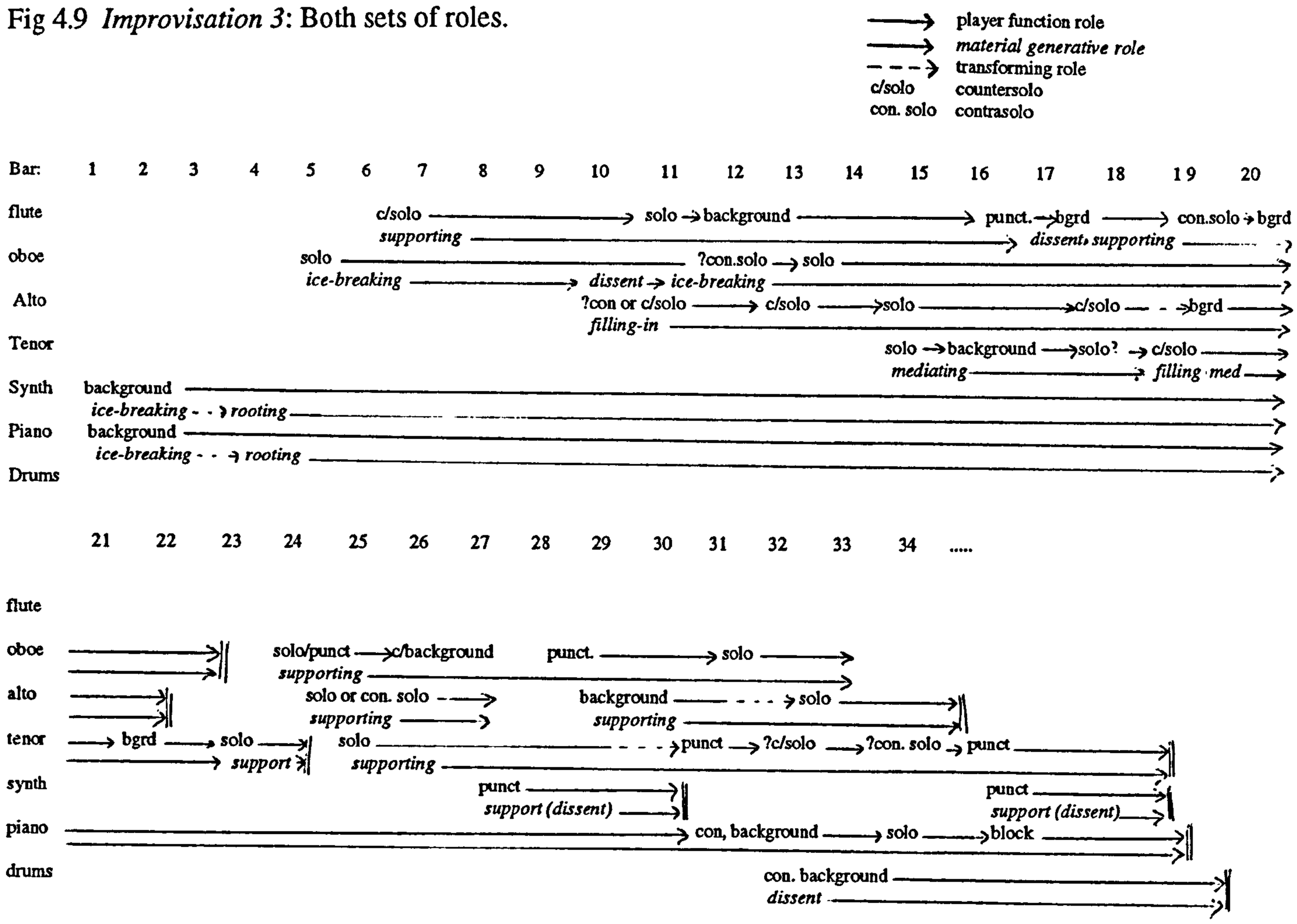
Fig. 4.8. Group T as mediating idea in *Improvisation 3.*

His reiteration of the E-group could almost root the structure by maintaining the original oboe idea, but this is not picked up by the rest of the ensemble; the material is closely connected to E1, but not a direct restatement. When the piece as a whole is taken into account, this return to the opening material is not easily heard, and is out on a limb as a ternary sub-structure. Instead the reiteration serves a supporting role, and the player stays in this role until the end of the piece.

The flute player remains fairly consistently with C-group material, supporting the opening piano idea. There is a minor dissent in bar 16, followed closely by a return to the supportive role at bar 19. The player remains silent from bar 21 until the end of the piece.

The bongos, on the other hand, do not enter until bar 32. The material is connected to the opening synthesizer pulse on Figure 4.4 by *abstract* association - they are both based around a similar semiquaver pulse; however, they are very different in quality and timbre. The rhythm in this context takes on a dissenting role.

Fig 4.9 *Improvisation 3*: Both sets of roles.



The player-function and material-generative roles can be summarised as shown in Figure 4.9.

Once again, the piece seems to be a battleground for the solo role. The relatively stable oboe solo is challenged by the two saxophones during the first twenty-two bars, but the oboist manages to maintain both solo and ice-breaking roles. The ice-breaking is complemented and assimilated by the saxophones.

When the ice-breaking ceases, all players take supporting roles (in terms of generation of material), re-using ideas that have already been introduced; the "scalic" groups E, U and V for example. A small number of ideas thus becomes the focus for further interaction, narrowing the breadth of material towards the end (Figure 4.10).

The two phases of the piece shown in Figure 4.10 can be seen as two phases of assimilation of the oboe rampage through the thematic groups. In phase I, assimilation takes place by mediation and filling in links between different oboe ideas by the tenor and alto saxophones respectively. During phase II assimilation takes place by the oboe and saxophones all supporting and reinforcing earlier ideas.

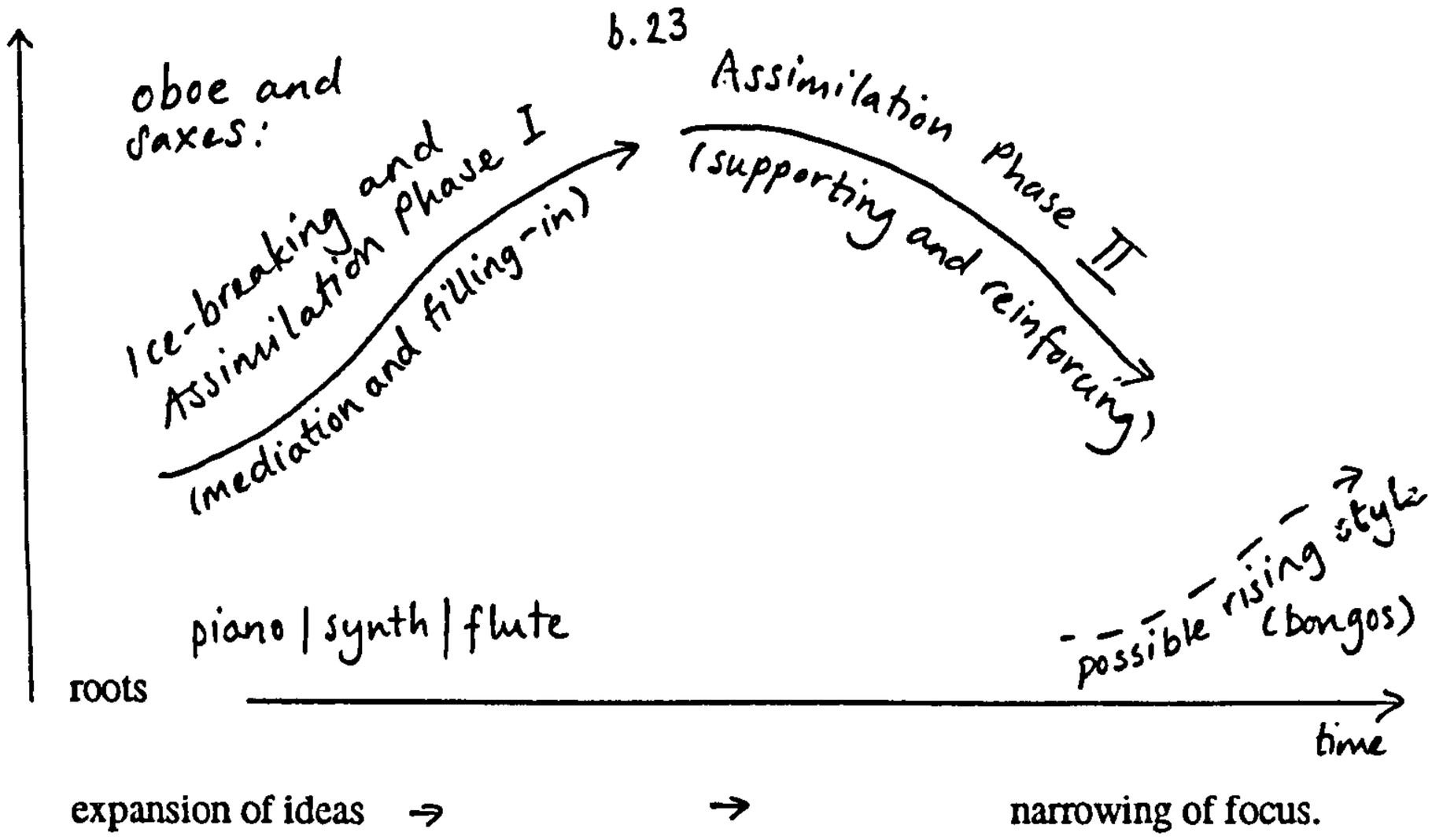


Fig. 4.10: Two phases of *Improvisation 3.*

The form in terms of solo roles is as follows; modes of interaction are also shown at the foot of the diagram.

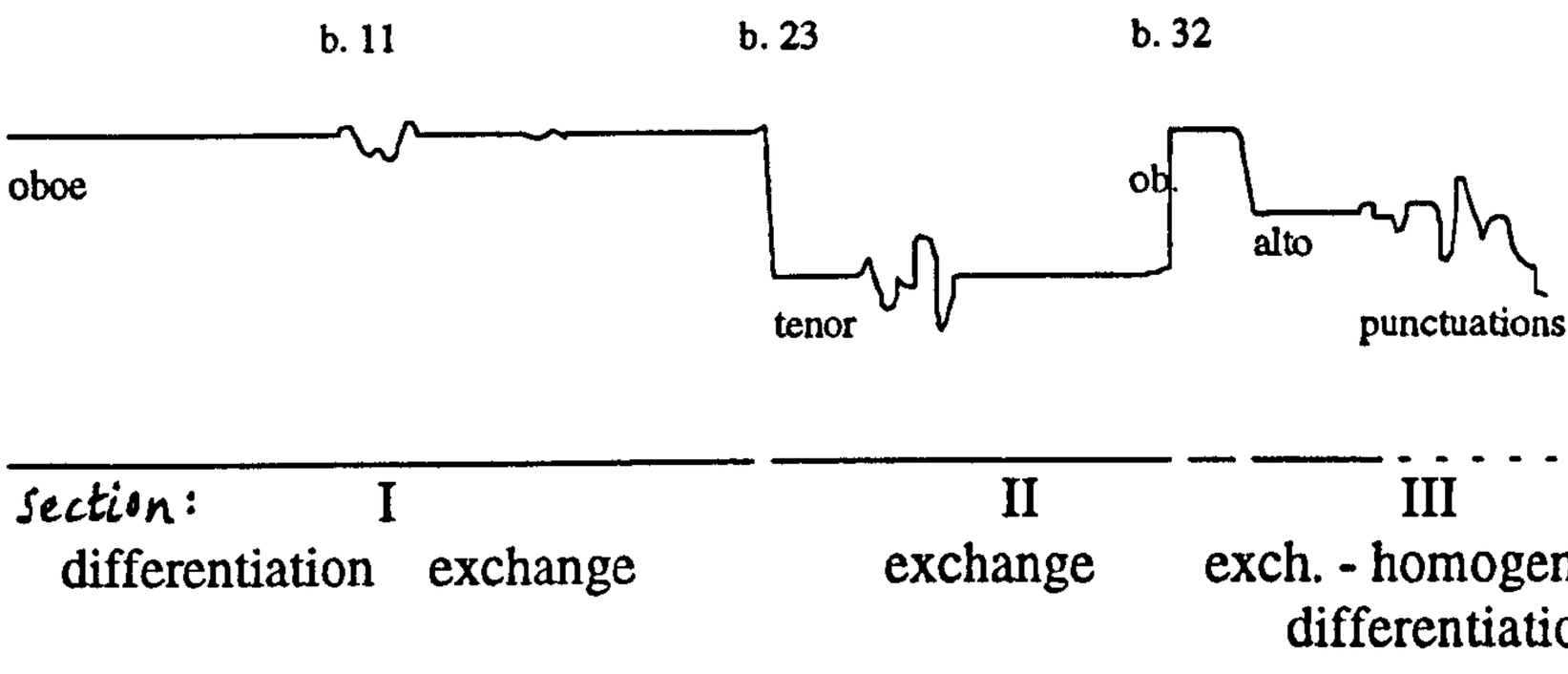


Fig. 4.11 Solo roles and modes of interaction in *Improvisation 3.*

The piece in this scenario is segmented into three. Section I is *broadly* characterised by an oboe solo, with contra- and counter-solos from the winds and a background provided by the keyboards (and sometimes the flute). Though the wind roles transform, the chief interactive mode is one of differentiation. On the whole, the oboe remains in the solo role, and the other winds are heard as contra/counter to it. At b23 (Section II) the tenor solo is still differentiated from the piano background, but is in the exchange mode relative to the oboe and alto. The exchanges become shorter creating a homogenous texture during section III, still against the piano background. The final bar contains the tenor, synthesizer and piano in the exchange mode, differentiated from the drum counter-background.

Figs 4.10 and 4.11 represent two different ways of looking at the structure of *Improvisation 3.* There are structural connections, in spite of the fact that the two sets of roles operate independently. Both analyses point to the tenor saxophone solo in bar 23 as a point of change, whether this is because the ice-breaking ceases or the solo spot is definitely taken over for the first time. Before this point, a clearer differentiation of material-generative roles, and very stable rooting background material in the piano complement an oboe solo which is challenged, but unsuccessfully. After bar 23, a sharing of solo space (or a series of jousts) corresponds to a second phase of

assimilation, in which the oboe and saxophones all support and re-work the thematic ideas introduced by the oboe in the first part of the piece. The piano, too, joins this re-working at bar 34.

Through the Ears of the Players.

During the interviews that followed, several issues emerged to indicate a relationship between interpersonal dynamics within the group and the structure of the music, as defined in terms of the two sets of roles discussed above.

The ensemble members names and the instruments they play have been used interchangeably by the players in the following comments. A reference list of both is as follows:

Flute	Mark	Piano	Dan
Oboe	Ben	Synthesizer	Lloyd
Alto saxophone	Lisa	Bongos	Maurice
Tenor saxophone	Alex		

Storming it.

All of the players except one commented on the oboe solo, each person hearing it *as* a solo, particularly in the first part of the improvisation. Its sheer drive makes it unignorable, and the ice-breaking role necessarily means that other players have listened and developed the material.

Ice-breaking, making a mark, putting something on the agenda were issues for that player during the session. He had joined the group on that day not as a regular member (though he subsequently stayed) but to make up the numbers for this study. He spoke of his feelings in the interview as follows:

> "I suppose we [himself and the alto saxophone player, Lisa] were imposing ourselves rather than coming and quietly joining in ... we fancied the idea of coming and mucking up their thing - well, that's a bit strong - we wanted to be ourselves ... [that was] better than just going with what was there"

His diagram of the group structure (Figure 4.12) shows an enclosed group, with the two "outsiders" impinging on one side. In his interview, he claimed not to know Alex (tenor saxophone) or Maurice (bongos). However, he did know other members of the group; he was in the same college year as Lisa, Dan and Mark.

> "Lisa's the person I know more than anyone else ... also both of us were coming into the group ... Lisa and I are close to Dan and Mark - we've all played [together] and we're all in the same year. I know Dan a lot better because of composition and we've done some improvising. Lisa and Dan know Lloyd."

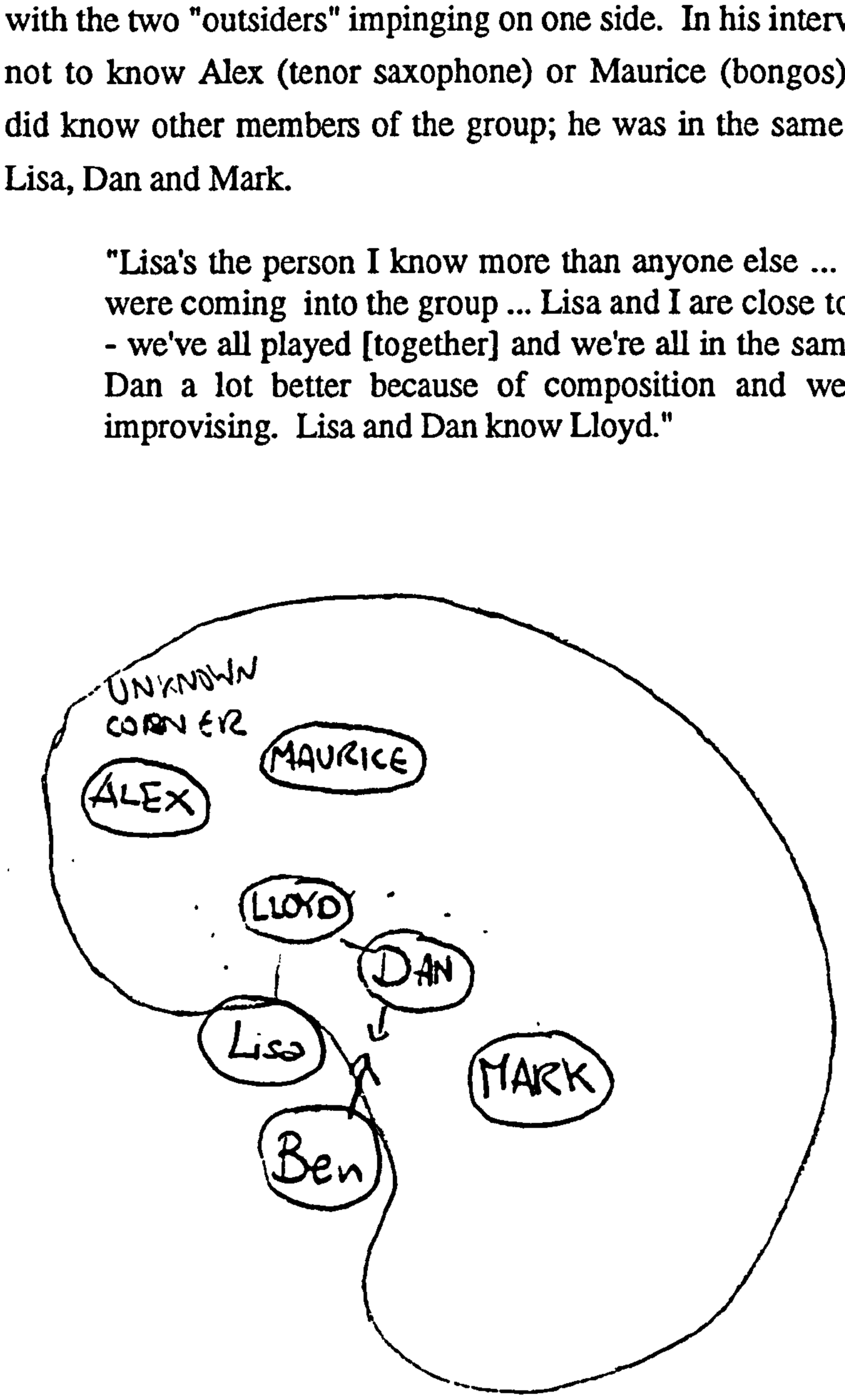


Fig. 4.12 Ben's diagram of the group structure

The impinging of the Lisa and Ben spheres onto the group "kidney" seems to reflect Ben's feeling about making his presence felt. Lisa the alto sax player did not project herself in the same way, but in Ben's drawing she is pressing against the group with Ben, perhaps as a supporting figure. The fact that Ben may have felt supported and knew some of the other group members, and had played quite extensively with me in other circumstances could have influenced the strident, confident ice-breaking. He commented:

> "What I was playing was very much me; everyone else plays their own version of that idea"

which is, incidentally, mediated by a sense of vulnerability:

> "I was playing around with the note being both strong and fragile."

Three of the other players made evaluative or subjective comments on the solo (a relatively high number). Lisa (alto saxophone) spoke about the entry as follows:

> "Ben - well, it's just fabulous isn't it? It's so ... *there* that they've started an accompaniment .. the oboe carries on in an elaborate frenzy!"

She represented the players within the music as follows, with Ben radiating energy like a sun (Figure 4.13).

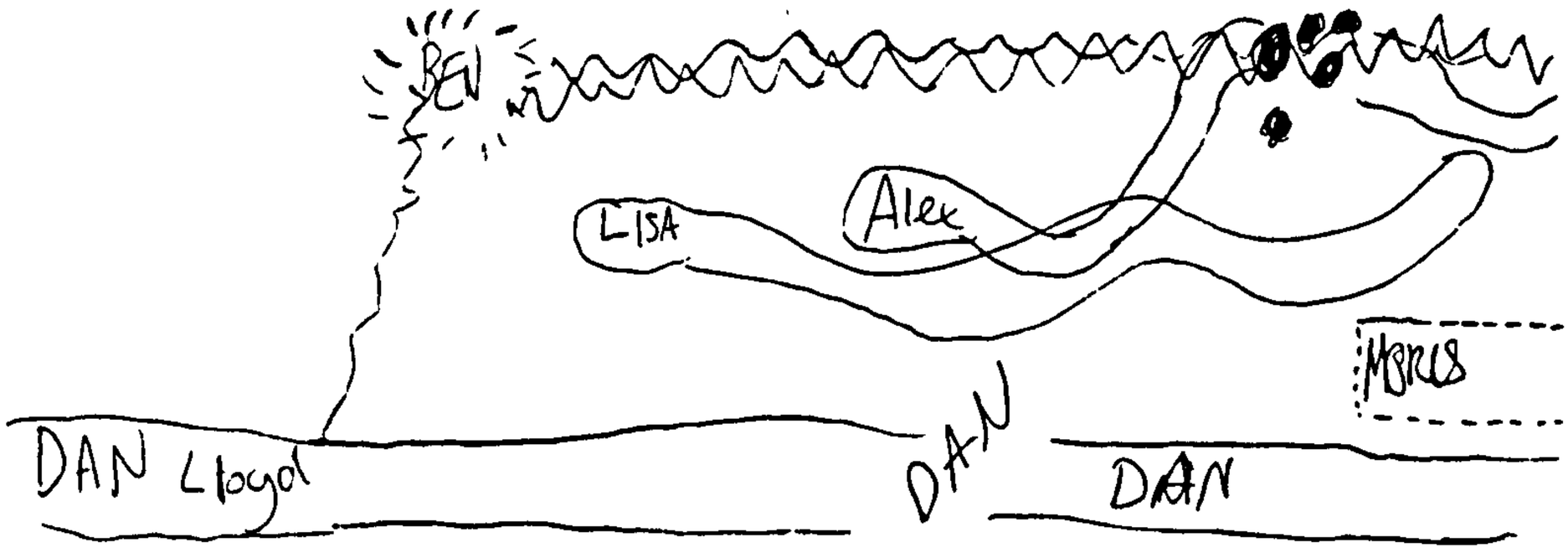


Figure 4.13 Lisa's diagram of the music

A power issue was implied when we discussed the music:

> "He's very much a solo but in his own world ... he doesn't give his part over".

For some of the piece, the oboe does not take part in the exchanges in the wind texture. The oboe and alto saxophone do exchange in bar 11, but the oboe then continues relentlessly, pausing only for breath in bb15-16. Both saxophones dive in here, but subsequent attempts to exchange are blocked by the oboe. To the question "Is it imposing?" Lisa replied

> "Yeah - er - I think he likes to do that. Not in a bad sense - he's definitely imposing himself ... it's not something I'd see the others doing."

The bongo player, Maurice made a similar comment:

> "The oboist .. just seemed isolated from what else was going on ... maybe I didn't like what he did ... [he] just kept going - didn't try to accommodate"

This too seems to indicate a power issue, or at least a struggle to be heard, especially since Maurice had joined the group a couple of weeks before the session. He was relatively new to the group, but here was someone even newer dominating the improvisation, while he was waiting to find a space within it. This was perhaps compounded by the fact that Maurice was less confident than the other group members and less connected institutionally, as he was not doing the same course.

Mark the flautist's reaction to the oboe entry was very different:

> "It's brilliant... so blatant .. like raw expression. That's what really makes it genuine, give it what you've got. It just inspired me."

And later,

> "I'm taking a supporting role, reinforcing his idea... I heard [myself] accompany what he did by way of a reflection ... [I'm] part of the accompaniment but using some of Ben's ideas."(c.f. beginning of the flute entries in bb. 6, 16 and 19).

His supporting role is quite possibly connected to his description of his social relationship with Ben, which has a quality of reaching out:

> "I feel I ought to get on with Ben better than I do ... I *feel* a connection with Ben, socially I don't think there is one."

There seems to be a direct relationship between the Ben, the oboist wanting to make his mark and the roles he took in this improvisation. Taking a soloistic role is a direct way to fill the space and grab attention. In a hierarchy of roles, the solo role would be at the top, as all countersolos are heard in relation to it, contrasolos are heard in contradiction to it, and backgrounds, heckles and punctuation are heard as "behind" or supporting it. Furthermore, the oboe solo here maintains its place at the top of the tree, at least for the first twenty-three bars, partly by blocking other attempts to join the solo spot by the exchange mode of interaction (e.g. the alto saxophone in bar 11, the flute in bar 16). Finally, his relentless ice-breaking during the first half of the piece provides a wealth of ideas which are taken up by other players.

While the ice-breaking is impressive, providing fuel for the others and connecting Ben to the rest of the group, the lack of exchange around bars 9-10 and 17-22 separates him. At bar 28 his material is more fragmented, and he reconnects to the other winds by exchanging U and V group material with the tenor saxophone.

If there is a cause for the fragmentation in the oboe part, it might be the running out of steam after manically storming through a wide variety of material. None of the other players have moved the material on, except the synth, which has introduced a new timbre - filtered noise - to the gestural shapes in the W and X groups. Having been left to grapple with a spread of ideas, but not given much space in which to play with those ideas, the others have plenty of fuel with which to challenge the soloist. They are probably either expecting to have small gaps in which to enter the solo

space, or use shorter punctuating gestures as a more reliable tool with which to pierce any continuity.

As Ben saw it:

> "Once my part was there, other people put their ideas onto it and developed it. Everyone else developed it. Eventually they dismembered it!"

Ben made his mark and the ensemble dealt with it. The order of events from this point of view is:

musical clarity and clear role differentiation - the oboe blocking other wind parts - a challenge from the tenor saxophone - fragmentation - dissolution.

The tenor saxophone challenge occurs from bar 23 and is conceded by the oboist by about bar 28. The oboist then fragments his line for one of three reasons: perhaps to hear what the tenor is doing, perhaps to joust with him, or perhaps to copy, and homogenise with him, to create a punchy texture. These options represent different power relations; the first implies submission, or biding time and allowing the sax to come through; the second implies that the power struggle is still there; the third implies a relinquishment of the lead role, and a sharing of the space. The situation is ambiguous, but in any case, the tenor part becomes a more effective solo, and the oboist stops playing shortly after.

Lisa (alto saxophone) perceived the challenge from early in the piece. When listening back to the piece, she commented:

> "It means something that Alex [tenor saxophone] sneaks in [bar 15]. It's a high note that gets mixed up with that high thing - he's put a counterpart between me and Ben."

As the band played on she continued:

> "Alex takes over my part. I'm doing the low notes. I'm rooting, he takes over the mediating ... Then he takes over Ben's! A takeover bid for the solo! [Laughter]."

Mark (flute), who was less embroiled in the soloistic space of the piece expressed the takeover in a less graphic way when we reached bar 16 in the listening back part of his interview:

> "I'm trying to work out whether the saxes are playing a counter[solo] or an accompaniment - it seems to be a fine line between the two ... there's nothing flourishy but the volume - means they're taking a solo stance. .. The oboe is left up high..."

At bar 21:

> "I guess everything's evened out slightly. Everyone's commenting on the same motif."

The only other comment dealing specifically with the issue of who was soloing when came from Ben, on listening back to the piece (bar 25, refering to the tenor saxophone part in bars 23-24):

> "It almost became a polyphony - then Lisa's sax jumps into the foreground"

In fact, the soloist jumping forth was Alex, the tenor saxophone player. On listening back, it was quite difficult for non saxophone experts (myself included) to hear who was doing what, but this must also indicate that at the time Ben had not noticed who had jumped into the foreground, and perhaps it did not matter to him.

Four of the players on listening back did not try to unravel the takeover in as much detail, although most people commented on the fragmentation that occured. The tenor solo was not labelled a solo by any of the players. By the second half of the piece the exchange and homogenous modes of interaction are in play and the solo does not therefore occur in the context of clearly differentiated roles. As Lisa's commentary implies, the takeover is via the back door ("Alex sneaks in") rather than centre stage.

The issue of solo space within the group has implications toward the musical structure as outlined above, but also points towards a power struggle in the group during that session. This is not to reduce *Improvisation 3* to a theatre of war, but to draw a connection with Tuckman's model of the stages of small group development (Tuckman: 1965).

Tuckman reviewed research into four kinds of small group; therapy groups, human relations training groups, work groups (which would be the classification of the ensemble in this chapter) and laboratory-controlled groups. He proposed a model comprising four stages of group development in the realms of task and intragroup social relationships - the way in which members relate and act towards each other as persons. The two realms deal with different aspects of group development, but each stage of development is characterised by an underlying dynamic. The model can be summarised as follows:

stage	social realm	task realm
Forming	Testing group boundaries; seeking to discover what interpersonal behaviours are acceptable to the group. Dependancy on group leader.	Orientation; defining the task by its ground rules. Underlying characteristic: orientation, in both realms.
Storming	Conflict; members become hostile towards one another as a manifestation of resistance to the formation of a group structure.	Emotionality; emotional response to task demands - a discrepancy between an individual's personal orientation and orientation towards the task. (*Emotionality is less obvious in task-based groups such as this one*). Characteristic: discrepancy.
Norming	Cohesion; an establishment of group-generated norms ensure the group's existence. Members accept each other's idiosyncracies.	Relevant opinion exchange; openness among group members, information is exchanged and acted upon. Characteristic: openness.

Performing	Functional role-relatedness; members adopt roles that enhance the activities of the group.	Emergence of solutions; attempts at task completion. Characteristic: constructive action. Both realms come together, energy previously used in interpersonal relationships is now devoted to the task.

Table 4.1 Stages of group development (summarised) after Tuckman (1965).

Later commentaries have added a fifth stage characterised by separation ("mourning").

It should be noted that there are many models of small group development (see Cartwright:1968; Gibbard:1974 and Tuckman:1965 for bibliographies), and this one should not be regarded as the only truth. However, most models point to similar stages of development, and as it is beyond the scope and objectives of this paper to discuss them all, only this one will be referred to.

The ensemble of musicians playing in *Improvisation 3* can hardly be viewed as an experimentally controlled group - the group is in various stages of development, since there were some new and some established members. The intragroup relationships are complex, and are apparent in the music on many levels. It is not the purpose of this research to discover how apparent they are, or to uncover all social processes, but to seek out possible connections between the structure of the group and the role structure of the music.

Ben's oboe solo may be interpreted as "testing" behaviour - for how long could he maintain his solo without a strong takeover bid? How much space could he take? His approach to being new within the group seems to be to plunge in and test things out. The alto saxophone challenge for the solo spot in bars 9-12 could be testing Ben, to discover whether he was willing to share the space and enter into the exchange mode of interaction. Ben's roles seem to be a result of his feeling about his position in the group - he

could have joined the group and, to use his words, "just gone with what was there", but he presumably felt like storming it instead.

Other players accept stable player-functional roles more readily; the pianist, synthesizer player and flute player, for example. These seem to refer to the fourth stage in Tuckman's model, in which appropriate roles may be taken in order to complete the group task. This is not to suggest that backgrounds are necessary for improvisations to exist, but in the context of an ongoing group such as this one, a range of roles, which may include backgrounds, is sometimes desirable. Every player wanting to play only solo lines in every session becomes boring.

Dan (piano) sticks to his rooting and background role until the last long bar, in which he supports earlier oboe material, and his player-function role becomes an ambiguous background/solo. Taken out of context, the role does seem to be a solo at this point, but when heard as part of the whole piece, the ambiguity is stronger, as the fragment overlaps the end of a saxophone solo. In Tuckman's model, this would surely correspond to an earlier stage; that of conflict. Although Tuckman's stages are developmental, implying linearity, a more useful interpretation for this study is a flexible "zig-zag" approach, which allows for flips back to earlier stages. A sudden emotional response to Dan's task of keeping a background going could be played out by breaking out of the background role and diffentiated mode and taking a solo role then blocking/punctuating role in the exchange mode.

Although Dan is a more established member and his first role seems to reflect this, the flip into solo/background could be as the result of his *feeling* about maintaining his part of the functional role-relatedness.

Sub-groups.

Sub-groupings, some of which are institutional, some social and some instrumental were reflected in the music.

Instrumental groupings were as follows:

Instrumental group	musicians
winds	Alex (tenor sax), Lisa (alto sax), Ben (oboe), Mark (flute)
keyboards	Dan (piano), Lloyd (synthesizer)
percussion	Maurice (bongos)

Table 4.2 Instrumental groupings.

Institutional groupings are as follows; all students were studying within the Music Department at City University:

Course	musicians
BSc (Music) year 1	Alex (tenor saxophone)
BSc year 2	Mark (flute), Ben (oboe), Lisa (alto saxophone), Dan (piano).
BSc year 3	Lloyd (synthesizer)
Music Information Technology Diploma	Maurice (bongos)

Table 4.3 Institutional groupings

Improvisation Group membership could be summarised as follows:

Group membership status	musicians
Had been in the group since its formation (8 weeks)	Mark, Lloyd, Dan, Alex
Was on his third session	Maurice
New that day	Ben, Lisa

Table 4.4 Improvisation Group membership

As the Group was eight weeks old when the piece was recorded, people's membership of University year-groups had quite a strong influence on the social relationships at the time. At the start of this improvisation, too, the instrumental groupings were mostly differentiated - the flute as mediator, contributing to the background keyboard texture, and occasionally exchanging material with and punctuating the other wind parts.

Maurice is separated from the rest of the group in terms of its sociological make-up and in terms of his instrument. This is reflected clearly by his dissenting and contra-background roles in this particular improvisation, though not nearly as much in other pieces recorded on the same day. His drawings of the piece show what he saw as various groupings and separations between different players (Figure 4.14).

Stage 1 shows the piano and keyboard (synthesizer) linked by arrows and "sending out messages". Stage 2 shows that:

> "The oboe has sat on top of the piano and keyboard. The power relationship - the oboe has taken control".

Stages 3 - 5 show the saxophone(s) becoming involved and "crossing" the oboe. The drawing seems to imply conflict. At Stage 6:

> "Then ... I think the sax starts off repeating, and they try to hold hands and play the same thing. They start expanding on themselves but they haven't broken the barrier between themselves (Stage 7)."

At Stage 8, the bongos enter, from outside the frame. A new allegiance is implied by the dotted line in Stage 9 between the piano and bongos. Stage 10 shows the players falling out of a trap door, and Stage 11 represents what might have been - a new window opens, in the style of current computer software.

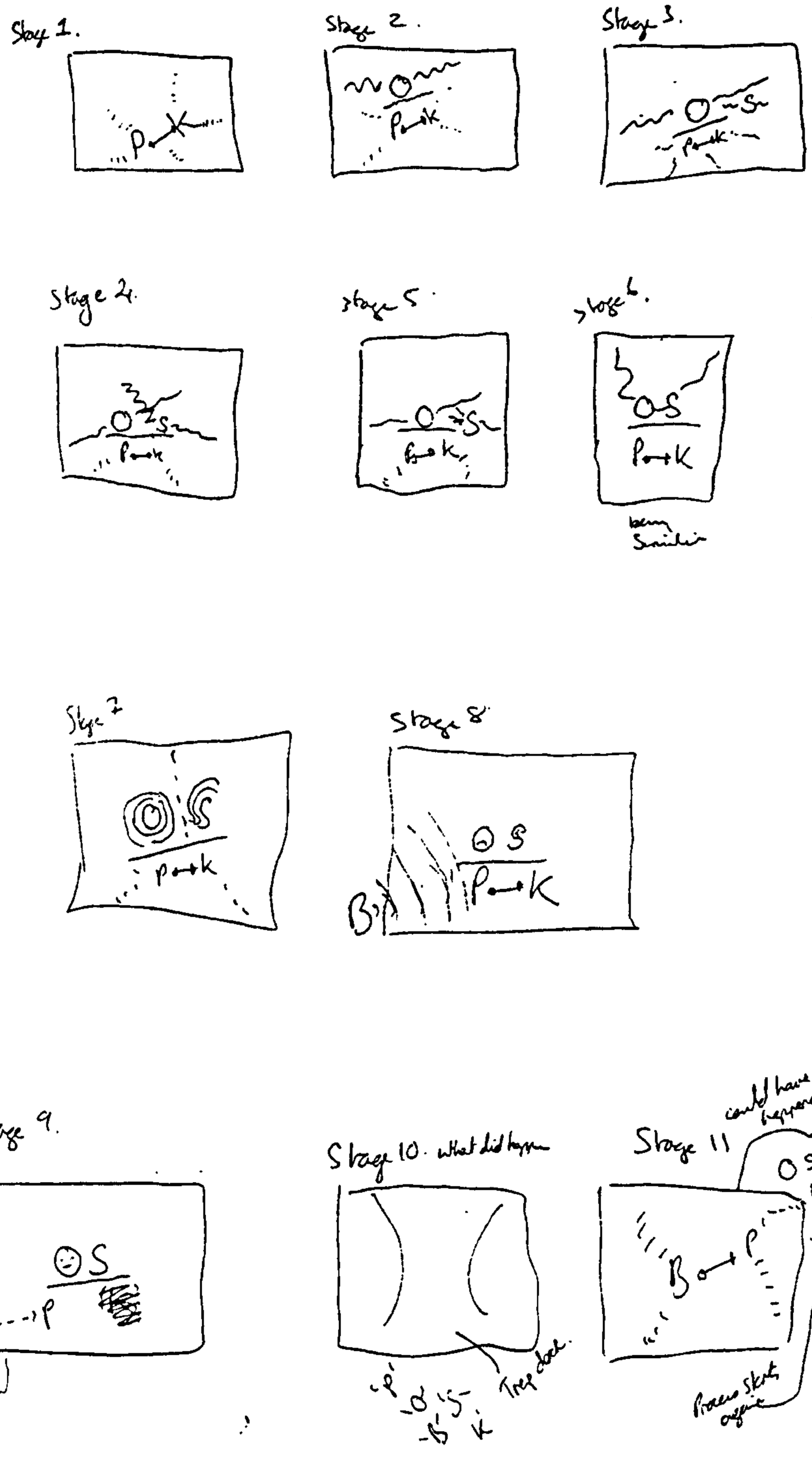


Fig. 4.14 Maurice's surreal comic-strip of *Improvisation 3*.

It seems reductionistic and a bit disrespectful to simply characterise Maurice as an outsider, yet in terms of the three tables above he is in his own sub-category of the whole. Although his role was heard as a contrapart by the other players and himself, he was able to hear in detail the relationships through the music, and this quality of listening connects him to the experience of doing the improvisation. The window image and the Stage 9 connection with the piano part offer new possibilities. Given what must have been a less than satisfactory playing experience for Maurice, it seems that the new possibilities take us onto emotional ground, perhaps expressing hope.

Another way in which allegiances are formed is through musical taste. Three of the players made subjective remarks about their own or other people's material. What seems a bit like gossiping is actually a way of placing oneself in relation to the piece.

Ben remarked on his enjoyment of the wrenching sound on the saxophones. Lloyd, the synthesizer player said of his own original idea :

> "I changed the sound rather than the note. I'm more interested in that generally. I'm not into notes any more".

He also enjoyed the sound quality of the oboe part

> "It could have been anything up to there - they decided to do ... screechy noises, which is good because it's not notes."

Mark (flute) comes from a different musical background, and resonated with a different aspect of the oboe solo:

> "When the synth came in I thought 'oh no, it's so false' - with the piano as well the whole thing was like a B-movie film music ... [then] the oboe came screeching in and the saxes - I thought it was an entity - pure take-off ... you have to broaden your mind to accept the synth, look at it in a different light."

His musical support of the oboe solo in bar 6, then, adds to the "natural" sounds in the opening bars of the piece - by his own admission he wanted to accompany the oboe, but presumably add to the screeching winds. The result contains thematic elements of the accompaniment (C-group) and the Set IV gestures.

Lisa (alto saxophone) specifically mentioned joining in with different players:

> "My first entry ... Ben [oboe] did his wild thing. I thought a short melodic line would have a purpose to add something .. I wouldn't have done it if Ben hadn't done that."

After the first listening

> "I can hear myself join in with Alex [tenor saxophone]"

At bar 37 (re bb. 35 -37)

> "Dan's [piano] slowing the tempo - I was giving it a dying effect"

When I asked her if there was an allegiance swap, she replied:

> "... I guess it was going with the music. The thought wasn't taking control of anything .. I guess I went for the strongest..." [laughter at the implied last word - man] "... I was with Ben before, then with Dan."

Although Lisa had also joined the group for that day, she is part of both the wind group and the year 2 University group. Her diagram of her relationship to other group members shows her much closer to Mark, Ben and Dan (Figure 4.15).

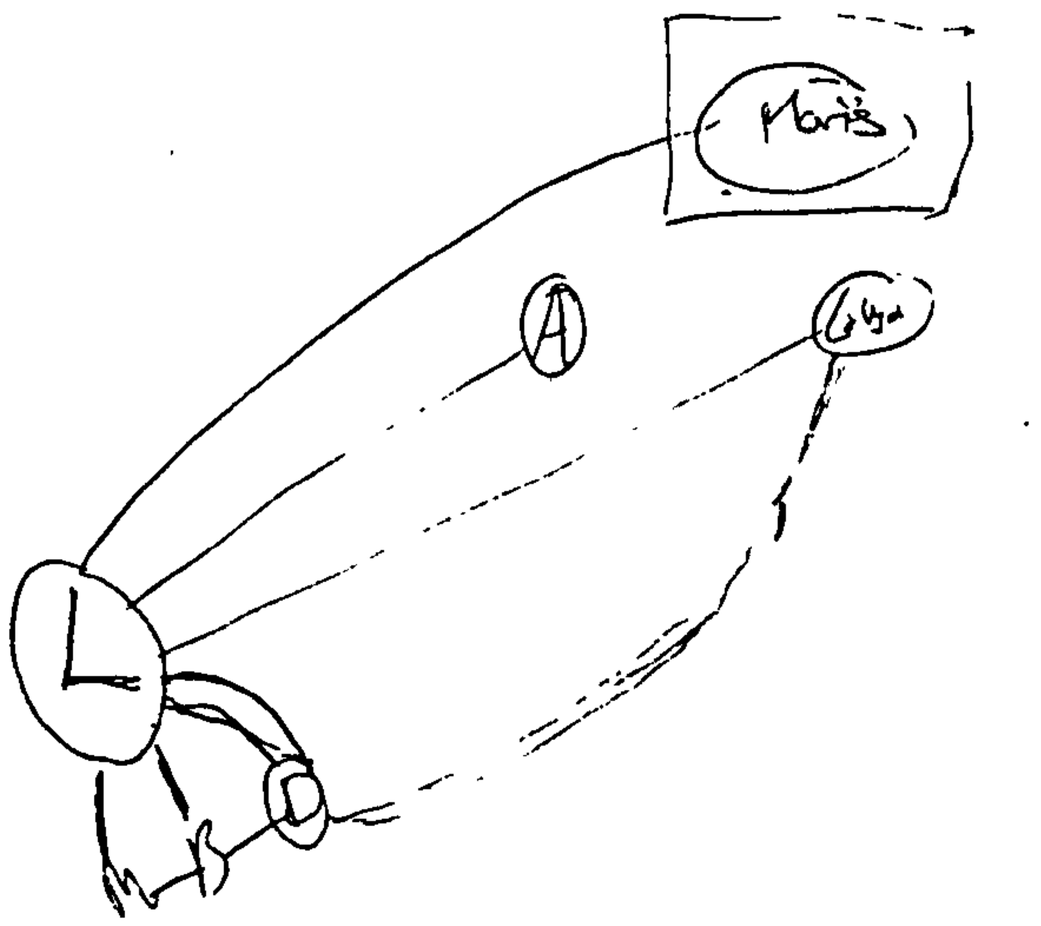


Fig. 4.15 Lisa's diagram of the group structure

Musically, she is very much connected to Ben *and* Alex (the oboe and tenor), before joining Dan (piano) at the end. In terms of the role details, though, Lisa takes a role that reinforces Ben's and Dan's material - filling in "evolutionary" links in Ben's material and copying (supporting) Dan's. These are *complementary* roles in terms of generation of material. In relation to Alex, Lisa's filling-in role is working *alongside* Alex's mediating: both Lisa and Alex (alto and tenor saxophones) contribute to the assimilation process, and perhaps get in each other's way slightly.

In the music the players often group together in duetting pairs. The two saxophones, for example, immitate each other during the course of bb. 15-20, as do the oboe and tenor saxophone in bb. 27-32. There may be no deliberation in the sense of pledging allegiance attached to these pairings. The tenor saxophonist certainly did not know the oboist, and knew the alto player casually. However, he could have been trying to get to know both players by testing their responses to his countersoloing.

The opening in the synthesizer and piano is a different case in point. The pianist had agreed to start the improvisation, and gave a clear up-beat so that if any other players wanted to begin simultaneously, they could. The synthesizer player was the only one to do that and this relationship was reflected in the social relationship. Asked to describe his relationships with other group members, the synthesizer player replied:

> "How well do I know people generally? I don't really know anyone in the group. I walked to the Barbican with Dan" [piano].

Having accompanied Dan to the Barbican, he also co-accompanied the begining of the improvisation.

Group structure/role structure.

Three types of relationship between the group structure and the role structure of the music are traceable from these interviews.

The above relationship between Lloyd and Dan (synthesizer and piano) is in a category which might be described as congruency: an aspect of the social relationship is reflected directly in the musical one, here in the opening bars of *Improvisation 3*, in which they both spontaneously took rooting and background roles. Without wishing to characterise them as present-day Thompson Twins - the two inseperable policemen from the *Tin-Tin* cartoons (Hergé, 1962), there is an "accompanying" symbolism in the choice of role (background is equivalent to accompaniment in this context) and in the fact that they have taken identical roles. Maurice's dissenting role also seems to be congruent with his position in or out of the group.

Secondly, in many cases the player-function and /or material generative roles are adopted consciously or not as a result of that person's feelings about being in the group. Ben's oboe solo is an example. His reaction to coming into the group on that day was to "storm it" rather than joining in tentatively, and the result is a truly ice-breaking solo. The solo has a strong effect on the structure of the music. There is, in part at least, a causative relationship between his feeling about his structural position and the musical result.

Lastly, it seems clear that not every interpersonal nuance is mapped from the structure of the group onto the structure of the roles within the music. For example Alex (tenor saxophone) is very connected musically, but people had not got to know him socially; he in turn was able to comment in detail on some of the musical aspects of the piece, but when it came to

drawing the relationships between people in the group he said he could not remember people's names. This third category is of non-relatedness.

These categories of relationship cover every possibility, and without this study, we might well have guessed their existence anyway. What the study does bring to light is evidence and methodology to support the idea.

Conclusion

Hearing the players in the music.

After dealing with one improvisation in this way, and at great length, it becomes almost impossible to hear the music without hearing a series of interactions within it - hearing the people in the music. A music therapist's listening to music must be enriched in a similar way, though in a clinical context it is hard to envisage the resources for such a detailed look at musical structure. On the other hand, a musicologist might hear structure, harmony, chaos or lack of normative structure without a sense of who created it, or what the weaving together of parts expresses. One of the central aims of this work has been to connect the two visions: to find a way of seeing the interaction through the detail of the music, whilst allowing the music to keep its place as a product of a performance tradition, not a therapeutic-healing one.

Roles and role-playing have been used as a middle-ground tool, lying between music analysis and the social psychology that informs music therapy. Leaving aside aspects of the piece that relate only to the language of music, such as harmony, (and hence what this language can represent symbolically - eg cultural unity, diversity, cohesion, conflict), and by-passing purely psychological aspects of the group such as group members' personalities, roles have a reference to and meaning in both fields.

Thus the kind of conflict dealt with in the analysis is somewhat different from large-scale harmonic conflict: whilst harmonic conflict often generated by a single composer may be *symbolic* of conflict between people, beliefs or nations, the conflict arising from heckles or contraparts is the play-out of an

actual conflict between group members, whether simply a conflict between musical ideas, a battle for solo space or the tip of an interpersonal iceberg.

The analysis presented here can be viewed as a "snapshot" of two minutes' worth of improvisation. It does not seek to locate the music historically or culturally, neither does it seek to be a diagnostic tool for the habitual interactive patterns of the participants which might be looked at during a group therapeutic situation. By emphasising gesture over stylistic norm, it gives a detailed account of what happened during a *particular* improvisation rather than pertaining to the greater scheme of things, and gives a window onto the interpersonal dynamics that were played out through roles taken in the music.

Within the two-minute time boundary, it gives vital clues to a living group culture at that time. Musical ideas reverberate between the players, some for a large part of the piece, some fleetingly. The music is constantly being reinvented afresh, and as a meaningful piece takes shape a microculture begins to grow. In *Improvisation 3*, the players find ways of reinforcing ideas that they like and want to sustain. Even in this short space of time, they settle into roles that enhance the interaction; they "reinforce" (Mark, flute), "take over" (Alex, tenor saxophone), "add something" (Lisa, alto saxophone). The roles are at best communicative and at least indicative of each player's intentions towards or feelings about a shared goal of creating a two-minute piece.

However short-term the goals, or basic the culture, the creation of a two minute piece is a shared act; in this case, an act without excessive cultural appropriation. Against a macroscopic cultural background in which borrowing from various styles often results in derivitive compositions and performances, further work into the growth of small group cultures that results from collaborative music-making offers hope for the quest for identity that pervades the work of individuals, groups and institutions at the end of the current century.

A hierarchy of roles?

This chapter has refered briefly to the idea of a status hierarchy of roles. From high status to low, the order could be:

1	solo roles :	i)	solo
		ii)	countersolo
		iii)	contrasolo
2	accompanying roles:	i)	background
		ii)	punctuation, heckle
3	counter-accompanying roles:		counter background, counter heckle, etc.)
4	contra-accompanying roles:		contra background, etc.)

Two factors come into play in the ranking above; the amount of attention afforded to each role by the listener (and/or the other players), and relatedness of musical material within the part (eg solo material) to other ideas within the piece, placing it centrally within a hierarchy of thematic ideas.

However, there may be many additional factors at play which may be different for different listeners. For example, does complimentarity of material override attention-seeking qualities, placing a complimentary background *above* a necessarily non-complimentary contrasolo? Does role-relatedness play a part? Should the status be determined by the players, high status afforded to the players to whom the ensemble listens as they respond during an improvisation?

Whilst a term like "status" implies power relationships, a status hierarchy is not congruent with a control hierarchy. Often a soloist does not control the group or the direction of the music. Considerable control or influence may be taken by a background rhythmic part that leads tempo changes, a heckle or contrasolo that provokes shifts in the material generated by other players. The lack of congruence between the two hierachies may also be due to their separate but overlapping spheres of operation - while status relates to interpersonal interaction, and to locate roles within a status hierarchy is to invoke human relationships, not purely musical ones, control in this context refers to control over the direction of musical flow.

On the nature of interpretation.

Whilst the techniques of music analysis used here have given a relatively neutral reading, or at least a way of justifying the reading of *Improvisation 3*, the extraction and interpretation of the players' verbal responses was considerably less impersonal.

Raw data came as players made comments on listening back to a recording of their improvisation (Appendix iii). However, this data was expanded during the following set of interviews. Although I asked very open questions and did not censor any points, ideas came up from the interviewees and were expanded during the "live" exploration. This almost certainly resulted in us not developing every underlying idea, therefore not giving the whole picture. The recorded interviews had then to be interpreted - my interpretations were influenced by hearing the music myself, knowing the group members to varying degrees, an interpretation of vocal inflexion from the interview tapes, memory of the feel of the interview, memory and field notes from the day of the improvisation itself.

Listening back to the interview tapes, I also realised that the actual words spoken gave away less than half of what was being expressed by the interviewee - many of the interviews consisted of half-finished sentences, vague language, "those", "these", "things" and "y'knows" - with accompanying "mms" from myself. Yet at the time, it had been perfectly clear that we were talking about the intricacies of the group and musical interaction on that day! Moreover, the better I knew the interviewee, the less the word content of the interview. It seemed that some of the interviews had run on empathy and common understanding as much as on conventional language, and doubtless a degree of empathy and personal knowledge swayed my interpretation of the "data" on the interview tapes.

On a slightly different note, the analysis has not as yet dealt with the function of long-term silence. Quality of silence, highly significant in the work of music therapists (Pavlicevic:1994) is missed out totally in the framework of musical-functional and material-generative roles. As a player-function, it must simply be silence, and long-term silence as material does not exist in the structure of thematic ideas in this or the previous chapter. Maurice's silence in *Improvisation 3* seems to reflect his position on the edge of the piece - the outsider. Was his silence a withdrawal? Did it

express dislike of the music or did it express his position within the group? Was he allowing space for the other players? The silence and its function are still open to interpretation.

Lastly, the methodology overall attempts to induce or reconstruct the players' intentions before and during the improvisation in order to tease out some of the connections between musical and social interaction. Any induction implies an inextricable involvement of the inducer or analyst - therefore the last characteristic I would claim for this work is neutrality, but I hope the interpretation here is both sensitive and fruitful.

Part II

Backbones

5. . The Ideals of Backbone Composition.

The ideal backbone makes use of suitable aspects of traditional composition. It also leaves space for the expressive spontaneity of improvisation without compromising either activity.

What is a Backbone?

A backbone is a composition for one or more instruments (including voices), written with the intention of leaving space for further parts. These parts are devised by members of the ensemble during the realisation or fleshing-out process. This usually takes the form of four steps:

1 Hearing the unrealised ("bare") backbone.
2 Trying out and evaluating ideas for ensemble parts.
3 Consolidating the parts: trying further ideas, shaping and refining the music. Getting to know the music.
4 Rehearsing and performing the fleshed-out piece.

Improvisation is the basic tool used to explore and realise ideas for the ensemble parts. This may take the form of improvisation around material given in the bare backbone (for example adding a part to a riff or ostinato), or free improvisation of simple background textures: drones, wisps of string harmonic, or dance rhythms to go with a melodic backbone. The process

invites the energy and personality of the players into the composition. The piece shapes itself around *their* individual sounds on their instruments; their timbre, expressivity, improvising habits, likes and dislikes. Through improvisation it is possible to move beyond what is notatable in music not only in the process of interpretation, but also in that of collective composition, as un-notated harmonies, rhythms, textures and melodies exert their push and pull on the backbone structure. In classical musical performance it is desirable that the written material should be transcended; in backbone realisation written material is transcended before the collective composition has been finished. This earlier transcendence is shared with aural-written traditions such as jazz and certain rock and pop practices.

Keeping parts of the realisation improvised allows the possibility of unknown moments in the finished piece. Players make instinctive decisions, take risks and even try out new ideas during the performances. This not only gives a uniqueness to each performance but also adds an element of adventure, as the ensemble is left to rely not only on what is known but on what is heard in the moment of performance. But since improvisation will have taken place throughout the realisation process, there is usually a high degree of focus in the playing and trust among the ensemble members that guards against elements of the piece sounding as if they have been hastily "thrown together".

All of the risk taking and freedom of action mentioned above could be found to an even greater extent in free improvisation. However, a backbone composer can also draw on the structural devices of written musics, and can make full use of architectural forms such as sudden changes in material, collage, simple ternary or rondo-type forms, phrases that expand to form whole sections, or spiral inwards towards cadences. The composer may be specific in his/her use of modal, tonal, symmetric or free harmony, carrying this through to the realisation. Alternatively, a backbone may be based around a series of pitch centres which function as what Steiner (1992) has described as a central axis around which the ensemble harmonies revolve. In this case, the players choose their harmonic material largely by ear or by chance, spontaneity throwing together a number of interpretations, for better or worse.

The written material can bring about clear beginnings and endings for each piece, rather than the players starting and stopping one by one (a jam

session cliché familiar to anyone who has jammed more than a few times). It can introduce key moments of coincidence, recurrence, shift in material or symmetry, all of which *could* happen in free improvisation, but are more likely to happen as part of preconceived pieces. Ideally, backbones can have the best of both worlds, the spontaneity of improvisation and the architecture of composed pieces.

The following is a general overview. A bare backbone could be:

A part for one or more instruments that runs for most of the piece, and is complete in itself.
A rhythmic, chordal or melodic outline.
A graphic score.
A conventionally-notated piece with space for improvised solos, textures, accompaniments or punctuation.
A solo awaiting accompaniment.
An accompaniment or series of accompaniment figures awaiting additional material.
A series of punctuating figures awaiting something to punctuate.
Idiomatic; i.e. in a *particular* style, or in a mixture of styles, or not in any easily recognised idiom at all.

Taking a purist position, a backbone *should* be:

A composition with a quality of leaving space for other parts, giving ideas for what those parts could be without being too restrictive.
Clearly structured and notated so that it is easy to follow during the realisation process. The more ambiguous or intricate the structure, the harder it will be to fit parts with it[1].
Composed with its functional role or series of roles within the ensemble in mind.
Able to stand as a complete (soundly structured if plain) composition, needing nothing else to make sense of it.
Able to withstand different realisations.

---

[1] Ease or difficulty for all concerned also depends on the experience of the realisation ensemble. An experienced group realising a complex or intricate backbone can produce music that is not only aesthetically successful, but that also contributes to notions of musical structure, as I hope to demonstrate.

Seven finished compositions are presented on DAT 1 and VT 1; the unrealised backbone material that the players were asked to realise is included as Scores 1-7 in Volume 3.

L'Amore d'Alfredo was the first backbone in the folio to have been written. It was composed in October-November 1993, and was realised with the band **Tirez la Tête** during the spring of 1994. The recording on DAT 1 Track 2 was recorded at City University in May 1994.

As the Score 2 indicates the bare backbone fulfils most of the "purist" criteria mentioned above. Although the piece was written for cello and voice, space has been left for other parts. The backbone roles have been clearly suggested throughout, the piece would sound complete, though sparse, on its own, and though only one realisation has been presented, the piece could withstand other versions. Furthermore the overall architecture is clear and dramatic, the piece making full use of elements of written-down composition.

With one set of ideals fulfilled, it remained to be seen whether the backbone had allowed the right kind of space for the players to devise their own parts without compromising their improvising.

L'Amore d'Alfredo. Reality Bites (1).

The text of *Alfredo* was taken mainly from a play by Fleur Mould (Mould, 1993). I added quotations from a poem by Miroslav Holub (Holub, 1987:40) and a small amount of additional material (see Appendix ii). The play is about a woman confessing to her priest erotic fantasies about a television star. *Alfredo* the composition focuses on unrequited love and an escape into fantasy rather than sexual guilt, and my intention was to write a backbone composition which served the subject-matter as clearly as possible, carrying this clarity through to the realisation.

The bare backbone material not only makes use of such devices as word-painting, but is idiomatically suggestive, particularly in the opening melisma and the belly dance sections (beginning at letter F on the score). My aim was to strike a balance between suggestive material and structural subtlety. While much of the music crudely imitates Egyptian belly-dance music as the woman acts out a naive fantasy of what it might be like to be in an Egyptian harem, the shifts between fantasy (belly dance) material and reality material are brought about with a sense of inevitability.

The backbone has been written mainly for female voice. Since the vocal part is relatively intricate (for a backbone), an additional cello part provides a harmonic and metric grounding. Its repetitive material makes a much simpler basis for improvised accompaniment to the song.

When the piece was being written there was no **Tirez la Tete**. The members of the realisation ensemble were unknown with the exception of the cellist. While composing for an unknown ensemble is neither undesirable nor impossible, it poses some problems since the process of realisation relies on group input. Like free improvisation, the realisation process can be characterised by the ensemble tensions, the pull in different directions by group members. However, unlike free improvisation, the musical outcome is not subject to a working-out (or not) of the interactive dynamics. The bare backbone remains a fixed element of the music, and while serving in theory as a grounding from which everyone works, it can feel less flexible than free improvisation in practice. For the composer, knowing and working with the culture of the realisation ensemble can ease this problem. Material can be written with aspects of the group in mind: the overall sound of the band (instrumentation, timbre, energy), strong and weak points of its improvisation skills and musicianship, the way in which individuals express themselves on their instruments (soulfully, aggressively, weirdly), the overall *identity* of the group and how it sees its identity. In other words, the composer is able to provide material that will release the players rather than trap them.

My first intention was to set up a framework that would be easy for the players to respond to. This has three elements:

1 The piece is modal, based mainly on sub-modes (small pitch-class sets) taken from:

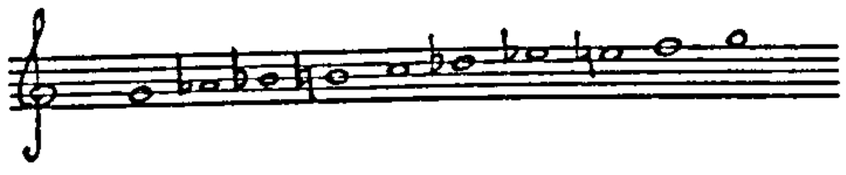


Fig 5.1 The mode used for *Alfredo*

Modes make clear and inspiring starting points for backbone realisation. In improvisation, they can provide a harmonic focus and mood. They may also facilitate the emergence of textures built on melodic lines rather than vertical harmony: the former parallel the coexistence of the ideas of *individuals* in the band, the latter is more analogous to an idea acting on the band *as a unit* - different fingers on a keyboard as it were. For most of *Alfredo* G functions as a pitch centre, and other pitches are heard in relation to it. Clear pitch centres can be responded to by the realisation ensemble with or without reference to the modal basis. The two methods have the potential to offer widely differing results.

2 The structure is built around three thematic ideas that suggest idiomatic ensemble textures. These are the melismatic opening, the belly dance sections and the repeated quaver patterns at letters K and M. The textures occur within sectional blocks, the various levels of contrast between them and within them creating a series of daydream-like fractures in continuity. There is a flow to the music, with some surprising twists, rather than a series of juxtaposed ideas.

3 The piece breaks down into short sections marked by rehearsal letters on the score. As will be seen in Chapter 7 which looks at the realisation process in detail, sections of music requiring a single basic realisation idea are easier to work with. In *Alfredo* I wanted to sketch in the realised textures quickly, and move on to the refining stages, in which people would relax into the flow of the music.

A further key to speeding-up the initial stages of the process was to be clear about the player-function role of the backbone part. The vocal line suggests a solo role for most of the backbone. The only ambiguity is perhaps in the mechanistic repeated quaver figures at K and M, which could form the basis of a background texture. Overall, though, the simplest way to approach all of the given material was for the ensemble to find an accompaniment, which

could then be embellished with countersolos, punctuation, contraparts and so on at later stages.

After letter F, the vocal line increases in complexity, and additional material is given as a grounding for the accompaniment. This is most specific at G, at which point the cello riffs become the central material around which the realisation works. In the *short term*, the cello part *is* the backbone here, for this was the material the realisation was built upon. However the cello material cannot be considered to hold the key to the *large-scale* structure, since the continuity of this section of *Alfredo* relies on a retention of pitch material in the vocal part from letters F to H. The pitches circle around B-flat and B-natural before opening out into melodic lines. The opening-out begins four bars after H: here the circling triplets from "shake my head shake my body"

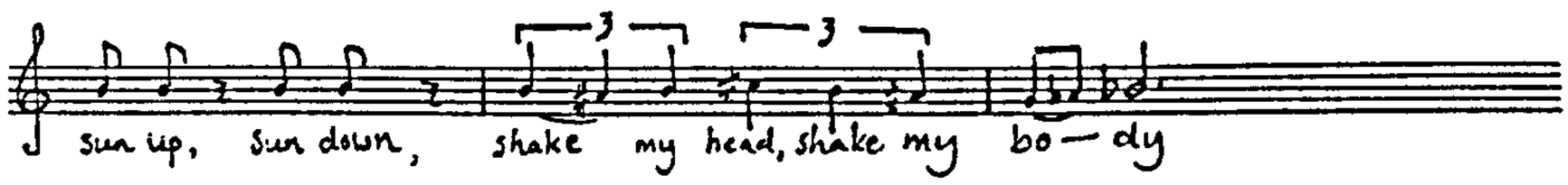


Fig. 5.2. *Alfredo*: The opening-out of pitch material 4bb after H.

reach fruition in the most song-like material in the piece:

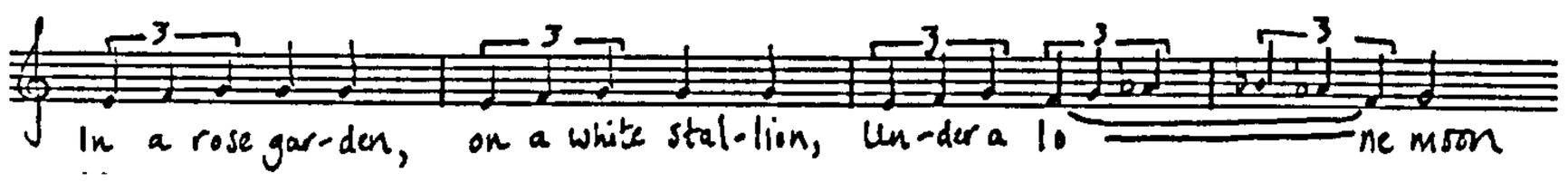


Fig. 5.3 "In a rose-garden..."; the most lyrical part of the fantasy in *Alfredo*.

Having relied on the use of riffs, modal harmony and a piece that broke down into short sections, the framework that eased the working out of this piece consisted of tried and tested technical elements as well as a new technique, that of writing the backbone with its player-function role in mind.

Using such a framework made it possible to work the composition towards complex formal issues, and to create a structure to serve the drama of the text.

A structural theme running through many of the backbone compositions presented in the portfolio is that of opening and closing spirals. For example, the opening section of *Alfredo* contains "interrupting" pizzicato figures in the cello part, which increase in length at each appearance, eventually forming a two-bar riff. The riff is played a greater number of times at each appearance, and the original melisma dies away to the belly dance.

A "closing" spiral is used at letter I (beginning "In, on, under"). The vocal part begins rhythmically and positively, becoming more frenzied until the four rising semiquavers half way through the 2nd system of page 12, Volume 2. The same process occurs twice more, in phrases lasting twenty-seven, and nine beats. The final phrase consists of the four semiquavers repeated eight times, as the spiral finally winds up. Up until this point the text has narrated a daydream. Here, the belly dance loses its two-bar phrase regularity, the speed is pushed on, the pitches are pared down and a fragmented timbre-based texture takes over. In the story, this expresses the idea of the daydream vanishing. An image used in the composition and realisation of this section was of a pan of water boiling away, leaving only the trace elements (a whispered "give me"). Musically, an extreme spiral such as this, opens the way to almost any material. Dramatically, I wanted to bring in an overblown fantasy that failed to project, as if the character behind the voice is grasping for the vanished daydream. This gives way to the mechanistic words that follow at K.

These have been set to maintain the mechanical nature of their repetition, which contradicts their erotic quality: "tickle" and "take me" suggesting a heightened playfulness that is anything but mechanical. The music begins with even quavers which then spiral rhythmically outwards, becoming slower and lower in pitch. The spiral here arises from a transformation of material rather than a manipulation of phrase-lengths, the exaggerated *allargando* and fragmentation suggesting failing or breaking-down rather than evaporation or disappearance.

At the second occurrence of this material (at M), the same process seems to take place. The repeated phrases do not slow down, but become longer increasing from two syllables in length to seven. The cello part follows this pattern, but as the voice reaches the last fragment "ummamich", which grows into longer and increasingly dramatic cries, the cello fragments

become shorter, spiralling inwards and drifting up into a hysterical glissando. The use of two spirals operating in two directions at once (inwards and outwards) produce what is probably the most explosive moment of the piece. A manic free improvisation was written in to mediate between this, the least certain moment of the piece and the certainty of the drone-based section that comes after.

Spirals in this piece therefore have dramatic and structural functions, conjuring or dispelling illusions, and opening or closing sections of music. They vary in length and complexity from the most difficult to realise at I, to much smaller ones that simply wind up phrases, for example, the neat quavers terminating a wavering dotted minim three bars before letter G:

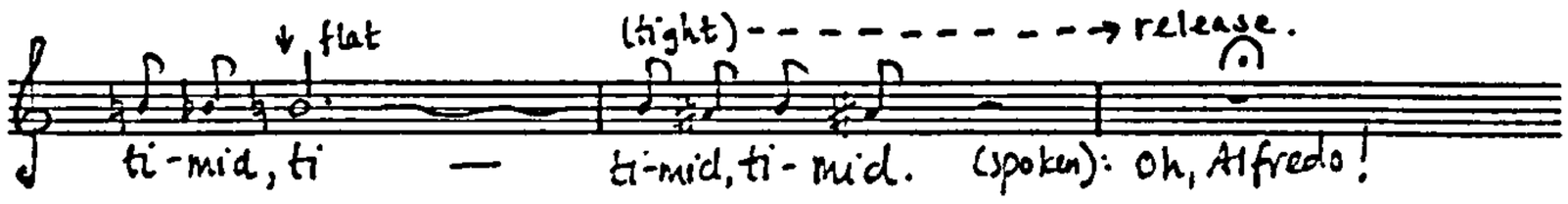


Fig 5.4 *Alfredo*: A small-scale spiral, 3 bb. before G.

The strongest example of the way in which a spiral can draw players into the structure or emotional content of the music occurred when we worked on the music just after K. In the spiral here, the pitches become lower, as note values increase under the *allargando*. The clarity of the change had an undeniable effect on the ensemble, as the ground seemed to fall away beneath us as we were playing through; each player slowing down their part to a halt or held note. The *music*, rather than my instructions, influenced the collective reaction of the ensemble. As in the process of free improvisation shown in Figure 1.2, evaluation of our realisation ideas occurred in-the-moment, as we were playing, rather than afterwards in conversation. Consequently, more time was spent experiencing the music rather than talking through the structure, as often happens. The process had a wonderful fluidity, and was led by the players' intuitive responses to what they heard. It seemed to come from inside the music and inside the group, rather than from words spoken by the composer.

This section came close to achieving the ideals outlined above, in which pitch, rhythm and form conspire to crystallise a moment musically and dramatically, making the work satisfying structurally, while the players were

able to successfully improvise their responses, interpreting the music without feeling constrained.

It should be added that not all sections are as tightly composed. Perhaps as a result, some of the responses of the ensemble were refined, changed, searched for and hammered into shape over a longer period. At times the players were led tightly by the backbone (the sections beginning with repeated quaver patterns), at times left freer as in the belly dance sections, and even faced with the challenge of drifting successfully away from the backbone "floating through a window" at H.

On a small scale, the ensemble was drawn through the work section by section, not necessarily in order, working on each fragment separately. However, this was guided by my awareness of the whole structure, which may be summarised as follows:

A melisma
(Plus some short foreshadows of section B)

B belly dance.
(The material is twisted to its limit by a series of spirals the last of which occurs after section I)

C repeated quaver patterns
(Opens out with an *allargando* and grinds to a halt)

B' belly dance.

C' repeated quaver patterns.
(Extended, climaxing in a double spiral).

A' melisma.
(Postlude).

However tough some of the sections of *Alfredo* were to realise, I was lucky to work with musicians who nonetheless produce some beautiful results. Their playing fulfills the other part of the ideal, that the improvisation should not be compromised. *Knowing* the musicians personally, I can hear the presence of four individuals in the music, and I remember the considerable commitment shown by the other three. Whether or not the

listener also senses this may depend partly on his or her experience of listening to collaborative work such as this piece.

Ultimately, the bare backbone and realisation process are not simply an experiment as part of a research topic but a means to creating music. The pieces in this portfolio should be listened to as finished pieces, not as the final part of an experimental or educationally valuable process. For a second, vital ideal in regard to realised backbone compositions is that they become accepted as pieces of music, or works of art, alongside music produced by conventional means.

6. The Realities of Backbone Composition: the fleshing-out process.

After composing a backbone, having dreamt up a magical world in which incredible and intense transformations come into being and dissolve into nothingness, the microcosm must be taken out into the external social world of the realisation ensemble. This *is* the final stage of backbone composition, and it finishes with one or more performances of the realised work.

There are many approaches to the realisation process. An open, experimental model has been described briefly at the start of Chapter 5.

An alternative is a process of directed or guided realisation, in which the composer specifically adopts an enabling and leading role, setting up a series of exercises that lead players towards a set of performance criteria (e.g. strong characterisation, specific qualities such as yielding, wildness, precise melody).

Three pieces in the folio were composed for student groups with the intention of exploring the two different processes outlined above. *The Gathering Doubt* (DAT 1, Track 3, Score 3) used the listen, try out, refine, rehearse/perform approach. As a result of issues arising from this, the second piece, *Circus* (VT 1, Track I , Score 4), used a directed approach in which the ensemble first had to develop a circus character and find a way

of expressing that during their playing. *String Soundscape* (DAT 1, Track 4, Score 5), was written for three string orchestras was realised under tremendous time constraints, and is the most heavily-directed work in this portfolio.

Fleshing-out in theory: The four-stage realisation process and multiple feedback model.

In the realisation process described in the previous chapter and used for the fleshing-out of *The Gathering Doubt*, the crux of the collaborative work and problem-solving occurred at the "trying out ideas" and "consolidating" stages. Here additional material was generated by members of the ensemble. The process of trying out ideas consisted of the ensemble members improvising responses to the backbone itself, and myself as leader initiating a series of directed improvisations which created a background for the melodic backbone material. Improvisation was thus as the centre of the realisation process at all times.

Chapter 1 sketches the improvisation process in cognitive terms, showing how in-the-moment evaluation feeds back to the generation of ideas. During the process of improvising for backbone realisations, evaluation operates at a second level. Music is generated with different intentions - the ideas have to work with something already given and determined (the backbone itself), and they will eventually become part of the finished fixed piece. Of course, "fixed" here does not necessarily mean fixed note-for-note, but fixed as ideas: a short solo, the use of specific melodic fragments, a dance rhythm, a creaking drone.

Ideas that are present for a long portion of the music must become settled before further material can be added to the realisation. The second form of evaluation, reflexive evaluation, takes place with respect to ideas that may become building-blocks for the *further development* of the piece. Such an evaluation deals with ideas at a higher structural level; not a level of minute detail but of longer term generative possibilities, for example, the long-term

harmonic progression of a solo, a motivic reference point, or the quality of gesture or character underpinning a section. It is in effect during the improvisation, but more distinctively *after* the improvisation, often in discussion amongst the ensemble. Criteria are extended beyond whether the material simply works in the moment, to whether it is clear enough or robust enough to build upon.

Once a basic idea has been discovered it must be refined. Ideas are re-evaluated in terms of precision and detail, and re-tried. Details such as how to stop and start the idea may become fixed at this stage, as may cues or key pitches. Hopefully, with each attempt, the eventual direction of the material becomes clearer, as information feeds back to the generative stages at conscious and subconscious levels.

Thus, from the point of view of the individual, there are two stages to the process of finding additional material corresponding to stages 2 and 3 given at the beginning of Chapter 5. These are illustrated in Figure 6.1:

1 Trying and evaluating new ideas.
2 For accepted basic ideas, re-trying and refining them. As ideas are refined, the music feels increasingly "known", not just as a backbone, but as a fleshed-out piece.

Figure 6.1 is a diagrammatic representation of this process, from the perspective of the individual rather than the group - the cognitive process modelled is not a collective one. This accounts for the fact that musicians playing different parts may be at different stages in the model at any given moment. Although Figure 6.1 deals with the evaluation process each player goes through, it is not intended to convey that evaluation takes place in lone individuals: as explained in the first chapter, evaluation (hence the overall generative process) takes place in a socio-musical space, and takes account of aural, vocal and other information coming from the group.

At Stage 2 of Figure 6.1 it is possible, even desirable, to become settled into the repeat-evaluate-OK. loop. In here, music is generated as a known commodity rather than as new ideas; improvisation is within known boundaries or from clearly-defined materials. No *new* changes are made, and the idea stays at a consistent level of refinement. Each time an idea is evaluated as OK then repeated, memory comes into play.

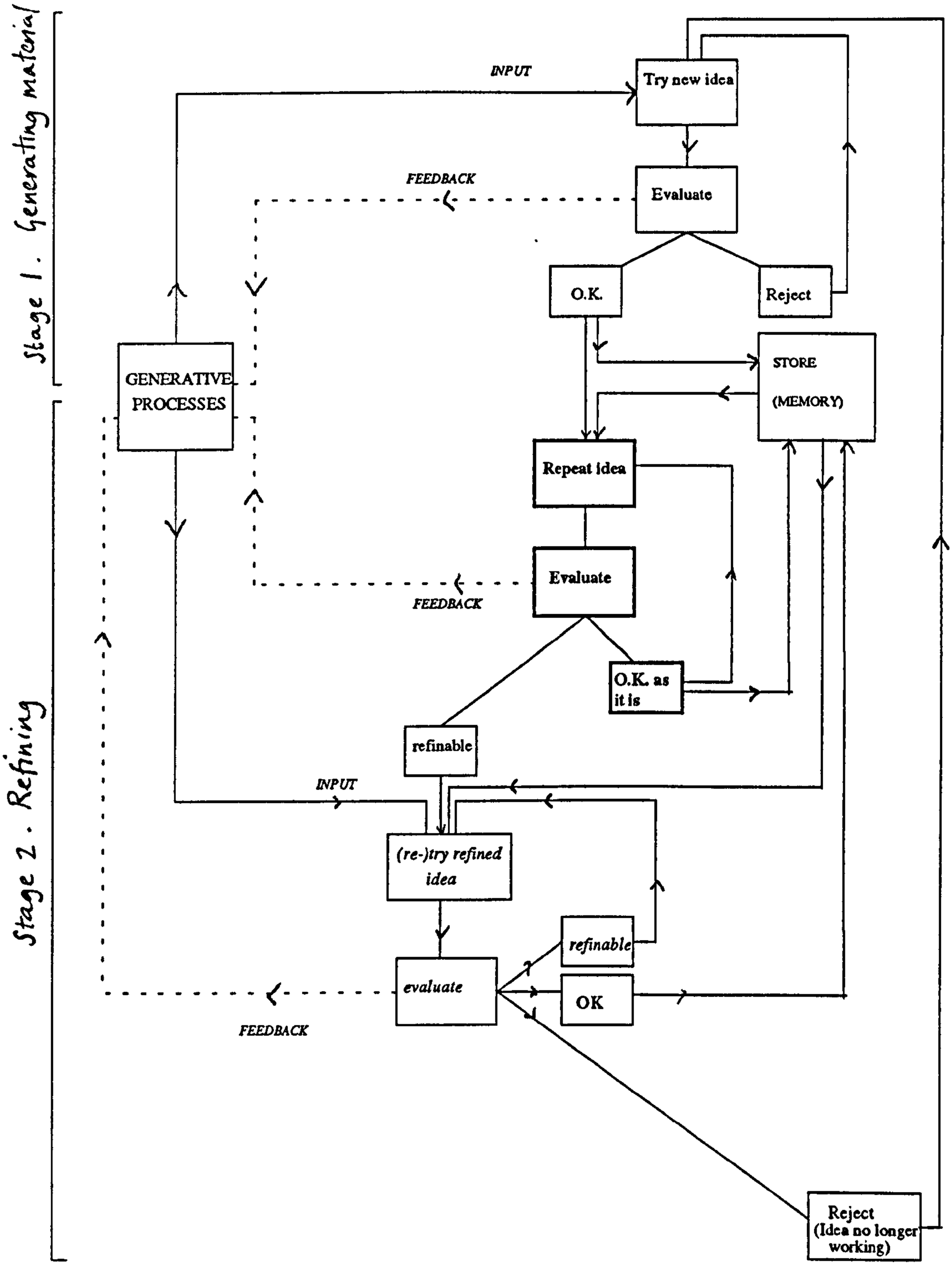


Fig. 6.1. Cognitive map of the realisation process

During the realisation of backbones, ideas must at some stage become settled if not completely fixed. This means that if an idea is evaluated as OK-for-now whilst still untidy, the music can sound unfocused or slightly confused for some time. The key here lies in the player's constant

evaluation of his/her work. Crucial to this evaluation is the possibility of moving on to a more refined stage, perhaps when other parts have fallen into place. Theoretically, ideas are refinable time after time, until they become totally fixed. In practice, the ensemble must decide at what point to stop fixing and refining ideas. Indeed, the music may be kept deliberately unrefined in order to draw on the spontaneity and improvisatory character of the players. In *L'Amore d'Alfredo*, all solos and cadenzas were left open to spontaneous interpretation.

Sometimes, ideas that have started to have been refined cease to work. This can happen when the wrong parts of the idea are filtered out, or the idea only works in relation to something else in the texture that gets lost or dropped. The best course of action is usually to start afresh, go back to the first stage of trying new ideas. Nevertheless, the try-refine-reject process becomes wearing after a couple of times through. The more refining work done on ideas, the more is invested in them in terms of time, energy and emotion by the players. Ideas are less easy to let go after being hammered into shape, even if the shape is an unsuccessful one; weak ideas are best weeded out at the first evaluation stage.

Realisation of backbones is easier when the ensemble tackles the material in bite-sized chunks. It is usually essential for players to deal with one process at a time; to find a basic idea then set about refining it, to play with it, stop and start, make it more subtle. If the basic idea works for the first half of the piece then needs to be changed, it becomes a burden for the player to remember during each play-through where the first idea stops working and to try to generate new material for the rest of the piece. The player would be in Stage 2 (refining the first idea) then would have to shift to Stage 1 to suddenly generate additional material. Rehearsals are far more productive if one problem and one process are dealt with at a time. The composer can facilitate this by writing music that breaks down into short sections, or longer sections that use a single piece of material.

A case in point here is the section of *L'Amore d'Alfredo* just after letter H on the score ("In a rose garden" to the instrumental solo) which was difficult to realise. The given line is clearly soloistic, and is presented with a chord sequence. This is fairly straight forward until the D-flat pedal over the page. Suddenly the vocal line and harmony become static, the intention being to illustrate the feeling of floating through a window as if in a

daydream. The problem here was to get the section over the D-flat pedal to flow out of the previous section. The following is a description of the refining process (from my working notes):

1 The backbone was played through with the ensemble making a background texture using the given chords and rhythm.
2 The violinist added and refined melodic ideas in response to the vocal line.
3 The group worked on the section based on a D-flat pedal (18 bars after letter H). The vibraphone and violin added more developed melodic material; at this stage the result was messy, but we left it in its unrefined state.
4 Working on the whole section again, the ensemble dropped the chords except the D-flat pedal, and worked from a mode culled from the given harmony. As a result, the piece lost some harmonic focus but became more detailed rhythmically (DAT 2, Track 4).
5 The chord sequence was reintroduced, maintaining the rhythmic interest.
6 The cellist added a melodic line just before and during the D-flat pedal. The vibraphone sustained the given chord with a "fluttery" texture. This had the effect of creating a tidier texture and inverting the voicing of the preceding texture, as the bass became the melody, and the background melodic instrument (the vibraphone) became the grounding.
7 To bring back the rhythm for the instrumental solo, the cello solo evolved into a cadenza, and the other instruments dropped away. The cadenza was given a "duende" shape, allowing it to teeter on the edge of death/ecstasy before bringing back the bass line for the instrumental solo (DAT 2, Track 5).

It was essential to break the music down artificially into two divisions; the music before the D-flat pedal, and the music from the D-flat pedal. After Stage 3 above, once a rough idea for the second portion had been established, the whole section (H to the instrumental solo) was worked on to maintain the continuity. At Stages 6 and 7 the second half was once again isolated and refined before we played through from letter H to I (the whole section).

This process and the order of the different stages was the result of choices made instinctively and with a group of highly-skilled musicians, rather than by following the "recipe" of the try-out/evaluate model given above. Dropping the chord sequence from the first part, and making the whole section based around line rather than chords was a fruitful learning process. Although it did not sound as lyrical, feedback from the music generated at

Stage 4 (Track 4) enabled the harmonically static "floating" music to flow out of the previous section, in line with the seamless flow of the backbone.

Fleshing-out in practice. *The Gathering Doubt*: Reality bites (2).

In contrast, *The Gathering Doubt* was realised by musicians with no previous improvising experience, and was therefore composed in clearly-defined sections, using a single realisation idea for each. This was designed to enable the group to work more closely to the four-stage model, to research its possibilities and limitations. The finished piece is on DAT 1, Track 3 and the backbone score is presented in Volume 3 (Score 3).

The piece, as it happens, was aptly titled. A sense of gathering doubt was what I felt as we worked through a difficult and sometimes stiff and uninspired fleshing-out. The project was set up for postgraduate performance students at City University, and took place over eight rehearsals in early 1995. Two postgraduate students took part, a singer and a clarinettist. We were also joined by a flute player who had some experience of improvisation and backbone work. Since two of the performers had not taken part in any free improvisation before, the first two sessions were spent experimenting with basic approaches to improvisation, designed to build some of the skills that would be required for the realisation work.

The riff sections of *The Gathering Doubt* (Figure 6.2) were composed only after the initial two sessions, using material similar to that which had been developed during the improvisations.

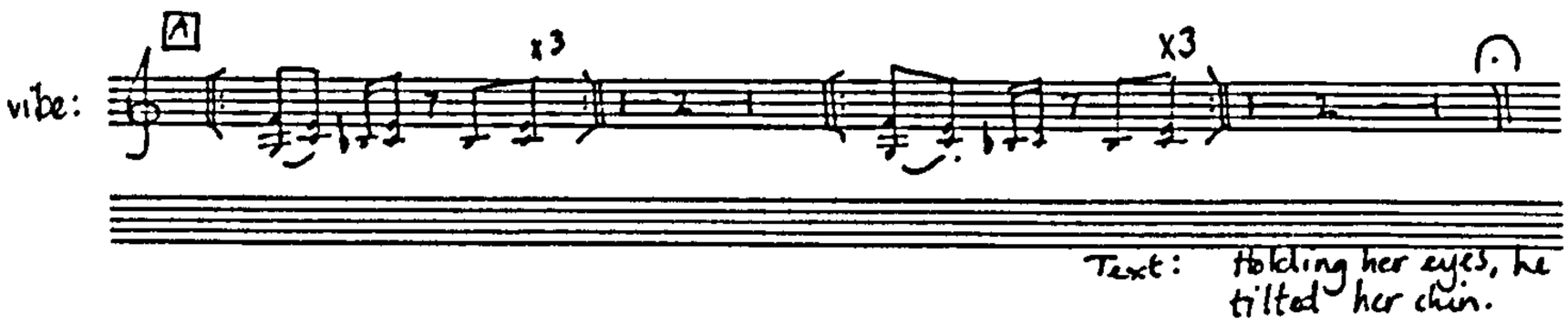


Fig. 6.2 The *Gathering Doubt* riff.

A text (Cutler, 1984) was chosen to reflect the early work of the group, in which we had discussed the theme of companionship and its connection to musical accompaniment. This had an additional function in giving the singer some words on which she could comfortably base her improvisation. Sections of music consisting of either a flute melody or vibraphone spread chords (Figure 6.3) were composed later and woven between the three harmonically static riff sections.

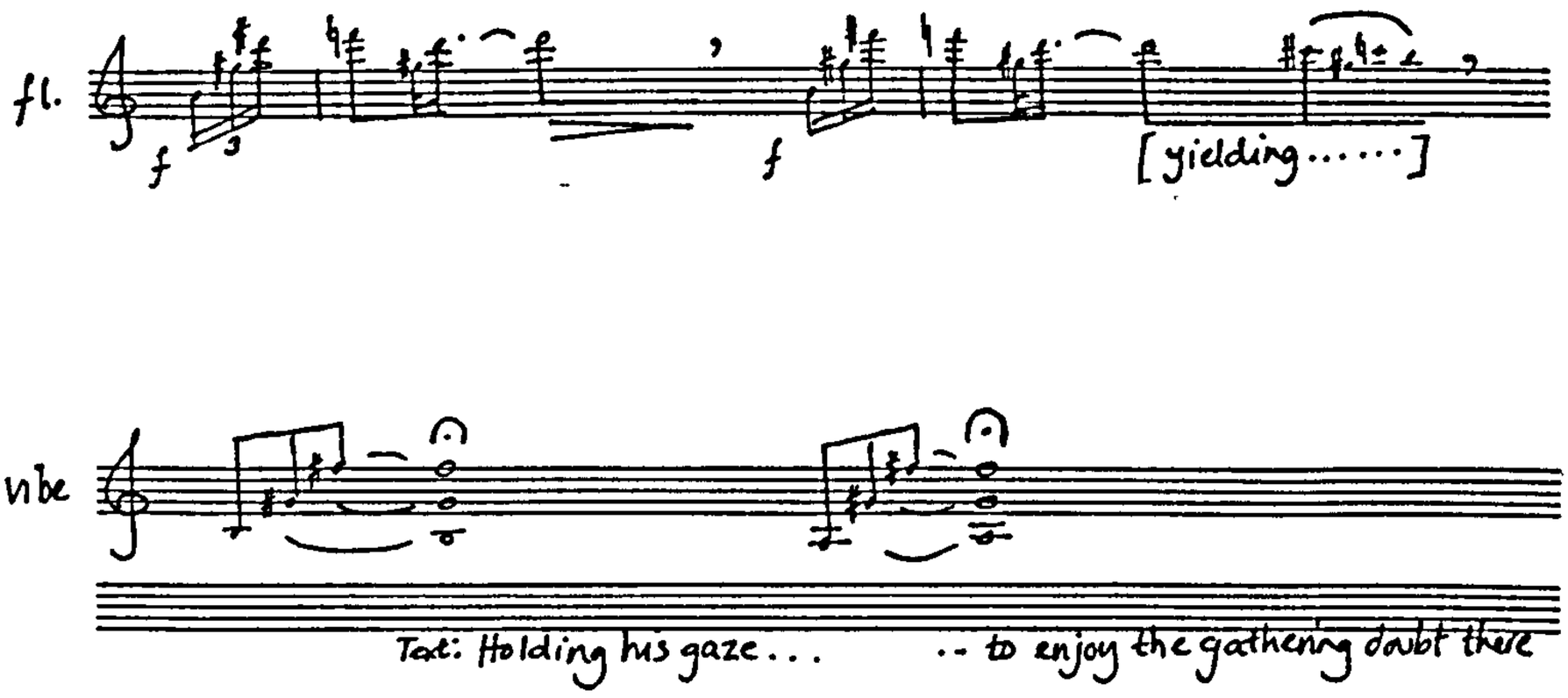


Fig. 6.3 *The Gathering Doubt.* Additional backbone material.

Dramatically, the piece again explores the friction that can exist between one's internal and external worlds. Each phrase in the melodic sections begins boldly but yields towards the end, reflecting the internal emotional world of the female character in the text. During the almost painfully static and predictable riff sections, the character relates the text in the third person and in the past perfect, as if distancing herself from her feelings in a presentation of the narrative to the outside world. For example, she relates:

> Holding her eyes he tilted her chin, smiling as he had learned.
>
> "You are both stupid and ugly", she whispered, holding his gaze to enjoy the gathering doubt there.
>
> "I'm in advertising" he said, " public relations"
>
> - and took her hands.
>
> (Cutler, 1984:19)

The realisation process.

The three types of material each required a single realisation idea and were tackled separately.

The section giving rise to the easiest process of fleshing-out, the one that corresponded most closely to the feedback model began with vibraphone spread chords at letter E on the score (Figure 6.3). After listening to the given material the singer added an improvised part, using the text in a quasi-recitative way. A third layer was added, the flute-player was given a counter-solo role and asked simply to shadow the voice. With the absence of the voice at the repeated bar after letter F, he had more space in which to allow his material to flourish and the solo here became somewhat expressive of the whimsical quality of the story.

Refinement consisted of the singer deciding to speak the text after letter F (" 'I'm in advertising' ..."), as if the male character's voice is part of the background scene and the piece is essentially an internal drama of the female character. This was the only piece of refinement that arose from reflexive evaluation; changes to the flute part and the recitative were minimal and came about without discussion but through aural feedback and evaluation - retrying similar material at each run-through. On Figure 6.1 this would correspond to firstly being in the repeat-evaluate-OK loop, before the singer decided to refine her part, then moving towards the retry-evaluate-refinable loop as she found different ways of speaking the line of text, and eventually settling back into repeat-evaluate-OK.

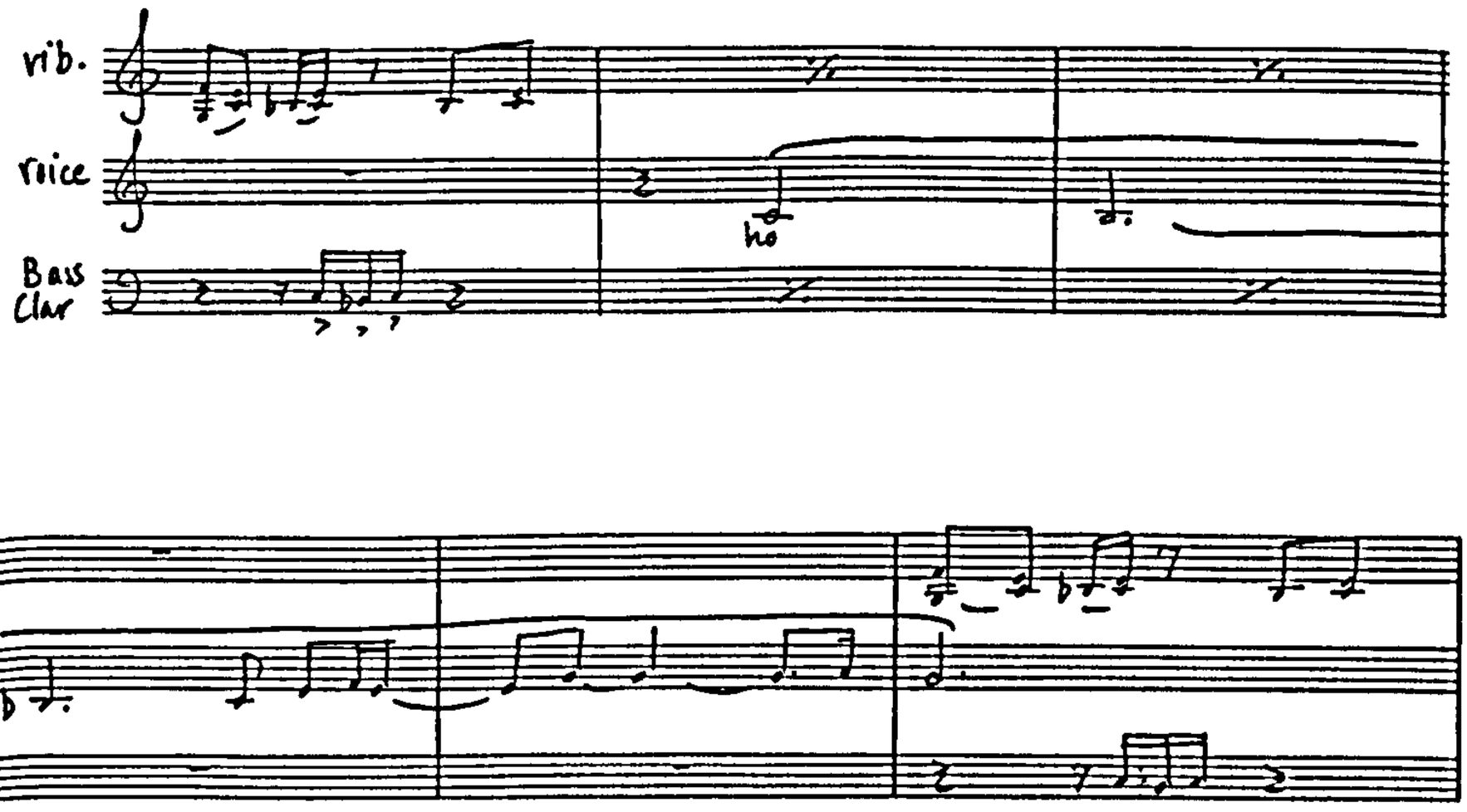
Similarly, the opening flute melody and its reoccurrence at letter B were realised by a process of finding material and responding to in-the-moment feedback and evaluation. The clarinettist, singer and I (vibraphone) improvised a background texture, focusing on the image of a bird trapped inside a building, and the energy of its fluttering wings. Though potentially messy, this texture was refined by limiting each part to a single element of the texture (one musical idea each), building density or allowing space in response to the given melody and other parts. This decision was taken away from the "live" exploration of improvising, and is an example of

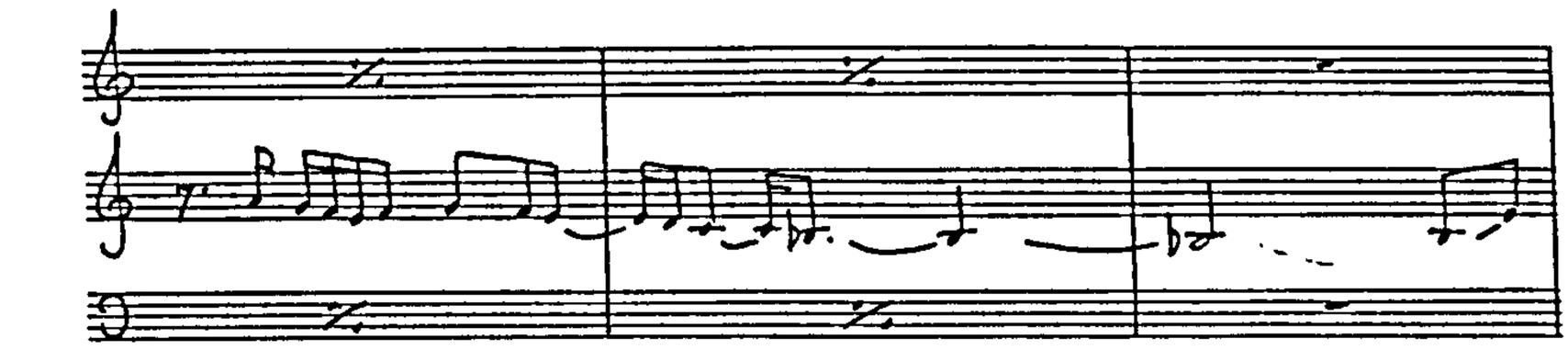
reflexive evaluation. We also decided to begin and end the background texture at various fixed points in relation to the melody, so that blocks of sound were punctuated by spaces, rather than being present all the way through the opening. The process here seemed constantly to be in a retry-evaluate-refinable state (Figure 6.1), as the improvising remained relatively *unfixed*, but sometimes became more *focused*.

In contrast, the regions requiring the most detailed work were subsections of music coming after the riffs at letters A and D. The riff was the first backbone idea to be introduced to the group, and seemed to lay the artistic and methodological frameworks for the project. The process of development and refinement will be traced in detail below. Examples of the work recorded during the rehearsals are given on tracks 6-11 of DAT 2.

Session 3 saw the introduction of just the section at letter A on the score. This was realised by the singer and clarinettist finding riffs to accompany the vibraphone riff (first bar of letter A "looped"). Over the same music they alternated solo and background roles, so that one player added a part to the riff while the other soloed. When the players had become more comfortable, we looped the first *five* bars of letter A: three bars of riff and two bars' rest.

The first attempt at this is on DAT 2 Track 6, and the singer's solo is illustrated in Figure 6.4.





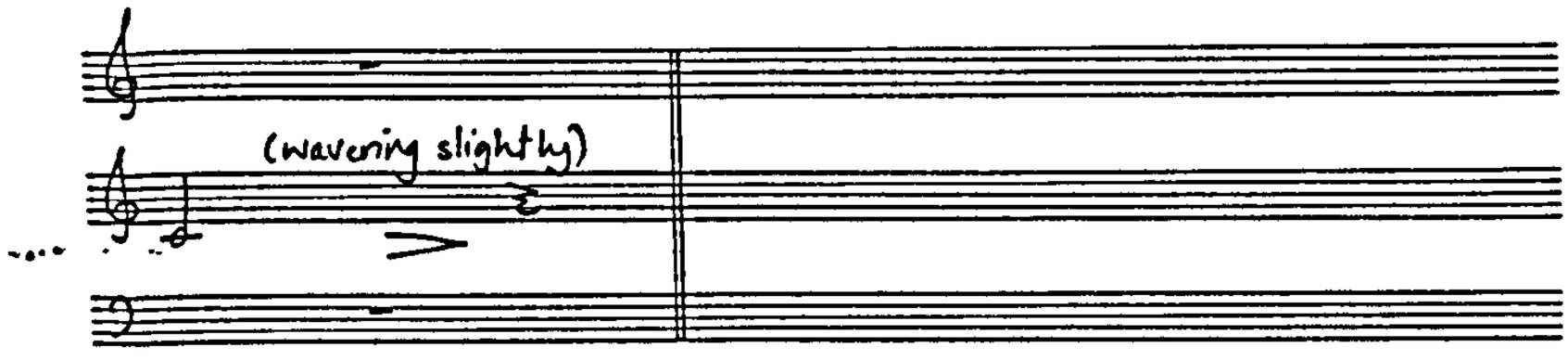
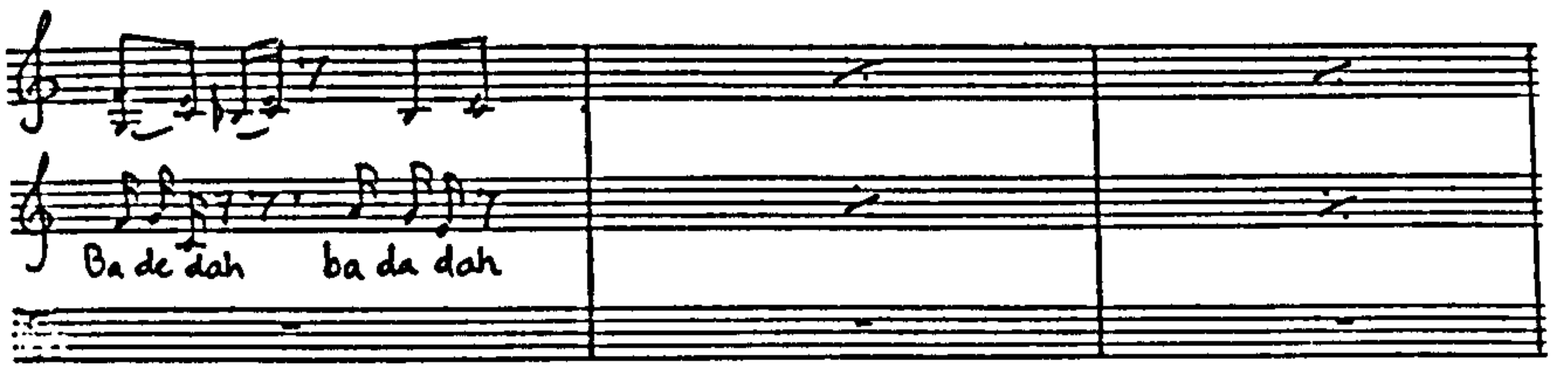


Fig. 6.4. *The Gathering Doubt,* realisation attempt 1.

Track 7 and Figure 6.5 illustrate the next stage, in which lines of text were placed by the singer in the second two bars' rest. To make this easier, we made the length of the space variable. However, the phrase temporarily lost its rhythmic diversity. Removing the metric discipline of a strict two bar space seemed to have cut off the "fuel" provided by an implied pulse, or metric feel. The phrase in Figure 6.5 is asymmetric and uses a different pentatonic mode (c.f. Figure 6.4) as if the lack of rhythmic boundary is matched by the movement of the singer outside certain pitch boundaries.



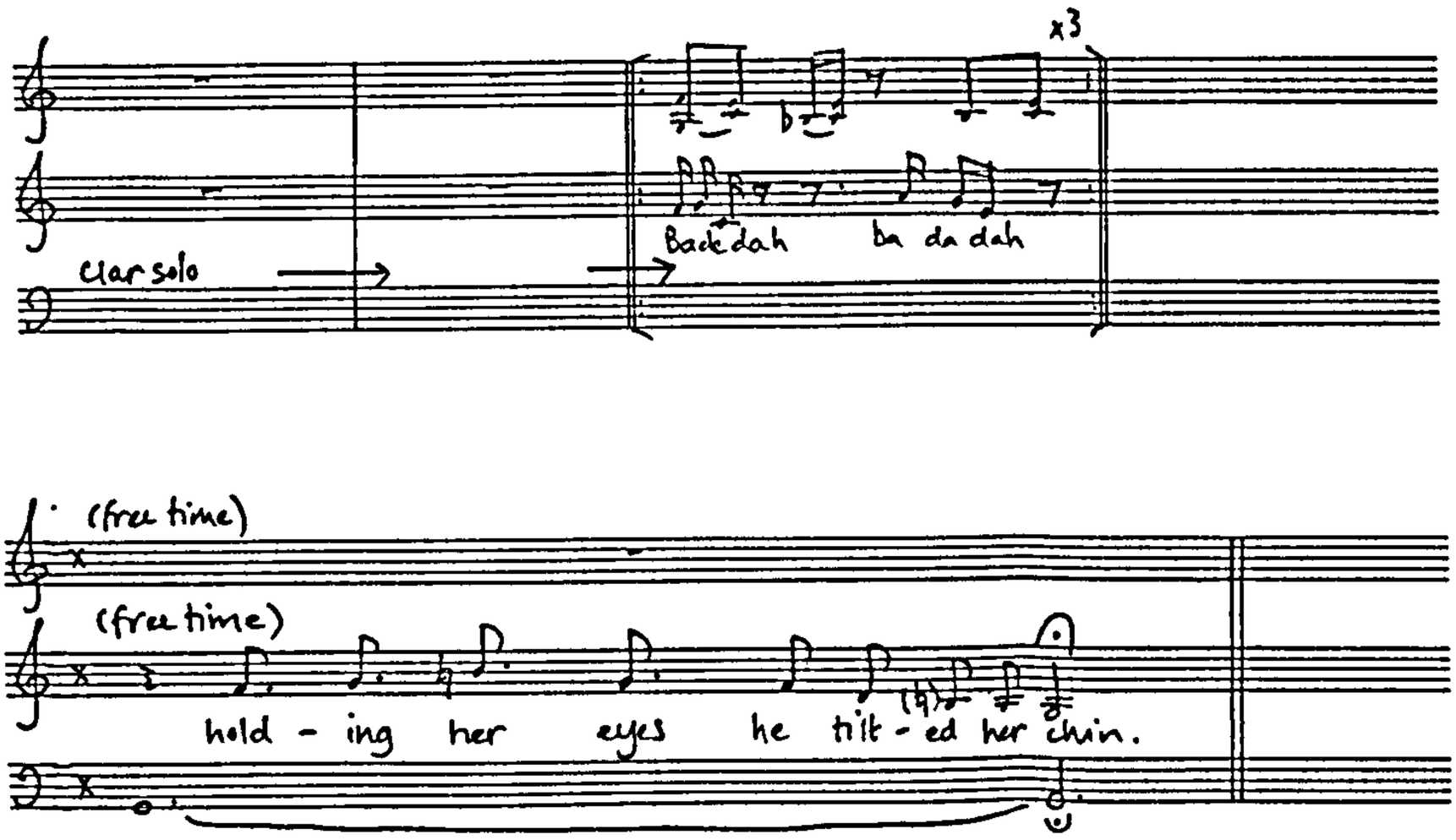


Fig. 6.5 *The Gathering Doubt*, realisation attempt 2.

During the next session, the clarinettist was unable to be there, but the flute player was. The singer was encouraged to experiment with the syllabic content of her part, and the "tu-la" motif began to emerge. It seems likely that this was an imitation of, or a response to, the flute sonority in its most velvety register and at a new slower tempo. By this stage I felt it was essential to move the text away from jazz-like syncopation towards a more direct expression of the meaning behind the words. This was achieved firstly by the singer speaking the words (Track 8, Figure 6.6).

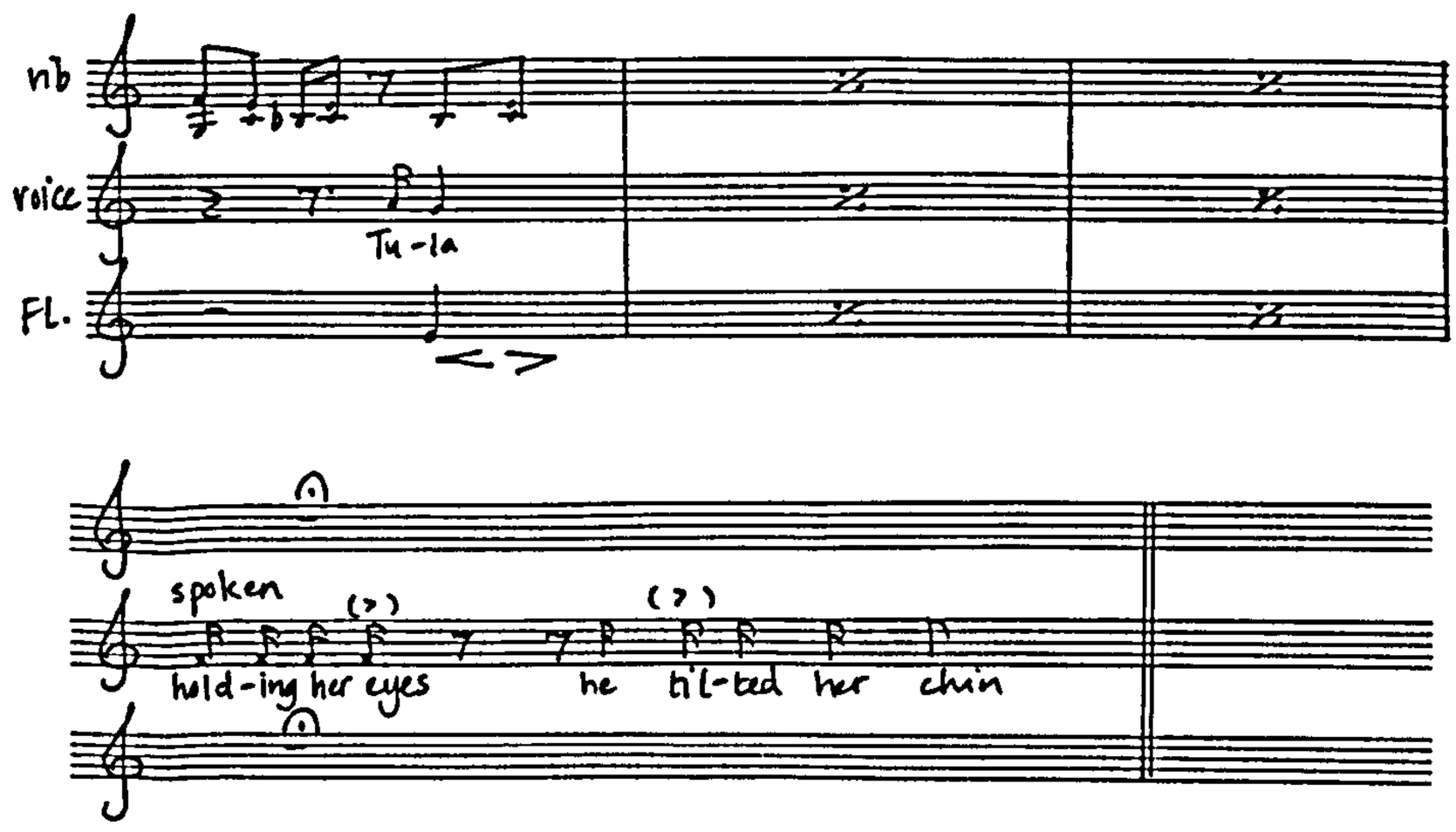


Fig 6.6 *The Gathering Doubt*, realisation attempt 3.

The singer wanted to develop the way in which the text was performed, but felt stuck for inspiration. Track 9 is a recording of a three-part vocal improvisation between the singer (voice I), flute-player (voice III) and myself (voice II), which was intended to bring up ideas for expanding the colour of the words. The opening is transcribed roughly in Figure 6.7. A quick comparison between the singer's part in Figure 6.7 and the subsequent improvisations, later in Track 9 on DAT 2 (Figure 6.8) demonstrates a process of development of material; a widening of timbre, gesture, rhythmic variation and the use of repetition.

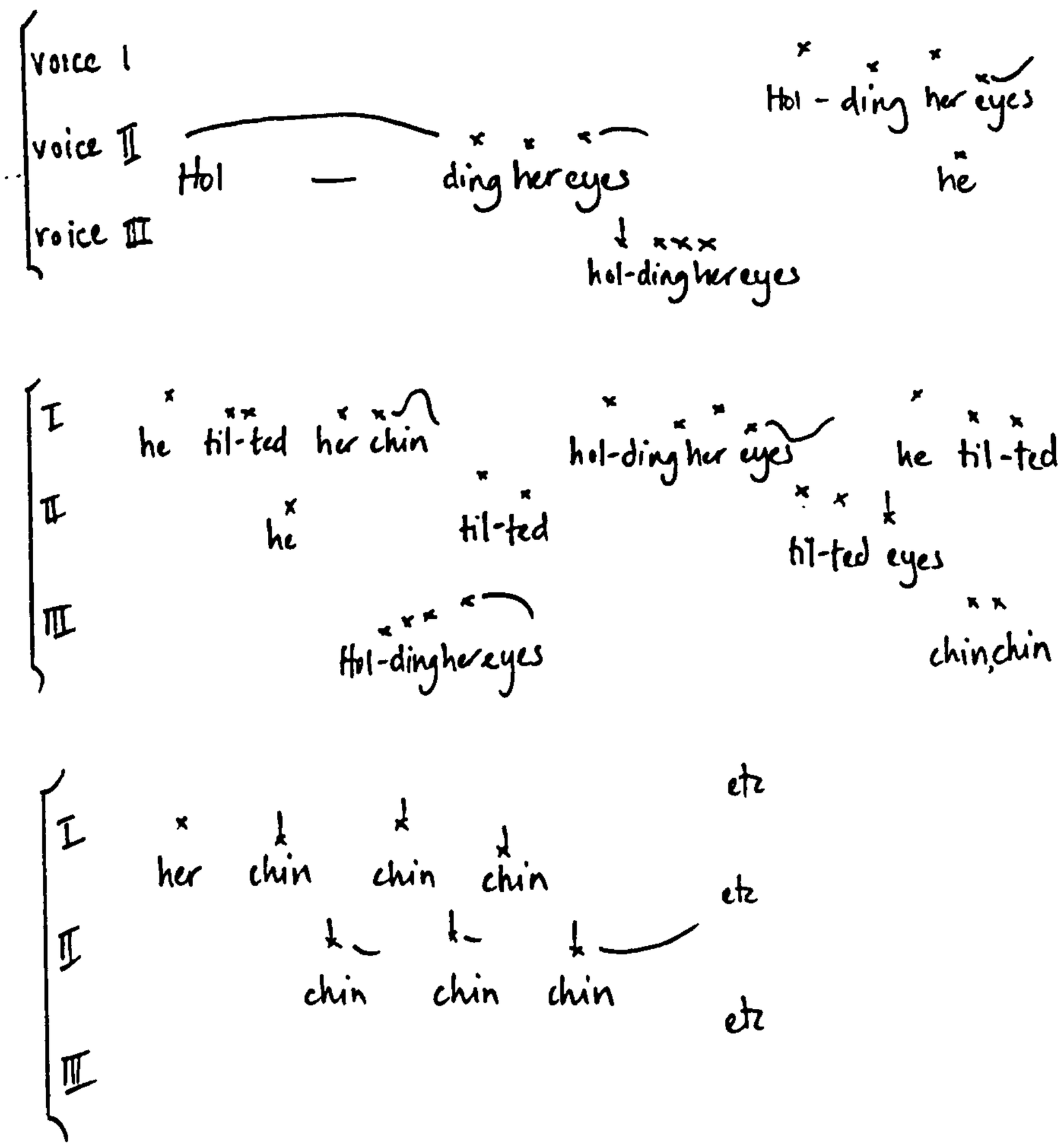


Fig. 6.7 *The Gathering Doubt,* realisation attempt 4: a three-part vocal improvisation on the opening line of text.

Track 10 (distorted) and Figure 6.8 trace the next version of the music at letter A, in which the flute-player accompanies the singer while she speaks the text, drawing on the work from the vocal improvisation illustrated in Figure 6.7.

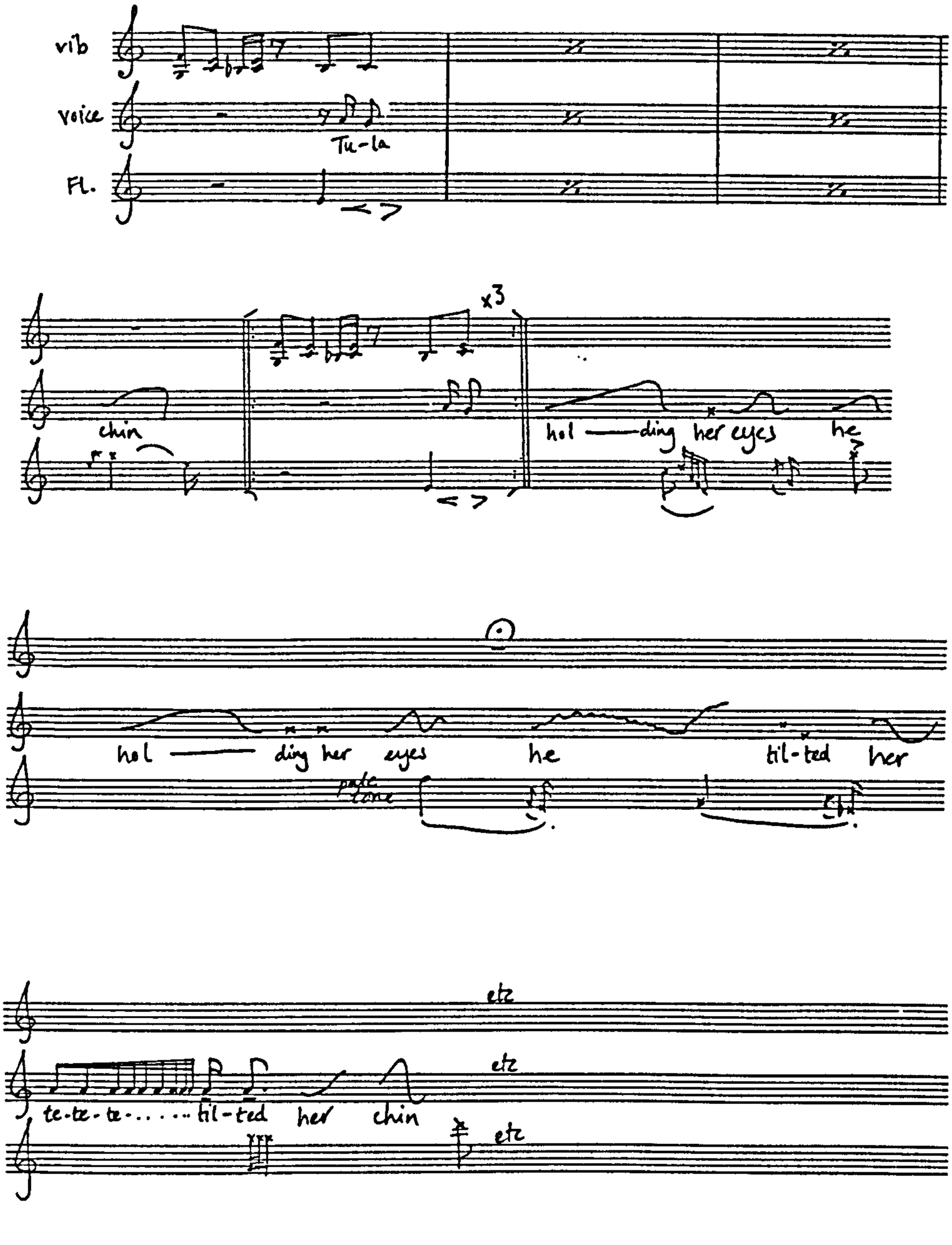
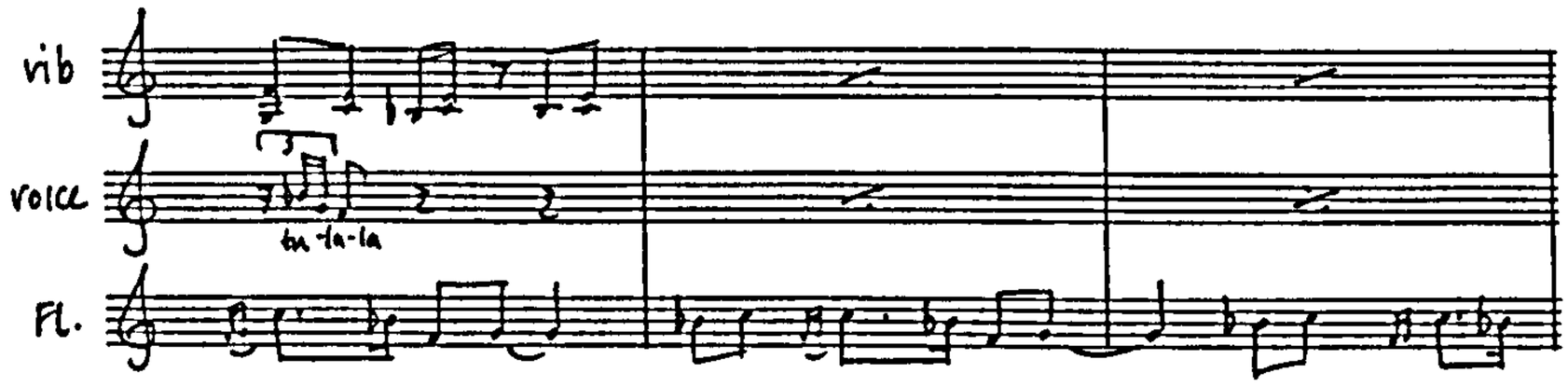


Fig. 6.8 *The Gathering Doubt,* realisation attempt 5.

Clearly, the singer and flute player feed each other ideas in this example, to their mutual enrichment. The flute player sometimes shadows gestures, as in his first gesture after (a) in Figure 6.8, and sometimes punctuates, for example after (b), following "eyes" and "chin" in the voice part. While the players in both examples could be said to be in the exchange mode of interaction the music after (b) has a more dynamic quality. Here the flute player increasingly takes a punctuating role by using much shorter gestures in spaces after voice fragments as opposed to his longer countersolo after letter (a). His gestures affirm and support those of the singer, and their pointed quality helps to define the musical space in the way that written punctuation helps define the pacing of written words.

At this point in the process the music still sounded incomplete, the problems lying in the inconsistency of the quality of interaction and invention, and lack of continuity between the character singing the "tu-la" motif and the ensuing exaggerated vocal style.

During the next session (session 6), we began to consider the character speaking the words. I wanted to draw on the bird-like quality of the "tu-la" motif, and make the text more bird-like. We focused on section D of the piece, since the word "stupid" can easily be pronounced so that it has a chirped quality. We tried firstly with just a percussion pulse accompanying the singer, as she explored ways of twittering the text. Without the vibraphone and flute accompanying, her part became more consistently pentatonic. When the vocal extract was put back in context, the pentatonicism remained. The result is on Track 11, and in Figure 6.9.



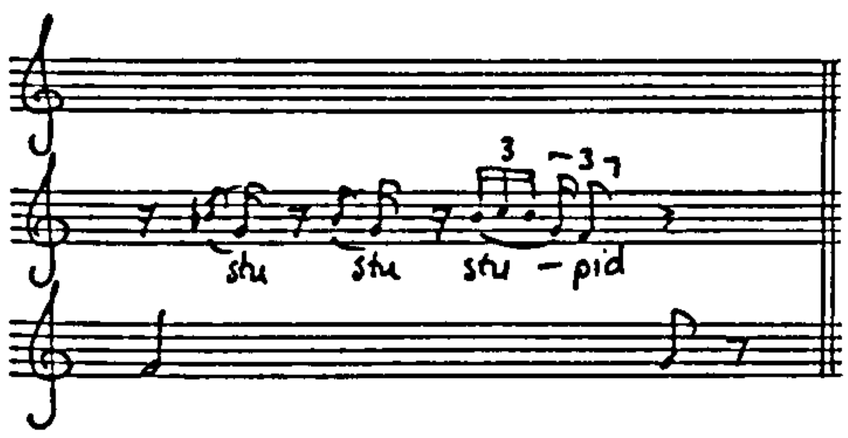


Fig. 6.9 *The Gathering Doubt,* realisation attempt 6

When the flute countersolo was added to the corresponding material after letter A ("Holding her eyes...") the player responded by using the same pentatonic mode. The use of a familiar mode apparently gave the players security and focus. By this time, I felt that this degree of focus was of more value to the piece and the process of realising it than pushing the harmony, and risking de-stabilising the realisation.

The examples in Figures 6.4-6.9 show in detail the process of exploration and refinement the ensemble experienced in order to realise two sections of the piece. It demonstrates the complexity of the realisation process, and is an example of some wonderful creative work being lost in the refinement. If Track 10 may be considered the peak of vocal richness - the variety of colour is greatest here for example - Track 11 shows a diminishment of breadth of such material.

Two factors seem to enable the singer to expand her material in Tracks 9 and 10 (Figures 6.7 and 6.8). Firstly she benefits from having someone to accompany her in a way that weaves into and responds to her material, secondly she benefits from the absence of strict temporal parameters. Consequently, the "stupid" motif in the final example (Figure 6.9) seems rushed as the space for her improvisation was reduced to one bar in length. The limited time-span for its delivery is yet another aspect of the piece for her to think about. This really highlights one of the skills of improvisers working in metric idioms: the ability to *feel* rhythmic structures, and thereby to respond intuitively to them.

Tracing the realisation process through one segment of *The Gathering Doubt* has revealed a development-refinement sequence; a process of expansion of material followed by contraction of breadth of vocal colour. Whilst the sequence is not unique to this project, it has been amplified here by a particularly sticky working situation: the group never really gelled, and the singer was developing her improvising skill (to her credit) on the job. However, because of the singer's willingness to learn, the research here appears to trace in microcosm the path of learning to improvise: firstly learning to generate ideas, and later on to focus and develop material.

The singer's development of her part was not completely intuitive but was guided in simple ways: limited to two bars' duration, spoken text, three-part vocal improvisation, duet with the flute, given a bird-like quality. The least constrained of these exercises was probably the three-part vocal improvisation (Track 9, Figure 6.7), the richest in terms of breadth of material was the duet with the flute, and the most focused characterisation was in the last example. Refinement begins in Track 10 (Figure 6.8) in which ideas begin to be re-worked and repeated ("holding" for example). In Track 11 (Figure 6.9), the nature of the refinement seems to change to constriction, as not only does the character of the piece become more refined but this influences the choice of pitches to match those of the vocal line in the riff. The loss of creative work or vocal colour lies not in the pinning down of character, but in a narrowing of pitch material in order to aid the task of focusing.

However, the goal of the project could be described as the creation of a piece that has clear intention and character. The piece is not intended as an advanced structure for improvisation, unless the improvisation has the desired clarity. From that standpoint, the pentatonic melodies created by the singer could be described not as a contraction of material, but *refinement*, and as a further *development* of previous material.

The ensemble had reached a critical point in the project at the time when the music in Figure 6.9 was produced. It was necessary to focus the character, and hence the vocal material. That this was a struggle, and felt like limitation, highlights the nature of the skills required for backbone realisation: the ability to expand or otherwise work with a small amount of material, and the ability to work with the notion of character. In other words to creatively *interpret* the backbone music and imagery.

Musical character, as created by a realisation ensemble member, comes from chosen harmony, gesture and rhythm, and may be intuitive or objectified. For a player of any experience working within their expressive range, and with some degree of emotional engagement, this can come from within whilst being highly focused. For a player developing their improvising skill who is not easily able to develop small amounts of material, the process of focusing down to a few gestures must seem more like a technical exercise, becoming cerebral rather than intuitive.

Doubtless, the methods used during the direction of the realisation process influenced the outcome of the piece. However, to suggest that the added parts in *The Gathering Doubt* were totally shaped by the path of refinement as shown in Figure 6.1 seriously underestimates the dynamism of the realisation process. The particular sequence of steps presented above were taken in response to the music that was being generated. A singer specialising in extended vocal techniques or music theatre might have reached an equivalent point via a different route, almost certainly drawing on their own resources of character and pitch material in relation to what was given. What is presented here, then, is coloured by the singer's expressive influence.

The Gathering Doubt made technical demands that were perhaps a little tough on the players. I felt that my role in the process was one of facilitation, amplifying aspects of the players' responses to the evolving music, giving space in which I hoped they would contribute to the overall shape of the music. However, without a group of experienced backbone-realisers, it was essential to ensure that the players developed the improvising skills needed for the piece whilst accepting the limits of what the ensemble could offer.

The following piece (*Circus*), also written for inexperienced improvisers, was devised specifically with skill-building in mind.

The Directed Approach: *Circus*.

Circus was composed for a group of students at the Guildhall School of Music and Drama on the post-graduate Performance and Communication Skills course. All of them were competent classically-trained musicians, and had begun to develop basic improvising skills.

Bearing this in mind, a backbone was composed within an easily-used modal framework, once again with extensive riff sections, but also with spaces or windows for solo improvisations. These are indicated on Score 4 as semibreve rests with firmata, and marked "solo". In some ways these are an expansion of the idea of the rest bars after the riff in *The Gathering Doubt,* but rather than being of a certain duration are left as "open space" for short solo improvisations.

In the piece, I wanted to explore the potential for characterisation through musical gesture even further and more specifically. One objective was for each musician to create a circus character, which they would personify musically and with their performance presence. Each person developed a character solo: a small amount of clearly-defined solo material which would fill the windows in the backbone, or take a solo role over (background) backbone riffs. The piece is therefore deliberately polystylistic. This was perhaps inevitable with so many different characters; however, polystylism is also an expression of the multifarious world in which we live, and the function of the windows is to allow a glimpse from the *collective* (the tutti riffs of the backbone, the highly-disciplined bodies of the circus troupe) to the *individual* (solo or character).

I was also concerned to engage the players in the music and the realisation process on an emotional level. The combination of the cognitive sketch and four-stage realisation model given earlier in this chapter, if taken as the sole basis for a realisation methodology, leaves players somewhat uninvolved emotionally. It is as if backbones could be realised by a computer programme, a computation based on trying and refining ideas. The sketch and model stand as they are: as broad descriptions of the cognitive

processes involved in backbone realisation, but when regarded as proto-models for the realisation process of *The Gathering Doubt* resulted in a dry and sometimes painful process.

The "closest" sounding ensemble section of *Circus* is "The Big Parade", at letter X. Here a full texture is provided in the backbone so that very little needs to be added by the ensemble with the result that this is the most homogenous section of the piece. The work on *Circus* began with the group playing this through, and afterwards the ensemble had an idea of the flavour of the music and hopefully a mental image of a slightly sad but dignified circus. With this music in our ears the crux of the realisation began away from the backbone score with preparatory work. Having chosen their characters, the players were asked to find simple physical (corporeal) gestures to explore the character further.

Standing in a circle (appropriately), players were asked to find the way in which their character would walk across it, change places with another character and who would give way to whom, how the character walked into the circus ring, how they exited - and hence something of their attitude to performance. Having expressed but not discussed the characters, we explained who we were. The following are examples taken from the rehearsal tape:

Alison	"I'm a trapeze artist and I love my costume, the grace of my art ... I love being high up there away from everyone else"
Sarah	"I'm a high wire walker, and I'm the BEST ever! Last summer I walked over a wire over the Niagara Falls ... I want everyone to know I'm the greatest!"
Luke	"I'm trying to be a clown. It's what I really want to be, but I often end up just sweeping the floor... I'm always the stooge when the other clowns play their tricks"
Marit	"I'm a lion, a very *old* lion." [Prompt: Do you like being in the circus?] "No, I'm pretty fed up, and tired."

The issue of status began to emerge: the ranking of the characters from the ringmaster at the top down to Luke's clown. Behind this lurked the question of power, symbolised by the whiplash rhythms in the opening of the piece:

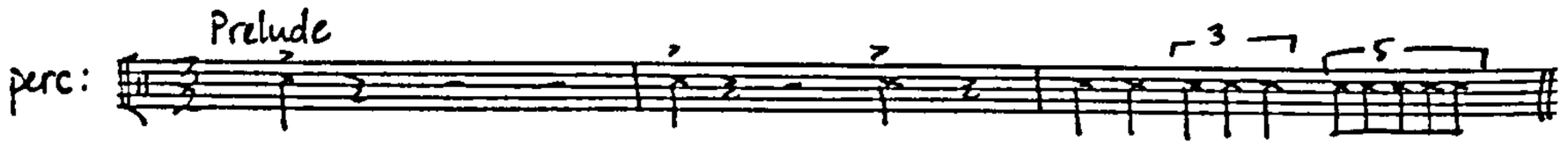


Fig. 6.10 Whiplash rhythm from the opening of *Circus*.

Foucault has written on military and other techniques for disciplining the body (Foucault, 1975: 197). He gives the example that soldiers should stand with their chests thrown out, heads held high and so on. In the same work he discusses the idea of the placement of the human body in relation to others within a power structure, such as the watchtower described in his chapter on Panopticism. To invoke the power structure of a circus, and the way in which the circus troupe is a mass of highly-trained bodies, the following text was inserted. It occurs after the introduction of a series of motley characters, which climaxes in the song of the elephants, and comes immediately before the solemnity of "The Big Parade":

> There was [once] a military dream of society; its fundamental reference was not to the state of nature but to the meticulously subordinated cogs of a machine, not to primal social contract but to permanent coercions, not to fundamental rights but to indefinitely progressive forms of training, not to the general will but to automatic docility ... As a technique of internal peace and order, [it] sought to implement the mechanism of the perfect army, of the disciplined mass, of the docile, useful troop.
>
> (Foucault in Rabinov, 1991: 185-6).

Given this seriousness, the final, most crucial part of the preparatory work was to find a musical phrase to express the *feeling* of the character, as opposed to music that might merely suit its function: pastiche clown music or tightrope-walking music, for example.

Some of the initial attempts are on DAT 2, Tracks 12-15. All of these found their way into the final piece.

Track 12: Alison's trapeze artist (violin).

Track 13: Luke's clown (accordian).

Track 14: Marit's fed up lion (violin).

Track 15 : Sarah's "best ever" wire walker (cello).

Each player developed some clearly-defined material which would be a resource for any solos they would take. The next part of the fleshing-out, in which the group worked as an ensemble from the score, brought up three main problems. The first was the issue of musical space: with a group of thirteen music students who were playing the piece as part of their course, each person needed some space in which to be in the spotlight, even if this was a brief cadenza. This was to some extent catered for in the backbone windows, and each person had some material with which to fill their windows, play their cadenzas or solo over the background riff. As a result of the rich mixture of different voices, it became essential to develop a homogenous ensemble sound in the tuttis in order to underpin the individuality with a strong collective. Most of the refining work was spent on tutti sections in Part II, for example at letters E, G, I, J. All of these sections make use of the following riff:

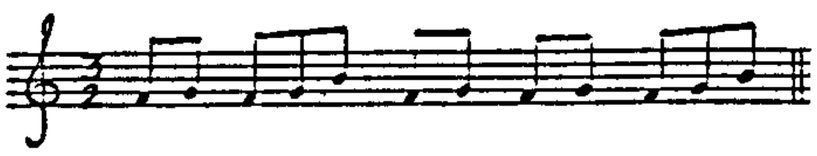


Fig. 6.11 The basic material for the tutti sections of *Circus*.

The riff is simple enough harmonically, but the players had some initial difficulty with the rhythm, a synccopated 3/2, and the fact that the riff is continuous rather than leaving inviting gaps. Given these problems, a number of realisation strategies were tried.

For example, in sections E and G, once everyone had added a part, certain riffs introduced by members of the group were selected to be doubled or harmonised, or players were asked specifically to find counterparts. Unfortunately, this meant discarding some of the ideas, and the whole process took a longer time than was comfortable for the group.

Sections A and C were realised in a slightly more open way by first working with small groups of musicians and simply doubling or enhancing the parts they generated with other ensemble members. For example, the music at C was realised with a cello taking the bass line, an accordion filling out the harmony, a violin playing the riff at the third bar of Figure 6.12, and two clarinets improvising more freely over this texture. Parts for three more violins, another cello and a flute were added during the repeated bars once the realised material had been consolidated. In the third bar, the flute player was given a solo role and a motif on which to improvise, and the strings added counter backgrounds to the pizzicato figure developed by the first cellist.

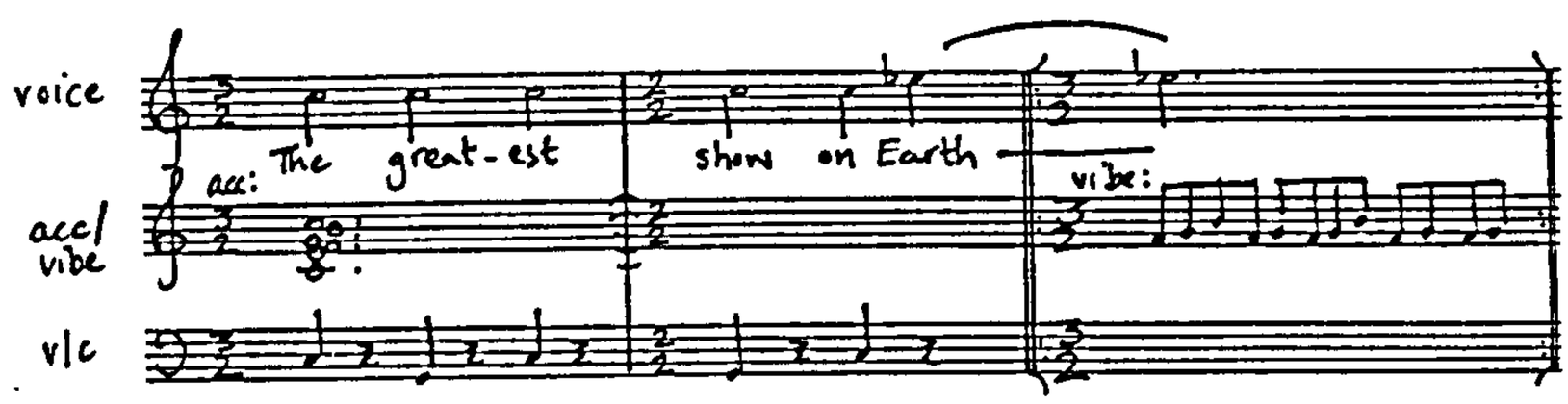


Fig. 6.12 The *Circus* backbone 6 bb. after C.

The research on *Circus* has demonstrated that the process of realisation comprises more than the four-stage model listed at the start of Chapter 5. The feedback model shows the process in terms of feedback and evaluation for an individual in relation to the music made by a group. The larger the group, the more fragile the individual/group interface, since any change in the group music could render the idea of an individual redundant, particularly if the individual's idea depended on some material from elsewhere in the ensemble in order to work musically.

The tutti riff sections (at letters E, G, I, J for example) did require a greater amount of refining time. Here the process became slower as we often had to wait for many of the group members to find their material. The group was often at different stages of the model, some members re-starting, some refining, some fixed. Having achieved a somewhat messy result, it was a bit disheartening to then have to discard some of the material in order to make the texture cleaner.

A more successful approach with the larger group was to group the players into sub-sections, with three or four players doubling one riff, adding harmonies or creating a secondary texture. It was almost impossible for a group of thirteen to listen to each other in the detail that a smaller group such as a quartet can do. By the end of the project, I felt that given the size of the group, the tutti sections could all have been more strongly directed. This could be achieved either by working first with a sub-group then expanding the orchestration, or by asking for specific rhythmic or harmonic ideas from individuals within the group.

The process modelled at the beginning of the chapter tends towards the refinement or fixing of ideas. In the case of the solo material generated with respect to specific characters in *Circus*, the process was less concerned with fixing some material in relation to a whole backbone or ensemble, than with clarifying an idea for improvisation that was true to the player and his/her character. Rather than trying to find the "right" idea, the concept of the "right" material was much more open. From the beginning, players were able to find their material and not worry about whether or not it fitted in, partly because their brief was wide and partly because a series of exercises facilitated an internal and personal exploration of character, leading to the required level of focus. Similarly, fitting the character solos into the backbone was a swift, clean operation, and the positioning and timing of the solos needed little refinement. The enclosed facsimile of the working score (the score I used to conduct the piece) illustrates the points of inclusion (Score 4a).

Overall, the players defined their own characters and performed with a strong sense of who they were, musically, by their performance presence and by dressing up in costumes and face paint. Although video tape is often criticised as a "flat" medium, *Circus* has been presented on video in order that its visual aspect may be witnessed.

The performance on VT 1 (Track 1) was filmed at The Red Rose Club in London in December, 1995.

The Directed Approach (2): *String Soundscape*.

String Soundscape is the piece in this portfolio in which the largest proportion of material was generated in situ with the realisation ensemble and the backbone has generated the smallest proportion of material (Score 5, DAT 1, Track 4). It was written as an education project for the Philharmonia Orchestra for three youth string orchestras and five string players from the Philharmonia. The aim of the project was for the youth orchestras to contribute to the creation of a piece inspired by Wolfgang Rihm's *Time Chant Music* for violin and chamber orchestra. One of the principle challenges was related to time; the players and I had only a day with each youth group and an afternoon with all three in which to create and rehearse the piece.

The recording on DAT 1 was made at the only performance of the piece at the Royal Festival Hall, London in May 1995.

Three backbone tutti sections span *Soundscape*, as if leaving windows for contributions made by small groups on the project. Artistically, the project was based on two of Rhim's ideas for *Time Chant Music* (1993); the first was that of "chanted" melody (melody played with greater intensity than "sung" melody), and the second was that of the manipulation of time, a squeeze or stretch of chronometric time by a juxtaposition of different tempi or pulse relationships. Time in *Soundscape* has been bent in a more simple way and, for the realisation ensembles on this project, a more accessible way. Phrases in the tutti sections make use of ever-decreasing rhythmic values (like the whiplash rhythms in *Circus*), for example, the phrase from the end of Tutti 1 shown in Figure 6.13:

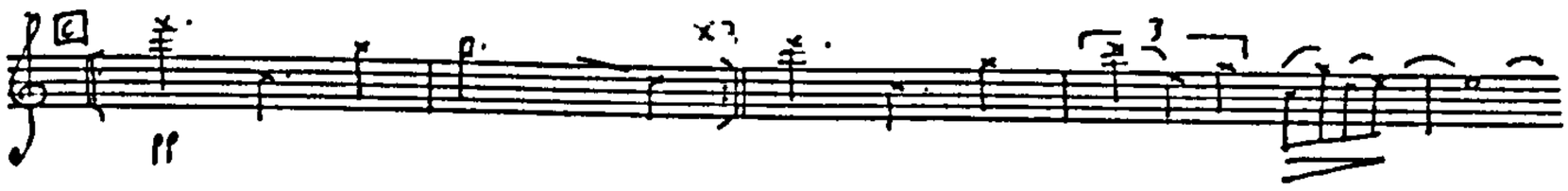


Fig. 6.13 Ever-decreasing rhythmic values in *String Soundscape*.

In accordance with the design of the project, the tuttis were tackled by each youth orchestra separately, and the realisation process thus had to take the

same angle with each group. Tutti 1 consists of melodies for the cello, second violin and first violin sections respectively. Some of these are punctuated by long-held tutti clusters.

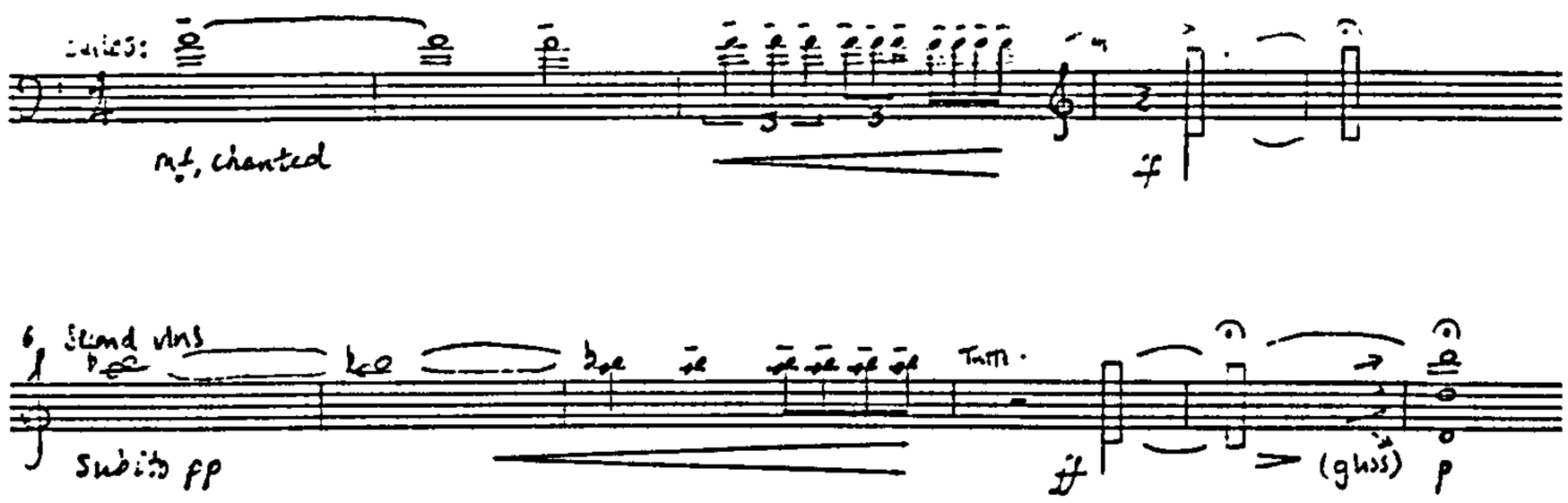


Fig 6.14 *String Soundscape*: "Tutti 1" bars 1-11.

The score notation was explained to the first group of players, and the melodies were played through. Simple ideas were added, for example the Philharmonia bass player had the idea that the basses should double the end of the cello melody (Figure 6.14), but on pitches chosen by each player. After trying and hearing this with the first group, we gave the added parts a clear downward shape, still without fixing definite pitches, and this realisation idea was introduced to the following two youth orchestras. The first tutti was further fleshed out by inserting a trio of melodies (in role theoretical terms solos from three players) *before* the start of "Tutti 1", over a background texture of harmonic glissandi.

Most of the exploratory work was undertaken with the first group, since if new ideas were added by the second or third groups, they could only be rehearsed with the first group on the afternoon of the performance. I wanted to keep the introduction of new ideas on that occasion to a minimum. However, material *was* added by members of the second and third groups in a way that did not alter the direction of the music. For example, solos were added by individuals over the drones in Tutti 2, harmony parts and riffs were added to Tuttis 2 and 3.

Each youth orchestra was split into two or three sub-groups and sent away with the Philharmonia players to develop their own chants. This process had been set up beforehand during a training day with the players and myself. I decided that each group should choose a subject; anything from

food to beer, to animals. Collectively and within two minutes, they had to devise a sentence on that subject, for example:

"A cool half pint of bubbly beer"

"Frogs and toads are green and slimy, Kermit the frog is nice and furry."

The third stage of the work was to find a way of chanting the words, giving them rhythmic character and intensity. The two sentences above became:

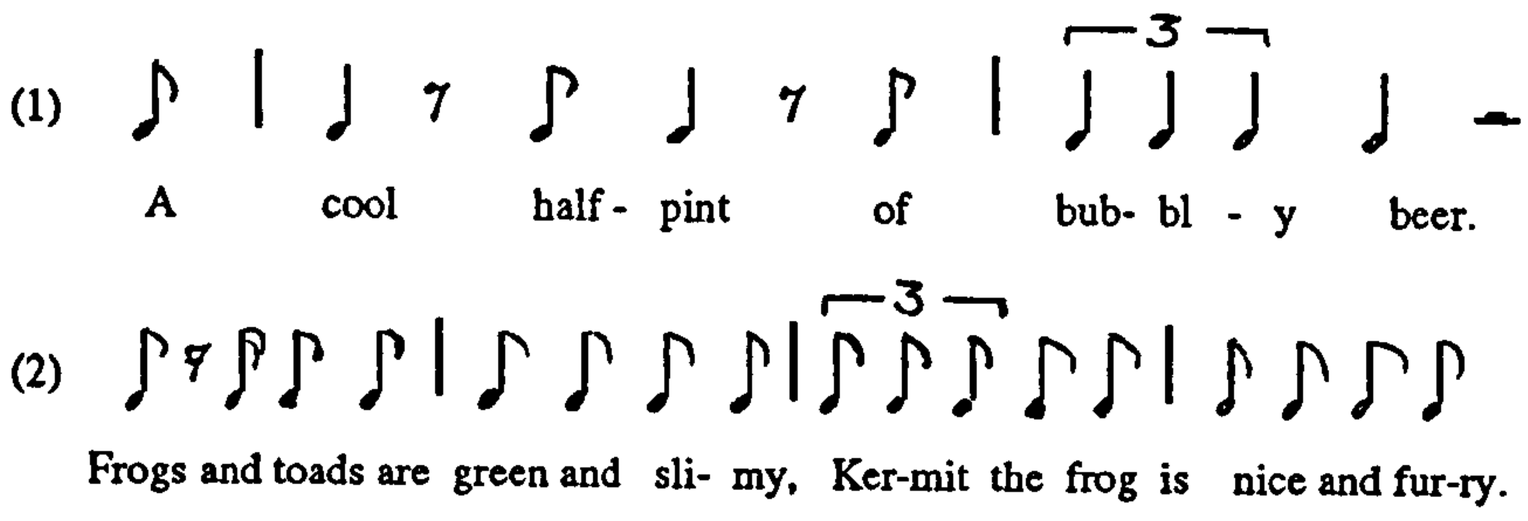
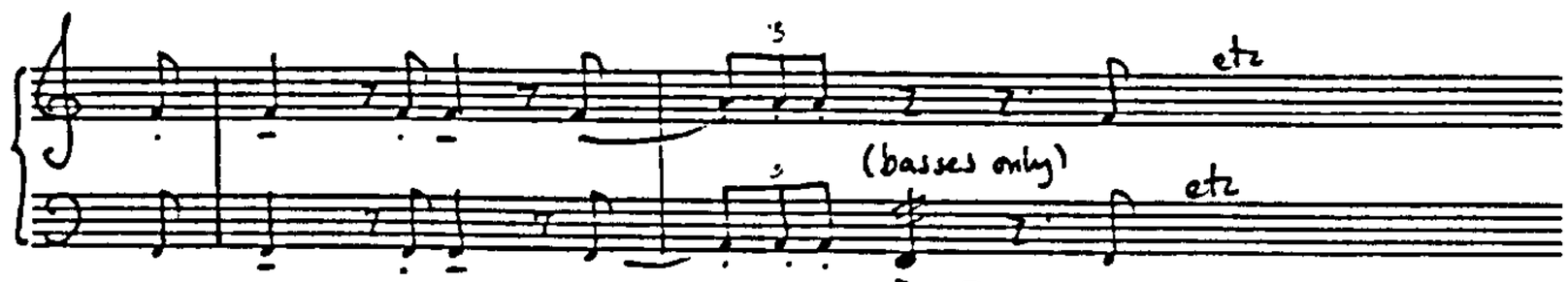


Fig. 6.15 *String Soundscape*: the chanted sentences as rhythms.

Lastly, the generated rhythms were played on the instruments, focusing on a given number of pitches and maintaining the chanted quality. Notes were singled out and "coloured" through using pizzicato, sul ponticello, glissandos. Accompaniment figures were also devised by many of the groups. The beer and Kermit rhythms were developed to become the following melodies:

(1)



(2)

Fig. 6.16. *String Soundscape*, the chanted sentences as melodies.

The third group was set slightly different "windows" tasks, as some of the windows music required development. One sub-group was set the task of creating a short, slow group melody that moved in steps either of minor thirds or of perfect fourths. The second sub-group was required to extend the "Kermit the frog" melody which had become the only diatonic section of the piece.

The extended melody, called "Death to Kermit", occurs immediately after "Kermit" on the recording. It remained diatonic, but was longer, and was given a set of obsessive accompaniment figures that complement other material in the piece. In the role theory given in Chapters 3 and 4, the new melody and its accompaniment figures could be said to mediate between the dissenting "Kermit" melody in Figue 6.16 and other material in the piece.

At no time was the group asked to listen to the backbone, try out ideas, evaluate them, and then refine their parts. People were to add specified ideas, such as harmony parts, solos and riffs. However, this was only done after a series of warm-ups, in which many of the players were asked to add solo ideas to simple practice material not from the backbone (pulsed chords, for example) without feeling pressured. When people were asked to add parts, they were from amongst the more confident players. Alternatively requests for new material were directed at the group as a whole:

> "We need another riff here, something mysterious underneath this one [the realised version of Tutti 2]. Who can find something?"

Someone, or a small group, would always try out some ideas and find a suitable part without that look of horror or dread I had experienced with so many other musicians when they felt unconfident or put on the spot. This approach to backbone realisation seemed altogether more comfortable socially, even if musically it produced the odd incongruous window such as the second melody in Figure 6.16.

Soundscape demonstrates that the technique of backbone composition is a suitable and useful starting point for collaborative composition using large forces. In this piece, sixty youth orchestral players took part along with five Philharmonia musicians. The piece is not unique in the world of music

education in terms of the number of its participants but is an example of a unified composition, rather than a fitting-together of smaller pieces.

The nature of collaboration in this piece is somewhat different from that in pieces realised by the smaller ensembles elsewhere in this portfolio, such as the group that worked on *The Gathering Doubt.* It is perhaps most useful to consider this from the composer/ensemble director's point of view: the collaboration is between the composer and an orchestra, rather than the composer and sixty-five individuals. Hence the realisation should somehow embrace the collective textural sound of an orchestra, and the process must work within the organisational constraints laid down by the orchestral management. In other words, it would be pointless and logistically impossible to use processes of negotiation with individuals in order to achieve a collaboration. I worked with the three string orchestras in groups *as* groups.

Further, the limited time and other constraints such as meeting the three groups separately were factors which influenced the musical fruits of the collaboration. The straightforward backbone material and windows tasks, as well as the series of warm-up exercises preceding the backbone work were devised as a direct result of knowledge of these limitations.

Given the straightforward material that was likely to arise, my aim was to shape the musical "soundscape" by balancing more sophisticated ideas with material that would be graspable and palatable to sixty young people. "Tutti 1" (Score 5), for example, introduces the principal rhythmic ideas via carefully composed melodies. The first of these is articulated on a single pitch, the second in major seconds, the third by movement in parallel clusters; a progression unlikely to be collectively suggested and carried through by a group of sixty players. This was not at all beyond the comprehension of the players, but a twenty-minute backbone consisting solely of such material would be likely to alienate such a group rather than draw them into a collaborative exchange. Away from the backbone, textural ideas such as the addition of tutti harmonic glissandos at the opening and the mad rising pizzicatos at the end contribute to the breadth of the sound world of the finished piece.

Within the sweeping collective sounds of the piece are spaces for individual solos. Examples of solo spaces are over the drones in "Tutti 2", which

enabled the more confident players to contribute at a level suited to their virtuosity. While not everyone had the opportunity to solo, many would have felt uncomfortable in doing so. The quantity of spaces for solos in *Soundscape* raised the proportion of players participating to a comfortable level - here assumed to arise from being stretched but not over-stretched.

Ultimately, the time factor was also used to advantage. Energy and enthusiasm characterised the realisation sessions, due partly to the speed with which the material grew. There was little time for the participants to reflect on the ideas or material, but contributions were drawn quickly and succinctly. The time dynamic of workshop and rehearsal processes became a prime question in the realisation process. This may be described as moving between the following stages:

unfocused, energetic ⟶ focused, settled ⟶ bored, lethargic.

It was vital to reach the productive focused stage through improvising our way through the energetic initial stage. On the other hand, the realisations were usually fixed before boredom set in thus avoiding a further source of alienation.

The piece demonstrates that backbones can be written and realised with large forces and throws light on the nature of working with large groups as groups. It manages to touch the imaginal both in its choice of material and by the use of words in the "chants". The process dealt with the energy level and the emotions of the players by acknowledgement of what might be referred to as the "time dynamic" of the realisation sessions.

Conclusion

Softening the fleshing-out process in *Circus* and *String Soundscape* certainly made the task easier. Leading the musicians to the backbone via a set of progressively more challenging exercises built confidence, and gave a more rounded and more grounded sense of what the music was about - an illuminating discovery that deserves further discussion.

Connecting the backbone music to other improvised musical experiences seems to open up the generative potential of the backbone material, still without reference to stylistic norms, by allowing players to hear or discover some of the musical elements that could eventually be part of a realisation. For example, certain accent patterns, dissonances, or gestures could be introduced through a series of warm-up exercises and improvisations. If complimentary ideas are generated by the players and enhanced or brought into focus by the leader, then further developed and so on, the ensemble and composer experience a voyage of discovery of their own making. Hence all concerned may approach the fleshing-out armed with a set of resources and reference points. Backbone material may be experienced against a background of common encounters. The composer as director of the realisation could approach the process with an idea of the musicians most comfortable with risk-taking and exposure and a sense of the improvisational character of some or all of the ensemble. This is a further set of resources.

Whilst a number of different exercises gives a fuller set of resources to the ensemble, the exact nature of "grounding" a realisation is somewhat more complex. Here it may usefully be summarised as providing a focus and security. Harmonically this can be achieved by working with a limited number of pitches, creating a harmonic centre against which dissonance can be felt *as* dissonance, as in classical chromatic notes or in jazz "playing off the chord". Rhythmically, a differentiation between strong and weak beats in a given cycle provides a sense of relative weight of rhythmic values placed in each bar, setting up a "feel" or groove.

Given a background of a tightly-defined rhythmic space, rhythmic values can be added by members of a realisation ensemble to enhance the groove. Hearing and accepting the enhanced groove allows the next set of players to

place added parts within or against it. Generally, too many players going against will drown the groove, losing the rhythmic grounding of the piece. This is not always desirable, though I allowed it to happen in the 3/2 sections of *Circus* in order to create an uneven effect. However, the ensemble in this case had worked through a number of exercises in which the group had played the 3/2 groove. We reached the dissent from the groove with a sense that it was a departure from something more unified.

The realisation process was further softened by allowing "window" space for the individuals to blossom through solos, cadenzas, or ensemble sections in which there was more autonomous input from the players. It was more than simply a matter of conceding compositional space: it was aesthetically satisfying to create structural frames which facilitated or demanded windows onto other people's consciousness.

Compositionally, the window structures in *Circus* and *Soundscape* represent a further level of grounding; open spaces, which run a greater risk of being filled by complete nonsense are grounded by the large-scale structure of the piece.

It has become clear that players in a realisation ensemble bring their whole selves, including their emotions to the process. The extent to which this happens depends partly on the process, the amount of space given to players, the amount and nature of development of their own material. For example, the players in *Circus* were asked to identify with their created circus characters, to express how the character felt, in order to avoid glib appropriation of "circus" music. Even in *The Gathering Doubt*, which was realised in a way that corresponds most closely to the four-stage model and without specific recourse to the expressivity of individuals, emotions made their presence felt as a lack of energy during some of the sessions. Professional detachment aside, it is not completely possible for people to leave their emotions out of the process and, since one of the aesthetic goals of my work is expressivity in the improvisations, emotional engagement is a necessary part of a greater whole.

Figure 6.1, a sketch of the cognitive processes involved in fleshing-out a backbone, therefore represents a limited part of the realisation process. The question of whether it could be modified has wide implications, way beyond the scope of this thesis, but the following questions are raised.

Firstly, a theoretical point should be made. In an ongoing process, artificial forms of intelligence such as computers or androids do not become bored and switch off, and do not make sudden *inspired* jumps from one stage of a "programme" such as the flow chart in Figure 6.1 to another. Humans may do either.

Secondly, the process of evaluation may be explored further. The in-the-moment evaluation "box" in Figure 6.1 could be broken down to include *perception* then evaluation. Given that one hears one's sound or phrase as an *idea*, and not simply a set of vibrations, one must *understand* this idea by means of a conceptual apparatus. Perception, then, embodies hearing and conceptualising sound. Pike (1967) has proposed a phenomenological model of jazz improvisation in which he postulates that sound, located in a perceptual field, triggers images and associations. It seems reasonable to suppose that some of these may have emotional significance. It also seems feasible that the images and associations could include sound associations, which could feed forward to generative processes. However, before they do, they are in an internal space, a space in which, Pike suggests, the improviser knows him/herself as a creative artist, experiencing I assume his own "unity of creative consciousness" (Pike, 1967:89).

The concept of character in the realisation process requires players to identify emotionally with an image or characteristic and then express it musically. This too is "information" given outside the music, and is therefore a type of external input. As a way of generating material, it functions through the internal, associative field, as shown on the modified multiple feedback model in Figure 6.17.

A full exposition of the phenomenology of perception is outside the central aims of this thesis. However, there is no doubt that the model given in Figure 6.1 gives one side of the realisation process, and that there exists another side which includes associative imagery and emotional experience, which may interface it at the "evaluation" stages via perception (Figure 1.1).

Lastly, the very concept of evaluation implies a process not entirely devoid of emotion. Quite simply, constant rejection of ideas is soul-destroying and leads to decreased output, whereas constant acceptance of ideas leads to an increased output, let alone sense of achievement.

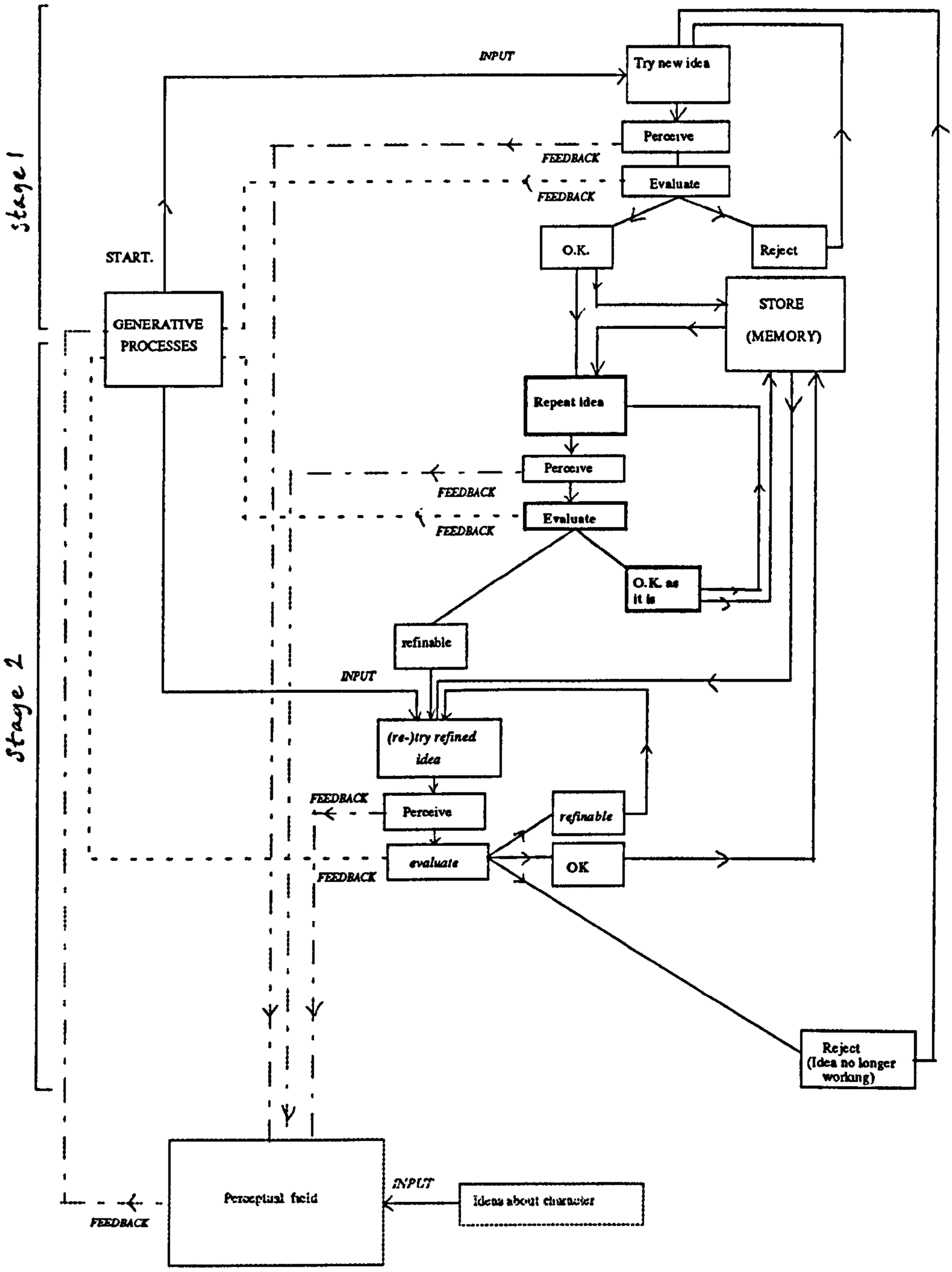


Fig. 6.17 The cognitive process revisited.

Ultimately it becomes deeply unsatisfying to model the realisation process only on information input and output. The internal worlds of players present a rich set of possibilities, not to be plundered but to be given space for expression, if desired. After all, if one of the reasons for embarking on a journey through the minefield of collaborative music-making is to draw on the expressive qualities of the players, it is vital to embrace these as part of

the realisation process. A model of the realisation process must also articulate where and how the internal worlds of the players are to be placed with respect to the concept of the process.

Figure 6.17 deals mainly with in-the-moment evaluation. Players, especially less experienced players, evaluate their playing in terms of how it sounds at the time, rather than reflexively, or whether the idea is suitable for long-term development in the composition. The latter seems more to be the domain of the composer, who has a sense of structure of the whole piece. The criteria for reflexive evaluation, as explained earlier in this chapter are structural, such as "is the idea robust enough to build on?". Players can at most only answer this question with respect to the parts of the piece they already know, for example "it's taking the piece towards a new direction". A new direction may be fine, but if the new direction conflicts with yet uncharted backbone material, the realisation runs into problems. It may not be possible for players, even players with a refined sense of musical structure, to evaluate using structural criteria, particularly if they have not heard the complete backbone. Therefore, a workable realisation method is for the composer to identify long-term realisation ideas and ask players to realise those, rather than asking the players simply to respond to what they hear from the backbone.

The realisation process is an essential part of the *composition* process. In the directed approach taken in *Circus* and *String Soundscape* compositional decisions such as the placing of certain motifs, harmonic colouring of the backbone and the length and content of "windows" sections were made during the realisation process and not before. Decisions were made both in the moment and away from the working ensemble - reflexively by myself as the composer, between rehearsal sessions.

The collaborative stage of backbone composition takes place after the bare backbone has been put on paper and presented to the realisation ensemble, and before the finished piece has been performed. Therefore, as in Chapter 5, backbones *can only* be defined as pieces composed with the intention of leaving space for additional parts.

Backbones are a million miles away from being incomplete scores. They are a means of creating space in which other musicians can join the unfolding ideas. That this space should be well-defined, that is bounded in some way,

and made welcoming and encouraging, is vital not just for the music itself but also for the "temporal" space in which the realisation sessions take place.

7. Interaction Structures in Collaborative Composition

As an expansion of earlier work on role-taking, *The Dark Box (of my shutting heart)* was written for clarinet and vibraphone to research the widest possible range of player function roles that could be taken by two players.

Player-function roles exist in improvised and non-improvised music, and the following list was first proposed in Chapter 2:

1 Solo.
2 Background (e.g. an accompanying figure, a drone or riff).
3 Punctuation.
4 Heckle.
5 Counterpart (e.g. countersolo, counterbackground).
6 Contrapart (a part in its own world; contrasolo, contrabackground).
7 Block.

The roles are defined by normative criteria. For example, solos tend to be salient within the overall texture, dramatic or arresting, demanding attention. Backgrounds are the opposite, non salient. This can be achieved by stasis (the part does not develop or change but prolongs a set of pitches or ideas), or repetition, or continuity of texture. Punctuations are

necessarily short gestures coming in the spaces of melodies or background figures, whereas heckles, also short gestures, create conflict by poking their way underneath other material. The term "counterpart" derives from counterpoint; a countersolo is a solo played simultaneously and in complement to another part (probably a first solo), whereas a *contra*part is played simultaneously with another part but using contradicting material.

In the subsequent chapter (3), it was demonstrated that in group free improvisations player-function roles together with material-generative roles operate within the following modes of interaction:

1 Homogenous : the parts, which may have different player-function roles, knit closely together to form a homogenous texture.
2 Exchange: two or more parts play in turn, as in call-and-response.
3 Differentiated: parts are in differentiated layers, each layer continuing in its own musical space, possibly in its own tempo.

Using this framework, the musical structure of improvised music can be mapped in terms of the interaction of the ensemble. From this research, new musical forms have begun to emerge, not defined by harmony or organic models of unity, but defined by co-operation and conflict, sub-grouping and, of course, role-playing.

The Dark Box (of my shutting heart) for clarinet and vibraphone explores the widest possible range of roles and interactive modes that could be taken by two players, and the possibilities of musical structure that could be produced using these resources. The two players move between various roles and interactive modes. Harmony has been used to heighten the separation or connectedness between the two parts as they take different roles. It also helps to contain the freer improvisations in the windows sections of the piece. Although the piece has a large-scale harmonic structure, this is incidental rather than schematic, its chief function being to support the movements between roles and modes that give the piece its form.

The Dark Box (of my shutting heart).

Over a period of a couple of months, I had been improvising with a clarinettist, Paul Bendzsa[1]. An intimacy and spontaneity had come to characterise our playing, together with a dynamism that always seemed to produce improvised pieces with clear structures. *The Dark Box* is essentially about intimacy. Its central image is taken from a poem by Cummings (Cummings, 1983:83) which is about putting away a letter;

> And where I will put it away my lady
> you will understand, only if once
> (if leaning and with little breasts apart
> you quickly will look into the
>
> dark box of my shutting heart.

Much of the early vibraphone material was inspired by the image of a shutting heart, and also the idea of a camera shutter, opening for a fraction of a second to allow light from the external world inside. Hence the opening melody has an uneven, erratic quality, whilst at the same time utilising the softly yielding sonority of the low register. This contrasts with a much more fiery clarinet character, and the two move through various degrees of frenzy towards a "Dark Heart", a calm, soulful melody after the agitation and tangled playing earlier in the piece. The "Dark Heart" dissipates into a barren wasteland, which eventually gets going again with the gentlest and least intense material in the piece.

On DAT 1 Track 5 a studio recording of the piece is presented, played by Paul Bendsza on clarinet and myself on vibraphone. The score of *The Dark Box* is Score 6 in Volume 3.

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[1]Teacher at Newfoundland University, and first clarinet in the Newfoundland Symphony Orchestra.

I decided that, using all three modes of interaction, I would confine myself to the following possibilities of role-taking for the two players (Table 7.1):

Mode of interaction	One player	The other player	
exchange	solo	countersolo	
		contrasolo	
		punctuation	
		background	
	background	contrasolo	
		background	
		punctuation	
	punctuation	contrasolo	
		punctuation	*(well-spaced)*
	heckle	heckle	*(conflicting spacing)*
differentiated	solo	countersolo	
		contrasolo	
		background	
		punctuation	
		heckle	
	background	background	
		contrasolo	
		punctuation	
		heckle	
	punctuation	contrasolo	
		punctuation	
	heckle	heckle	*(differentiated material played at conflicting times e.g. very slightly apart)*

continued over leaf.

homogenous	solo	solo	
	background	background	
	punctuation	punctuation	*(similar material played simultaneously)*
	heckle	heckle	*(conflicting spacing but similar material)*

Table 7.1 Possibilities chosen for role-taking for two players in *The Dark Box*.

Table 7.1 raises a number of points. Firstly, in the homogenous mode, the only *given* possibilities are for the two players to take identical roles. In reality it would be possible to conceive of a diverse pair of roles such as a solo and background in the homogenous mode. In this case the background and solo would consist of very similar material, so that the solo almost blended into the background, whilst each part maintained an appropriate level of salience or complexity. However, in this piece I wanted to make the homogenous mode distinctive by limiting it to imitative playing from both players; hence both parts must take identical player-function roles.

There are many more possibilities of role combinations under all modes when one considers that roles may transform during the course of an extract of music (see Chapter 4). The combinations shown above are those which occur under stable conditions, and which were the starting point for the composition of *The Dark Box*.

Seeing the role combinations for two instruments in such a simple way elucidates further characteristics of two-player interaction. There are a number of limitations surrounding the heckling role: for example, it is not possible, strictly, to heckle a background in the exchange mode. If a heckle

occurs during the middle of a background riff, thus generating characteristic conflict, it would either become absorbed by the riff, and hence sucked into the homogenous mode, or in order not to do so, it would necessarily retain a very different character and material, thereby slipping into differentiation. If the heckle was placed in a space in the riff in order to avoid absorption into the background, it would not generate heckle type conflict, which derives from awkward placing (as explained in Chapter 2), but would function as punctuation.

In a situation with more than two players, it might be possible for the heckle to function towards another part which was itself in the exchange mode with the background. The heckle would then be defined as a part butting against a second part (say a solo), which is in exchange with the riff, and therefore moving at different times.

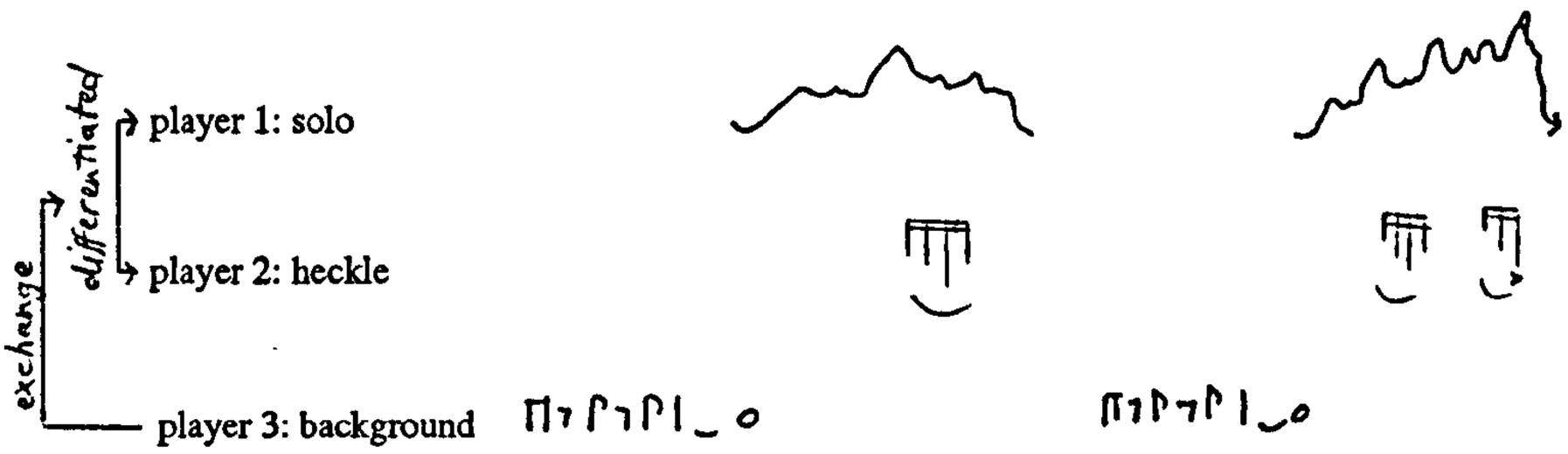


Fig. 7.1 Background and heckle in the exchange mode.

The heckle in Figure 7.1 is in exchange with the background riff by means of its interaction with the solo part. If the solo was not there, the "heckle" would be in exchange with the background, but would function as punctuation. In fact, Figure 7.1 illustrates two levels of interactive modes. Between the solo and heckle the differentiated mode is in operation, and between these two and the background there is a second level mode which is the exchange mode. Potentially, the range of interaction possibilities in larger groups may be enriched with various levels of interactive modes operating between individuals and sub-groups within the ensemble.

Player-function roles have been generally mapped using not only normative criteria, but also *relative* criteria: the notions of salience, spacing, placing, conflicting or complementary material all depend on some "other" in the music for comparison. In duets, the dependency on mutual definition is

more acute, since roles and interactive modes are defined when the parts are considered in relation only to each other, rather than to a group of possibilities. The sensitivity of the interactions thus heightened, any change or role transformation is immediately experienced by both players. Without the possibility of additional layers from other parts, the music expresses being uncompromisingly in or between the modes of homogeneity, exchange and differentiation. There is no softening of the interaction, no prettying-up of the results with additional material. The delineation of the modes and roles during the course of the piece is laid very bare.

A duet was therefore an appropriate medium for an exploration of role structures in composition for two reasons: with only two instruments, it was possible to build a piece around as many duet role combinations as I felt the piece would allow aesthetically, and the reliance each part has on the other for definition enabled a lucid exploration of the interactions.

A further idea for the piece was to consider the parts as existing along a continuum between sameness to and difference from each other. At the "sameness" end was placed homogeneity, strengthened by the exclusive use of identical player-function roles in both parts. With only two players, the other end would be characterised by opposites: the most extreme contrast between two parts in terms of character, role, rhythmic material, and to a lesser extent harmonic material, which in this piece never becomes completely polarised.

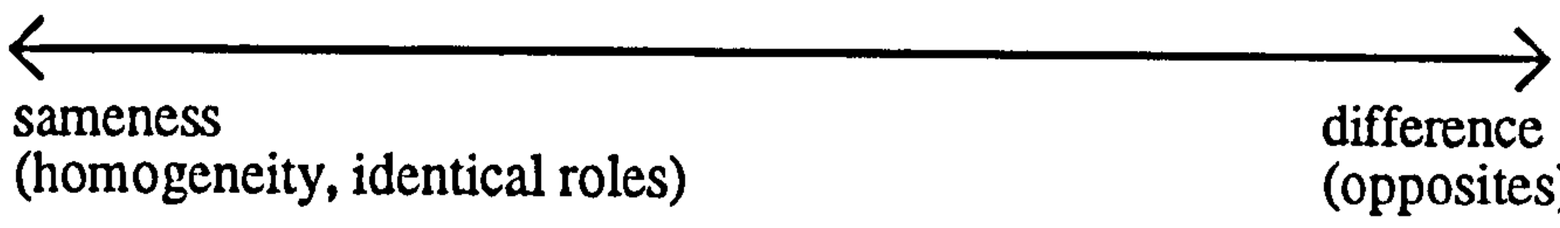


Fig. 7.2: The sameness-difference continuum for two players.

The vibraphone and clarinet melodic characters from sections A and B are an example of "opposites", the vibraphone's enveloping curves in contrast to the clarinet's fiery pushing-out of its microtonal space:

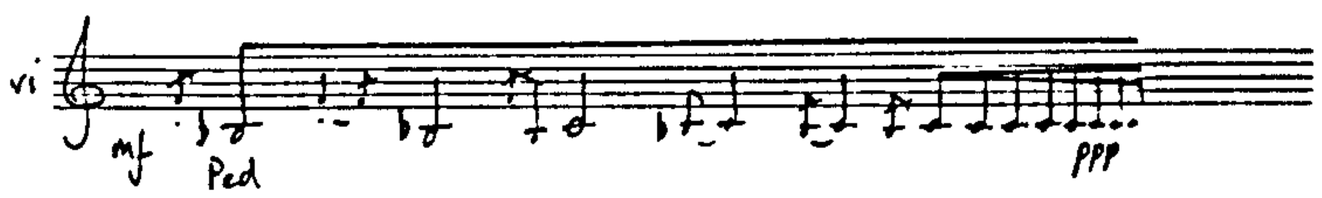


Fig. 7.3 The two melodic characters as they first occur in *The Dark Box.*

In the case of a piece written with three or more parts, the relationships as described by degrees of sameness or difference are not in a single place along such a continuum: two parts could be similar but opposites to a third, or there could be different *degrees of opposition* between parts A and B and parts A and C. For example, in Figure 7.4, parts A and B are rated as quite similar, and parts A and C are rated as rather more contrasting.

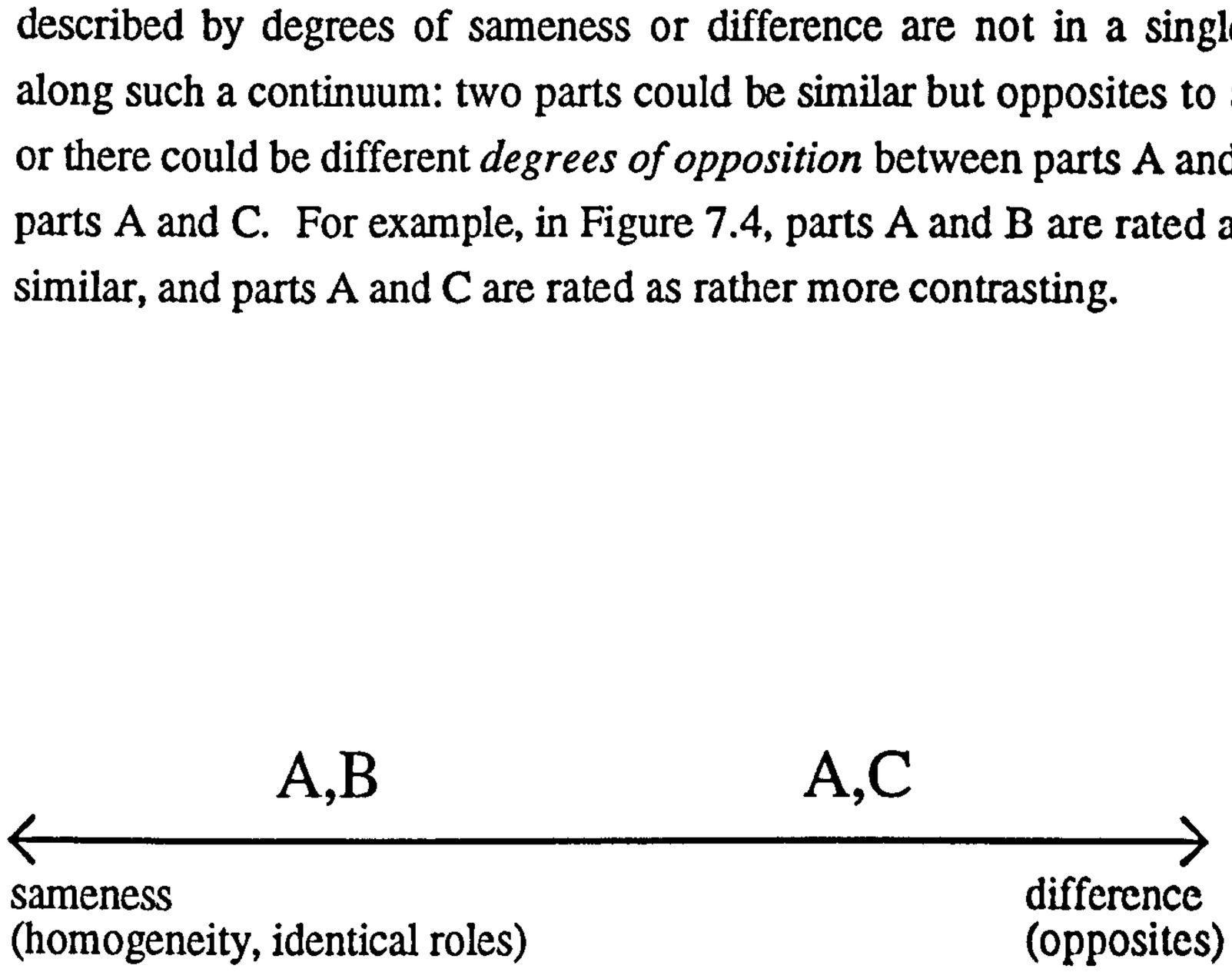


Fig 7.4 Three parts on the sameness-difference continuum.

Since it is impossible to quantify a quality such as "difference", it becomes difficult to judge exactly where two parts should be on the continuum, let alone judge a set of three parts to be characterised by a mutual degree of similarity or difference.

The relationships between the three parts are more complex, and more subtle. With only two parts, the degree of similarity and difference is contained only by the content of those two parts, and does not refer to any external yardstick (such as a third part).

The simplicity of the two parts existing on the continuum allowed an exploration of the detail of movement to and fro along that continuum. Hence, at letter B on the score, the clarinet and vibraphone are opposite in character, have opposite hairpin markings, and are salient in exchange with (at different times to) each other. After a while the vibraphone phrases begin to "gently dovetail" into the ends of the clarinet phrases. When the clarinet solo develops into a more continuous line at the end of the sixth system, the vibraphone punctuates this line with gentle shadows. By the end of the section the punctuations have extended in length to become a countersolo. At this point, both parts are in the homogenous mode, both in solo roles imitating each other closely within a narrow pitch band with only a couple of anomalous pitches to separate them.

At letter D, the two parts are mostly homogenous, playing the same melodic line, but with the clarinet pulling away; a dynamism introduced by a microtonal struggle. The dynamism collapses into the "Dark Heart".

At the "Dark Heart", the parts are very close harmonically, yet at the same time the series of opposites shown in Table 7.2 exists.

Closeness has so far been explored in terms of homogeneity of interaction and material, as if the two are equated through the language generated by the piece. At this point, paradoxically, there is an intimacy in spite of the opposites. This comes partly from an enveloping of the clarinet melody by the vibraphone chords. Indeed, the "softly yielding" character of the opening vibraphone solo, during which space is marked out by pitch boundaries and then filled in by the melodic line becomes gently containing. The clarinet melody in the "Dark Heart" is, in fact, a restatement of the

opening vibraphone melody, now grounded metrically, and infused with the outward-pushing clarinet character.

clarinet:	vibraphone:
foreground	background
melodic line	chord sequence
improvised after E' on score	written
off the pulse	on the pulse

Table 7.2 Opposites in the "Dark Heart" of *The Dark Box*.

Therefore, in the piece as a whole, there is a dynamism along the sameness-difference continuum. Within sections such as Section B, the duet moves from one end of the continuum to the other, from "opposite" to "the same". Yet similarity and opposition are expressed in various ways, for example the homogeneity arrived at during the early sections of the piece is blown apart by the 'similar-yet-opposite' material in the "Dark Heart". The role structure of this piece is enhanced by an articulation of intimacy and distance, and any emotional connotations these may have in the context of a duet - an interaction between two people.

The Role and Interaction structures of *The Dark Box*.

The role structure of any piece of music is defined as the structure of the piece given by a tracing of its player-functional roles and modes of interaction through time. Freely-improvised pieces analysed earlier in this thesis have also been presented in terms of their material-generative roles: for reasons listed in Chapter 5, the first chapter on backbones, this set of

roles will not be used to define the role structure of any of the collaborative compositions in this portfolio.

The interaction structure encompasses the role structure of a piece, and includes other aspects of interaction such as the closeness of material, sub-groupings in the piece among different parts, the ways in which intimacy and distance are played out.

Since the role structure, material resulting from freer improvised windows sections, and information about other aspects of interaction are derived empirically, it only makes sense to consider the interactive structure of a piece after the final interaction has taken place. As with much of the work in this study, interaction structures are derived from actual finished pieces as they were heard in performance or captured in a recording session. Obviously there are no *a priori* interaction structures in pieces involving improvisation, though it is sometimes great to sit in the bath and dream about what might have been.

The role structure of the finished *Dark Box* was influenced by the following:

1 Material given on the backbone score. The piece was composed with its set of player-functional roles and interactive modes in mind.

2 Instructions given on the score - see the passage from letters C to D, in which the players are given a series of roles and descriptive words; "solo", "punctuation to solo", "exchange", "denser exchange", finishing in:

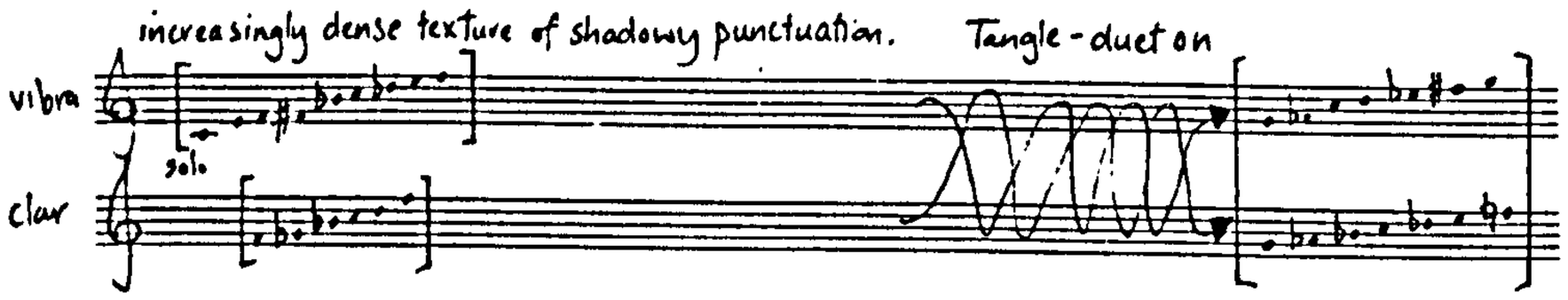


Fig 7.5 The tangle just before Letter D in *The Dark Box*

3 During the fleshing-out process the backbone and its role-structure were realised and altered. For example, in the "Wasteland"

section (letter F), the clarinettist sometimes punctuated the vibraphone instead of heckling, thus changing the written role-structure. As has been demonstrated earlier in this work, there are often additions and surprises during the realisation of backbone compositions.

Each of the above stages has contributed in some way to the closeness or separation of the two parts. For example, near the beginning of the piece, the two parts have been given backbone material which establishes their different characters. These are further delineated by a use of two different harmonic areas, F minor and F-sharp major, which are eventually brought together into a harmonic progression in the "Dark Heart" (section E). Table 7.3 summarises the harmonic and melodic material, and maps these out alongside the player-function roles and interactive modes.

The instructions given on the score are also specifically designed to steer the music towards or away from closeness of interaction. In a sense, sections in which the music is steered by instructions rather than by material are somewhat like the windows in *Circus* (Score 4 and Chapter 7) and *String Soundscape*. However, rather than being autonomous space for short solos or group pieces, these are part of the flow of the music, as if unravelled ends of rope left to be woven during the heat of performance. At the realisation stage, tremendous improvisation and interpretative skill was required to bring off the intimacy and separation in the piece, for it was only at this stage that the "interpersonal" dynamics of the structure truly came into being.

The shape of intimacy and separation, or sameness and difference is illustrated in Figure 7.6. From a starting-point of two different characters, the piece moves towards a claustrophobic closeness from homogeneity twice early on in the piece (the "tangles" in Figure 7.6).

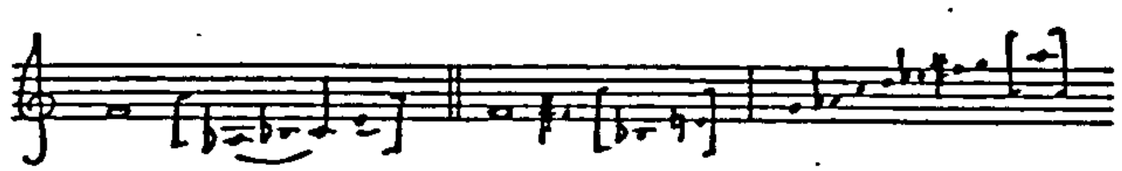
Table 7.3. *The Dark Box*: summary of roles, modes and harmonic and melodic material in the finished piece.

Section	A	B	B'	C	D	E	E'
vibraphone	solo	|b/ground --› punct --› c/solo	|solo	solo	|solo	|b/ground	
clarinet	-	|solo	|b/ground	b/ground --› punct --› c/solo	|solo	|solo	
interactive mode	-	|exchange exch. - - -› homog.	|diff.	diff --› exch exch› homog	|homog	|diff	

B'

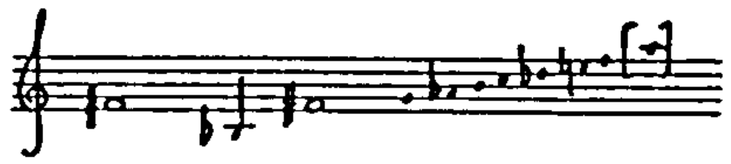
Harmony

Vibra:

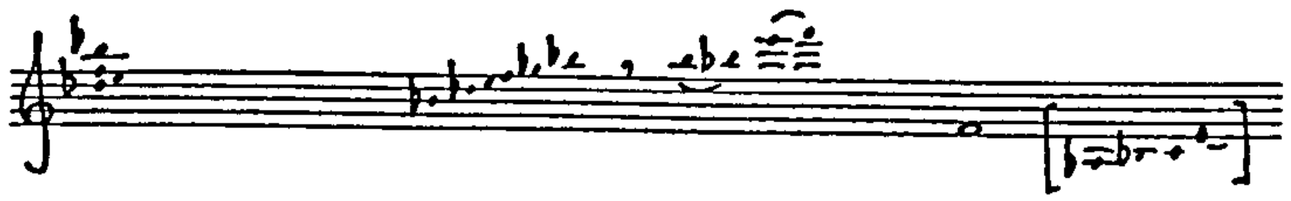


Vibra

Clar:



Clar



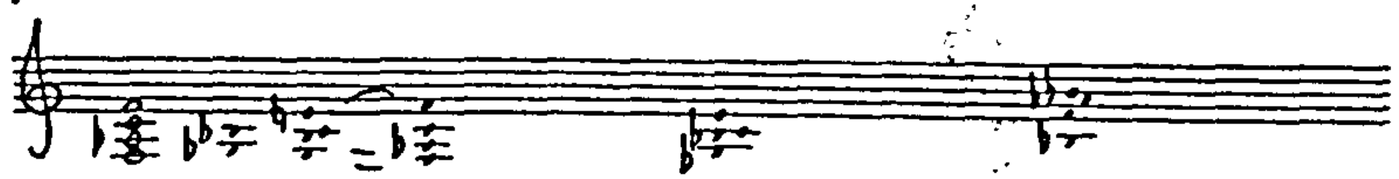
notes:					
re: harmony	F# in cl. introduces new pitch area, delineating it from the established F in the vibe part. At B', homogeneity is achieved by integration of texture, not matched harmony.	F# in vibra. resolving to F mediates harmonically between the two tonal areas.. Sub dom minor in cl (B minor).	Melody ends on leading note to F modal descent.	Gb heard as part of dominant chord (Gb, Bb, C, E). French 6th to eventual Bb tonality. No harmonic delineation between the two parts.	
re: material	New material in cl.: introduces feeling of pushing out of musical space.		from opening.	Return to section A vibra. melody, stated in clarinet.	

Table 7.3. *The Dark Box*: summary

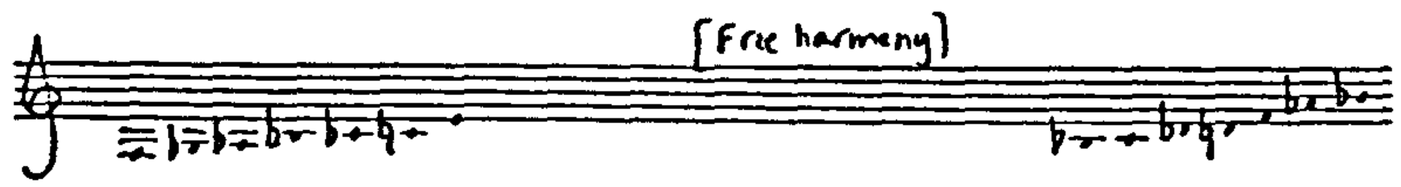
Section	E'		F	G	‖
Vl.	b/ground	→ heckle	heckle or punct.	b/ground	
Cl.	solo	(solo)	heckle or punct.	solo	
Int.	diff.		mostly exchange	diff | exch.	

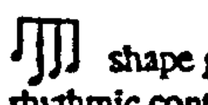
Harmony:

Vibra.



Clar.



notes:			
har.	Cl. free to move away from F minor harmony, but heard against consistent vibra. part.	French 6th extended in vibra.	Bb final home key. Vibra part visits chords of Gb, Bb minor, and A7.
mat.	Elaboration of §A material in cl.	Fragmentation of §A material in vibra.	 shape given new rhythmic context.

Notation.
Roles or modes of interaction: ---→ = transformation
→ = short transformation over a period of less than 4 beats.
| = sudden change in role or interactive mode eg at or after cadence.

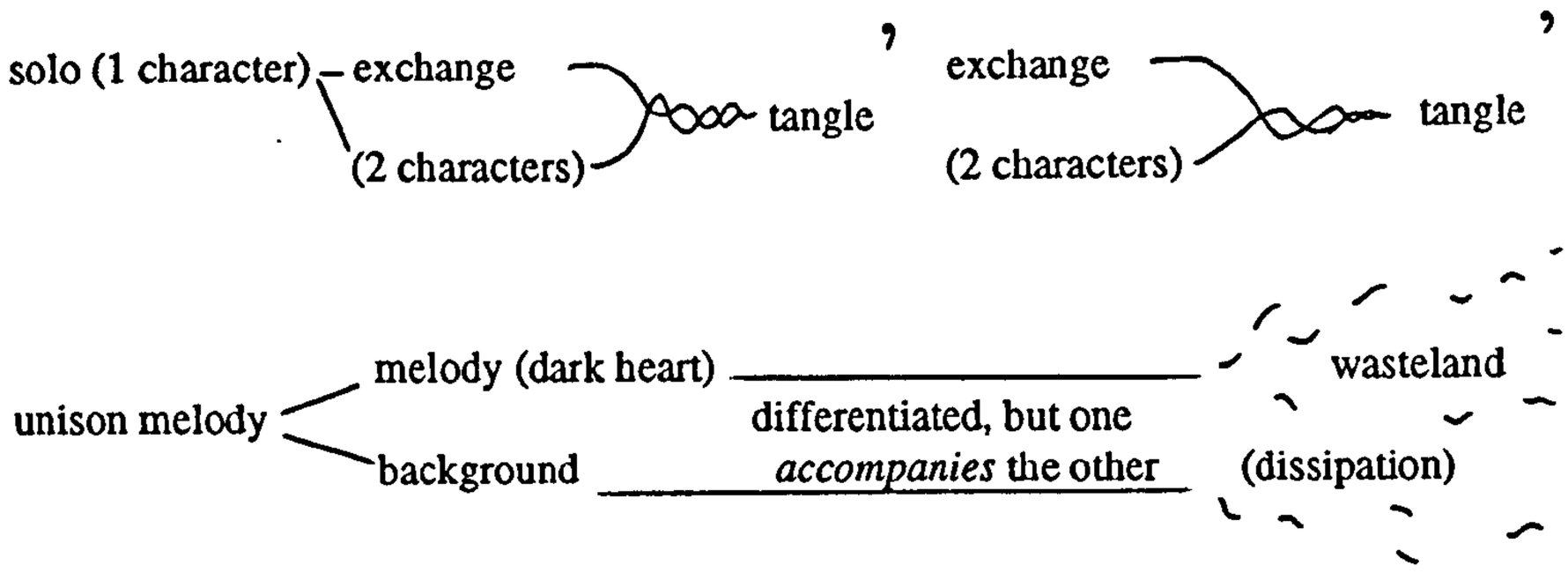


Fig. 7.6 Intimacy and separation in *The Dark Box*

The unison melody is another expression of homogeneity and closeness, but during this, the clarinet begins to push away by means of a melismatic blur of microtones on the long-held notes. The Dark Heart, which is the centre of the piece, is not merely another tangle, but a differentiated, spacious relationship. It is the most intimate section of the composition, the intimacy referring back to earlier material in the piece, as well as coming from the vibraphone chords which enfold the clarinet melody. For example:

1 The clarinet restates the opening vibraphone material.

2 The vibraphone harmony brings together the two tonal centres of F-sharp (G-flat) and F minor into a linear progressive context. G-flat is heard as the flattened fifth of the C major dominant chord (Table 7.3, under "Section E").

3 The chords are placed in the warmest register of the vibraphone. This is also the slowest tempo and least agitated section rhythmically.

4 Hence, the clarinet melody and improvisation are heard against a steady pulse and harmonic background. Intimacy in the improvisation derives from the clarinet player's awareness and sensitivity to this grounding, in contrast to the spontaneous and fiery responses heard earlier.

Degrees of closeness and separation are achieved through several means: harmonic delineation; choice of interactive mode, reference to material

earlier in the piece in the "Dark Heart" section. They are perhaps enhanced by the players' choice of player-function roles, gestural or melodic character and register.

The interactive structure of *The Dark Box* has been demonstrated in terms of the role structure and intimacy-separation, which is similar to the sameness-difference continuum, but its emotional charge carries slightly different implications. Role-taking and intimacy are terms which imply the arena of human relationships, but a term such as intimacy puts the structure in touch with an emotional realm. The structure now seems to speak more boldly of human relationships, to mirror a sequence of events describing what can happen as a friendship between two people deepens, and to advocate a tension between opposites as an intimacy with emotional honesty.

This research has aimed to explore potential models of musical structure which are derived from models of human interaction. Compositionally, player-function roles and modes of interaction have proved to be a technical resource during the composition and realisation of all of the backbone pieces in this portfolio. The resulting pieces have been considered in terms of their harmonic, gestural and "architectural" structures. Here, for the first time there seems to be a resulting structure which has a rich set of musical characteristics but also may be expressed purely in terms of its role structure and interaction structure.

The process of composing *The Dark Box* completed a circle. The piece was written using the fruits of earlier research, this time beginning with human interaction and ending with a musical structure. That this structure mirrors a human or psychological journey reinforces the relationship between musical and social interaction and musical and social creation.

8. *Splatt!* A Backbone for Film.

Given a strong model for the interaction between different *musicians* in an improvisation or backbone realisation ensemble, I wanted to apply it to a piece of work combining music and another time-based medium. Consequently, *Splatt!* was written as a backbone to be fleshed out by film as well as additional musical parts.

The piece is based on a poem I wrote some years ago, about the insects buzzing around my ears in the evenings as I was composing. One evening, the situation was compounded by a group of clarinet players who were practising in a room downstairs. As I attempted to swat the moths and crane-fly, I kept thinking, somewhat guiltily, about swatting the person who had invited the clarinet group around. By mistake, instead of stunning the insects and putting them out of the window, I managed to kill each one. They fell to the ground, then slipped between the floorboards. The film, then, is about the irritating buzz of insects, and also about the threat of revenge that can prevent one from dealing aggressively with one's opponents, whether they are annoying insects or inconsiderate flat-mates.

The film was made by Lloyd Samuels, a specialist in video editing and himself a musician. He was comfortable with the process of creating a film based on the backbone in Score 7, which was recorded and used as the film soundtrack. The film was produced taking the soundtrack as its starting-point, and is first presented here in its unfinished form, with just the film and backbone soundtrack (VT 1, Track 2).

After this initial stage, the work could then be presented in three ways; either as it stood as a backbone plus pictures, or the film could be screened with further layers of improvised music added live to the backbone soundtrack, or additional parts could be recorded on to the soundtrack. The final portfolio version, VT 1, Track 3, includes recorded realisation parts from the following personnel: piano, Sean Gregory; flute, Sarah Goldfarb; clarinet, Paul Bendsza; vibraphone, Jackie Walduck.

There are many ways in which the soundtrack has influenced the film. However, I also wanted an opposite process, in which the pictures could influence the music in the way in which pictures have historically guided silent film accompaniment. As will be seen, the influence between music and images cuts both ways in *Splatt!*

In the backbone (see Score 7), I wanted to convey irritation and fear, and the comedy of excessive indulgence in either of these emotions. The backbone material is very limited, mostly based on one simple motif:

Fig. 8.1. The *Splatt!* motif.

This is expanded in various ways (Figure 8.2), and most of the resulting ideas become punctuating or accompaniment figures in relation to the "solo" text.

i)

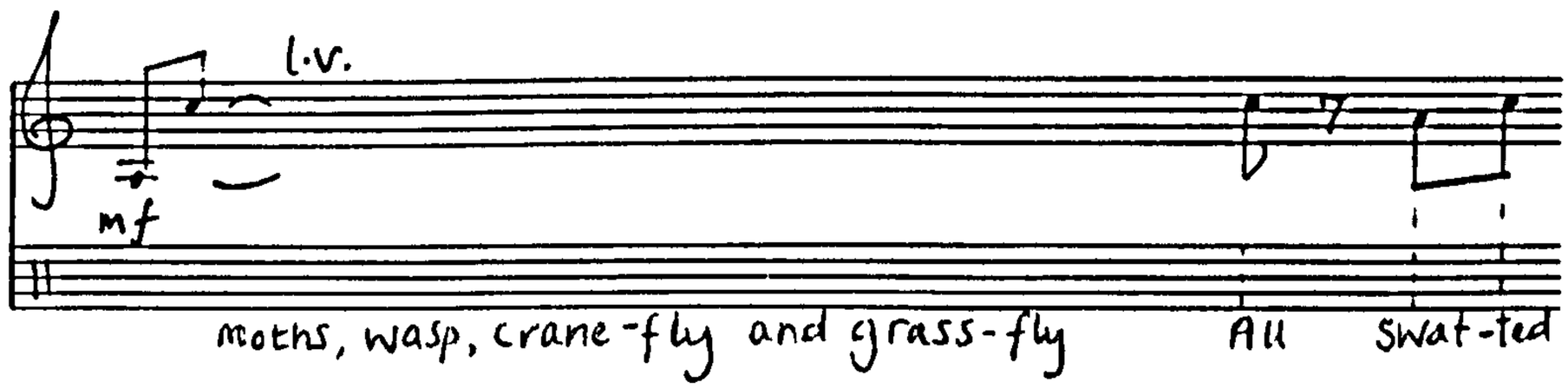
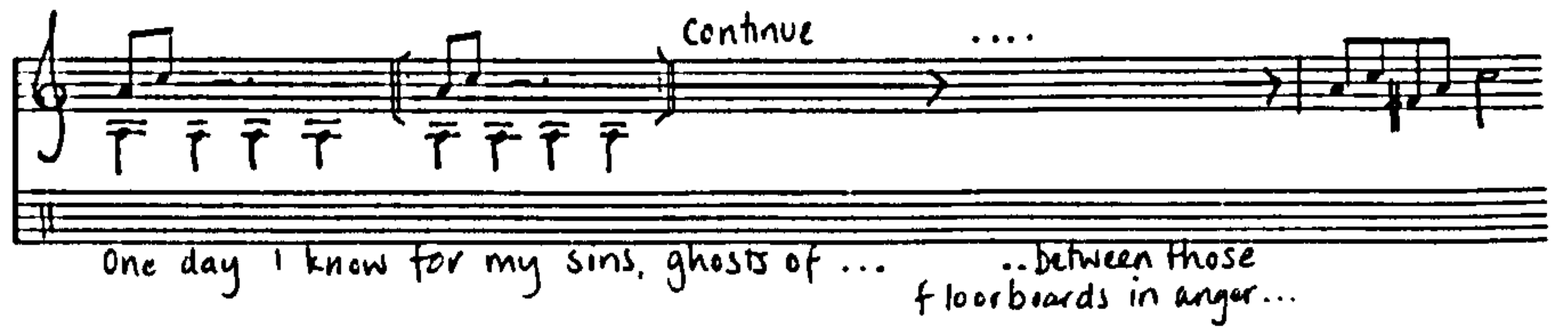


Fig. 8.2. (cont'd over)

ii)



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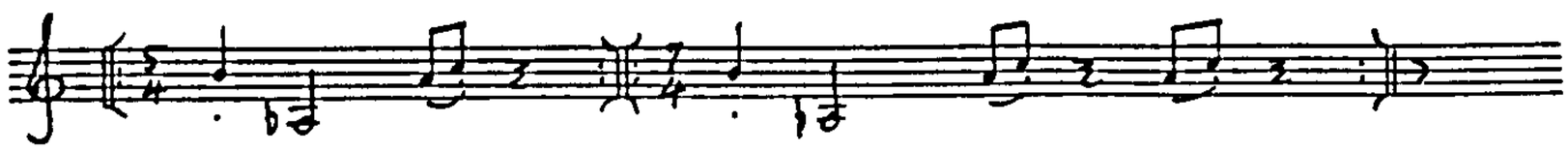


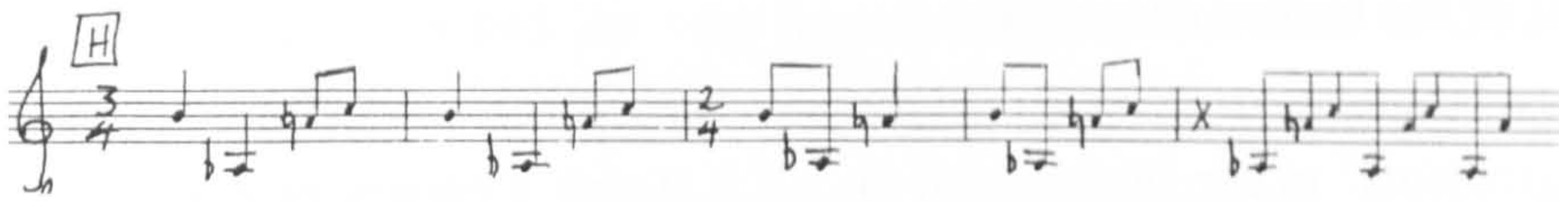
Fig. 8.2. (cont.) Some examples of expansion of the *Splatt!* motif.

All expansions are by the addition of extra material. There is little development of the motif by the use of such devices as inversion, augmentation, diminution or prolongation. Consequently, the tiny motif is repetitive to the point of irritation. This miniscule but pervasive motif is offset by longer ideas which are simple and uncluttered. For example, fear is conveyed by low tremlandi on the vibraphone, and by longer sections of repetitive music, which eventually wind into spirals, and sometimes "splat" gestures (Figure 8.3). This seems to bring about a sense of threat; sudden violent gestures come from stillness or stasis, out of nowhere.

Fig. 8.3. Spiral and "Splat" gesture, at letter E on Score 7.

In terms of player-function roles, the voice has a solo role, and the vibraphone either punctuates or is in a background role. In the opening section, for example, chords or motifs have been placed sparsely underneath words in the text, or just before or after they are spoken. However, at times it was necessary to draw such music to suitable climaxes and, as elsewhere

in this portfolio, this has been achieved by squeezing the music into spirals. A fuller explanation of spirals occurs in chapters 5 and 7, but examples in *Splatt!* may be found at letters E (Figure 8.3) and between H and I (Figure 8.4).



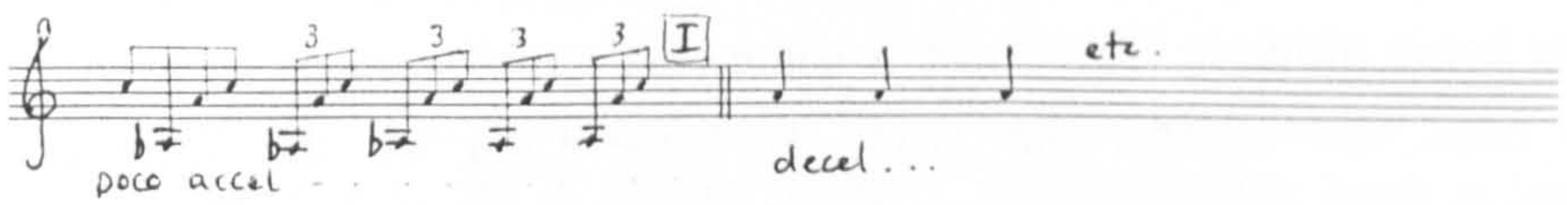


Fig. 8.4. Just before letter I on Score 7, *Splatt!*

As in other of my works, spirals proved to be a useful form for drawing together the sometimes disparate elements provided by other artists. The section of film that goes with the music at letter H is no exception, as the pictures enhance the musical shape by building in pace, climaxing with the character's head repeatedly falling to the table, Figure 8.5. The drama thus created was taken up by the pianist in VT 1, Track 3, whose part builds through the whole section, finally letting rip with crashing chords.

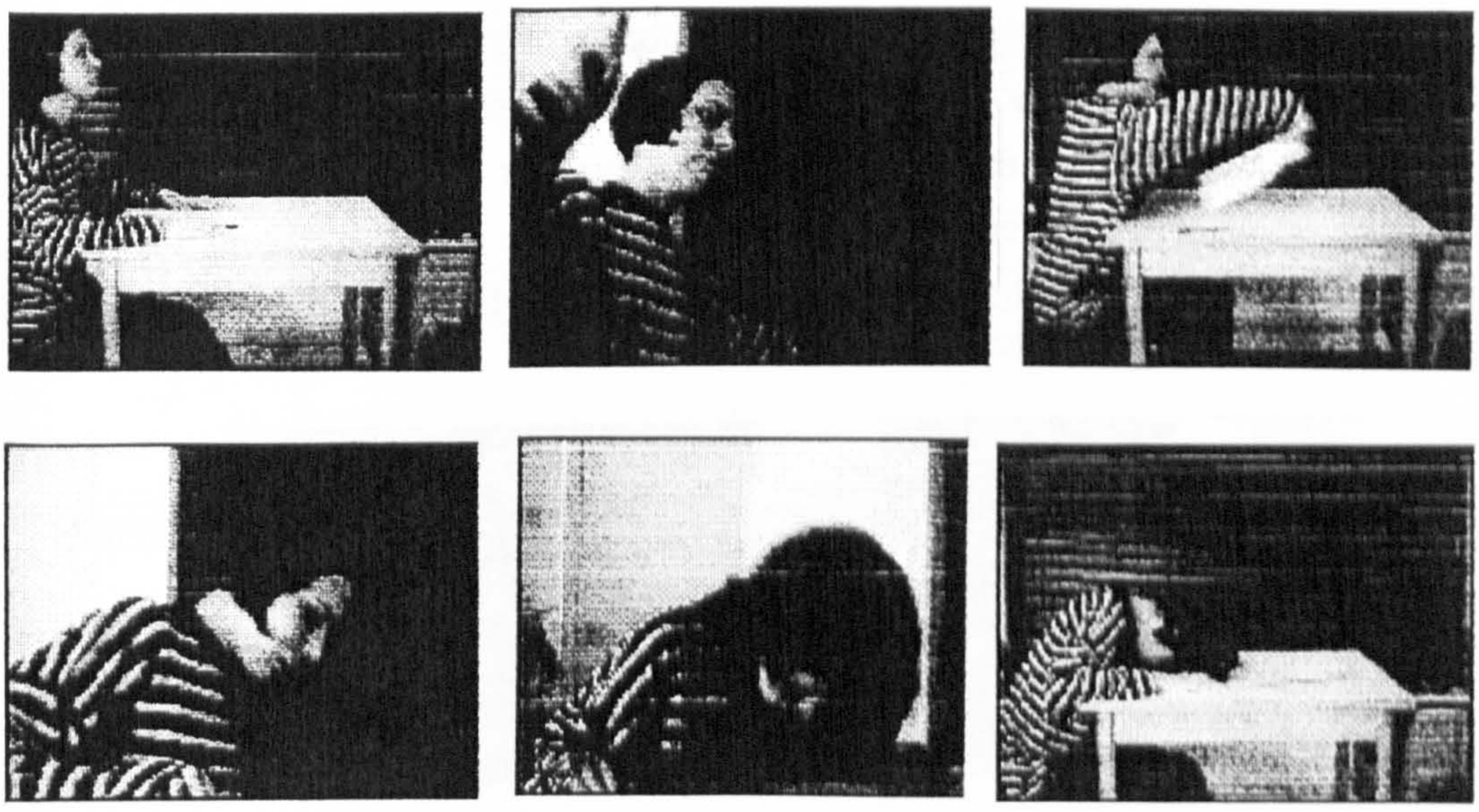


Fig. 8.5. A climax in pictures in *Splatt!*

Overall, then, the shape of the backbone is episodic - there is no underlying structure to be composed-out. The sparse texture and jabbing quaver figures which were chosen to convey the feel of insects in a bare room flying suddenly near, or buzzing around a lamp are offset by spiralling rhythms which are intended to draw the listener towards the intense emotions of the human character.

The "ingredients" of the film as seen on VT 1, Track 2 consist of a narrated poem, music and a black-and-white film shot on Super 8, the medium used for many home movies. The result is somewhat reminiscent of silent Art Cinema from the 1920's: the work of Réné Clair or the German Expressionists springs to mind by way of comparison. The viewer sees someone working at a table, becoming distracted by the buzz of insects. Strange happenings occur, lamps turn on or off, candles go out for no apparent reason. The character begins to take up a series of implements in order to wreak revenge on the insects, fighting them off or splatting them onto the work table.

In the film there is no dialogue, and the character acts out a series of impressions taken from the text rather than a narrative, lending the piece a magical and melodramatic overall design like that of the early silents. Yet somehow, the finished piece seems to be a product of the 1990's. This is partly because the film was edited on video tape, enabling contemporary techniques to be used during the process of transferring the film onto tape. There is a use of the "chromer" which has coloured the images on tape, so that they are seen in black and purple, or black and green instead of black and white. Even more strikingly, the film became stuck at times during the transfer, so that the pictures "roll" out of the video frame, or seem to squeeze themselves three or more to a frame, as seen in Figure 8.6.

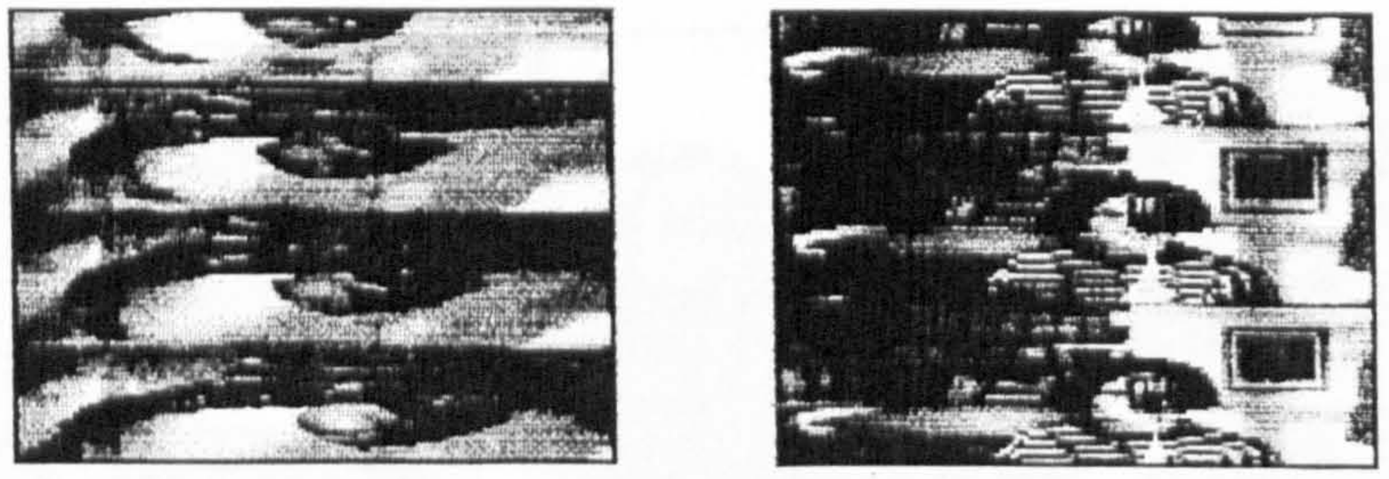


Fig. 8.6. Fortunate technical hitches during the film to video transfer.

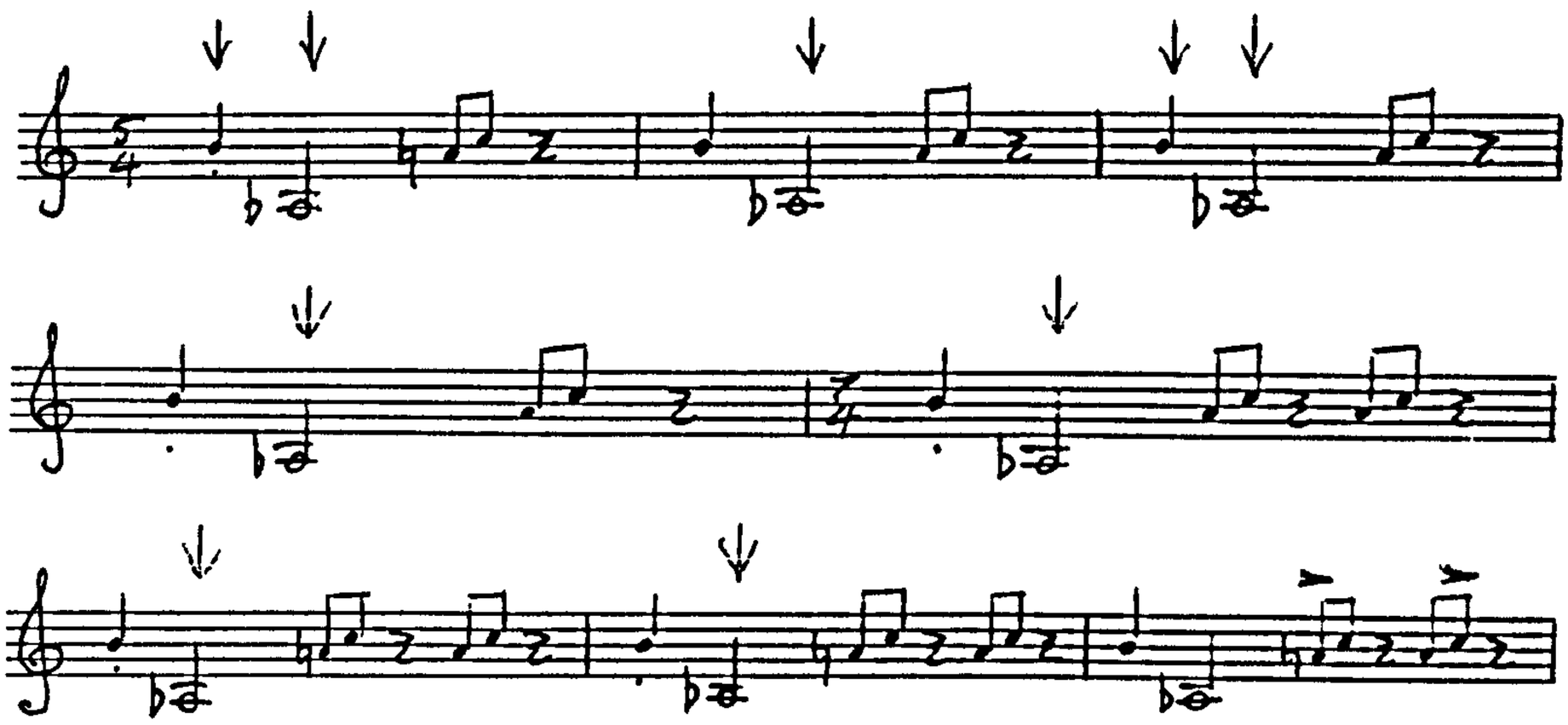
The contemporary character of the film must also be attributed to the existence of a pre-recorded soundtrack. The character of the music in the backbone has influenced the film at many levels. The film-maker gave the following examples:

> In the rolling part of the film [towards the end, see Figure 8.6] because you had the vibe [accelerandi], it lent itself to creating an almost time-lapse effect using the rolling video.

And with reference to the third example in Figure 8.2, Section II on Score 7:

> Because the rhythm is quite fixed, the pictures motor on .. it gave me time to do a pulsing thing .. it would have been a lot more pedestrian and illustrative of the words if the music wasn't there. (Interview given June 1996).

In its relationship to the sonic contents of the backbone, the film is like a 1980's pop music video. The latter were almost always produced after the song had been recorded, and a resulting characteristic was that the pictures were often cut to support the rhythm of the music, following accent patterns, drum breaks or other rhythmic features. In *Splatt!*, the same phenomenon occurs at the section refered to above, though what is particularly interesting in this sequence is that the cuts come at various places in relation to the pattern of the backbone riff (Figure 8.7).



Arrows indicate the positions of edits in relation to the riff on the soundtrack. ↓ indicates a cut, ➤ indicates a mix.

Fig. 8.7. *Splatt!*: Position of edits in relation to a riff.

The first four bars in Figure 8.7 see cuts on beats one and two, and then on beat two in every alternate bar. The regularity of the cuts in bars 5-7 is upset by mixes (cross fades between two pictures) on beat three and just before beat seven of bar 8. A different rhythm is set up by the changing pictures to that set up by the music.

In *Splatt!*, and also in pop music videos from the 1980's, pictures are "led" by the music, and in this particular sequence, they might be said to accompany, literally *be with* the music. In early cinema on the other hand, films were usually made with no soundtrack in mind at all, and were accompanied either by improvising pianists or by ensembles playing from collections of mood music. Specially composed scores came later, notably with the work of Claire/Satie (1921), Eisenstein/Prokoviev (1938). Hence in early cinema, music generally accompanies the pictures, or is at least led by the pictures.

The two genres, silent art film and 1980's pop video, have fascinated me for some time, precisely because of the way in which pictures can jump to the music, or set up their own pace or rhythm against it. With no dialogue, the music-pictures relationship is more exposed in these two genres, and it is the success of this relationship which can make or break any sense of drama or narrative. Yet the two genres, separated by a gulf of some sixty years, are opposites from the perspective of the dynamic between the music and pictures, particularly if it is considered in terms of which medium "leads" and which "follows".

As may be observed from VT 1, Track 3, *Splatt!* has been successful in its objective of allowing a two way influence between music and pictures to occur; the film has been led by the backbone, whilst the fleshed-out parts derive partly, at least, from a response to the pictures. Thus there is an observable reciprocity between the two media in the finished film. Though terms like "interaction" are not useful since the backbone cannot interact with the film, neither can the film interact with the added musical layers, the role relationship between film and pictures will be explored. This has been carried out in relation to the bare backbone and film (VT 1, Track 2). The recorded version of the fleshed out backbone and film (VT 1, Track 3) will also be referred to.

Roles in *Splatt!*

The following analysis assumes a set of player-function-type roles for film. These are not strictly player-function roles, since they are not improvised responses to a backbone or other ensemble players. Neither are they roles taken by players of music. However, they are a useful set of equivalents, which do facilitate an analysis of the role relationships between music and pictures. The roles are defined for film pictures in relation to the music at any given span. (Since player-function roles take time to establish, a span must be longer than a moment, but is shorter than the overall length of the piece). The following criteria apply:

Solo: For a length of film to function as a solo it must command attention, for example by the use of arresting gestures, cutting or images. In *Splatt!*, the close-ups of the lamp, the grainy quality of the pictures of floorboards that seems to make them writhe with life, the shot of the character moving menacingly towards the camera, fly-swatter in hand, all seem to have attention-grabbing qualities.

Background: Unchanging, repetitive sequences, shots held for long lengths of time, continuous shots of a single subject, particularly if the subject is still, or mundane, everyday, unremarkable.

Punctuation: Short shot-lengths of suddenly contrasting shot size (a sudden close-up) image or composition. Many of the shots of implements splatting onto the table have such a quality. An example of filmic punctuation from a well-kown source is taken from the opening credits to the original *Star Trek* television series. As the music plays, the Starship *Enterprise* sweeps from the inky sky past the front of the screen. If the black sky is in a pictorial background role, the *Enterprise* sweeps are punctuations. However, the punctuations also bear some relationship to the music. Figure 8.8 illustrates the position of the *Enterprise* sweeps with regard to the melodic (solo) line of the theme.

Heckle: In contrast to punctuation, a heckle-type role would consist of similar types of shot, but placed awkwardly in relation to the music. There are no heckles in *Splatt!*.

⟶ = *Enterprise* sweep across screen.

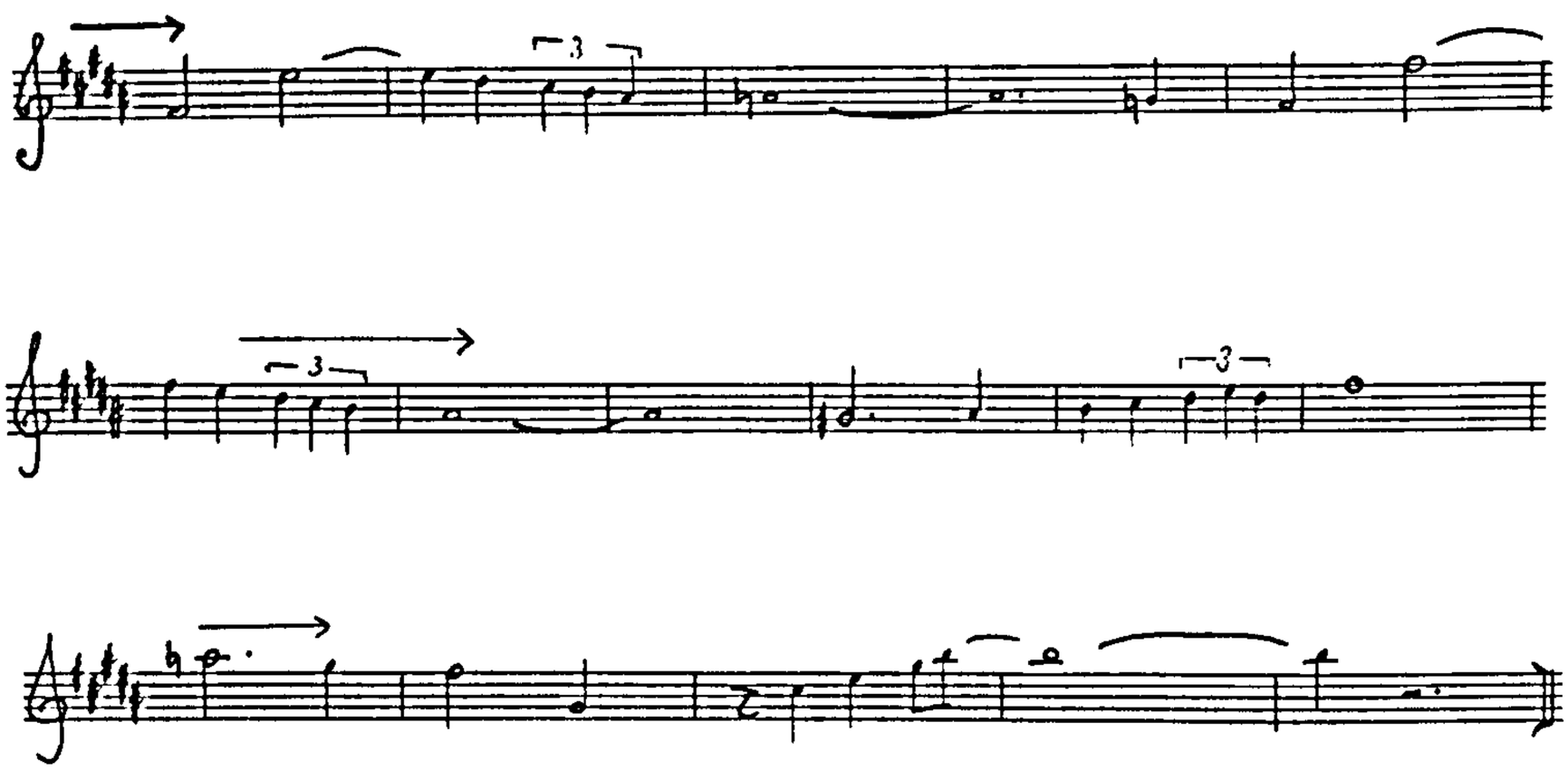


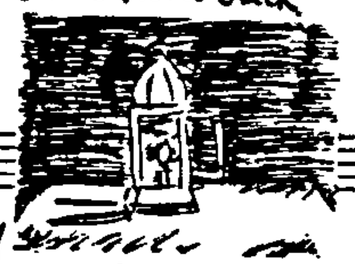
Fig. 8.8. Pictorial punctuations to the *Star Trek* theme.

The voice and vibraphone backbone for *Splatt!* is episodic, permuting or adding to gestural cells in response to the text. With no underlying role-structure, little is to be gained from an exhaustive analysis of the whole piece. The opening minute or so will be analysed, firstly with regard only to the film and backbone, and secondly taking into account the realised parts as well.

Figure 8.9 sketches each new shot in its temporal relationship to the backbone, and suggests player-function roles and the filmic equivalents for the pictures, voice and vibraphone parts. In Figure 8.9, shots begin where the left hand side of the frame corresponds to the score; hence the third shot, of a hand uncovering a dead insect, is edited in at the word "graveyard" which appears directly underneath the left hand side of the frame.

The pictures take a solo role at the begining. The opening is particularly striking, with a sudden lighting change on the candle. This is followed by a change in shot size and subject, a mix to a close-up of the hand revealing an insect, which in turn pulls back to reveal the owner of the hand. Given the strength of the opening images, and the amount of information contained in these shots, the role equivalent is that of a solo. Meanwhile, the voice part

Pictures



Fade from black

[solo]

Pull out

[punct.]

zoom

vibra

[background]

[punct]

[punct]

[punct]

text

[solo]

My room is a graveyard for insects...

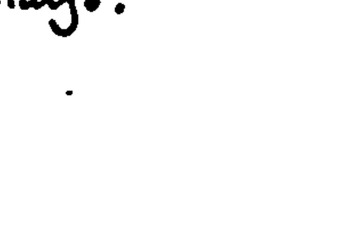
[punct]

Moths, wasp, cranefly and grass-fly...

[punct]

All swatted

Pictures



[solo]

[solo]

[solo]

vibra

[background]

[solo]

[punct]

[punct]

[background]

text

Vanished between splintery varnished floorboards

mp (urgent)

[countersolo]

Be good, or they'll come back one feverish night

[solo - -> background]

"Let the clarinet play, ok!"

[solo]

Pictures

vibra

[background]

text

[? background / countersolo?]

Bzzz..... and so the clarinet plays.

Fig. 8.9. *Splatt!*: Roles for the backbone and film..

also has a soloistic quality and is punctuated by the vibraphone part, thereby enhanced. With two solos happening simultaneously at the opening, the viewer's attention is somewhat pulled in two directions at once. Certainly, when I first watched the film, I felt drawn to the content of the words and pictures, rather than the musical quality of the words and the framing of the shots in this section, simply because there was so much to take in.

In the section illustrated in Figure 8.9 the roles remain fairly stable. There are two exceptions. At letter A ("All swatted"), all three parts take a punctuating role, with short clear gestures. Bringing the words, picture and music together here seems to mark out the gesture, giving weight to the swattings that follow.

A second momentary shift in the roles occurs at B. Here, the voice is pushed into the background as shots of the moving lamp become more intense. Something seems to be happening and our attention is drawn towards the pictures and away from the text.

The film-maker's intention here was to imbue the lamp with a sense of character:

> With a villain, to get the evilness you might show its armour then a close-up of its face ... the role of "Let the clarinet play" is to introduce the light. The light does a dance - a flourish ... the movement of the light is ununiform, seemingly out of rhythm, then it rears its head with the "Bzzz" [just after C in Figure 8.9].
> (Interview given June 1996).

The power of these shots not only establishes the film into the equivalent of a solo role, but also seems to divert the vocal part into a role not intended in the backbone composition, from solo to background. Role redefinition such as this has been experienced elsewhere in the pieces presented in this portfolio, during the fleshing-out process, and strengthens the connection between role-taking among different players in a backbone realisation ensemble, and role-taking across different artistic media.

The application of the role-taking model in *Splatt!* can be extended to explore the possibilities of modes of interaction between the film and music. As mentioned earlier, the term "interaction" is scarcely appropriate, given the working process. Instead, the term *modes of interplay* will be used,

where interplay describes the product as it appears after its creation, rather than what seems to be a series of interactions during the creative process.

The modes of interplay in Figure 8.9 are:

> Before A: The two media, each unfolding a series of images, and each self-contained are in the differentiated mode. As a sub-mode, the voice and vibraphone in the backbone are in exchange.
>
> At A: Homogeneity, briefly, at "All swatted". The vibraphone and voice are virtually identical rhythmically, and in the film the timing of the badminton raquet coming down onto the table is in rhythm with the soundtrack.
>
> At B: There is a return to the roles and mode of the opening.
>
> After C: A brief moment of homogeneity; the buzz in the vocal part is enhanced by the low tremelando on the vibraphone. This seems to match the mysterious intensity of the shot of the light slowly turning upwards towards the camera.

As yet, the concept of functional roles, and modes of interplay between film and music is far from watertight, and the current chapter should be seen as a proposal rather than a complete exposé. However, before concluding, I wish to draw a connection between the work here and the work of Eisenstein. His writing on the relationship between pictures and music in the then new medium of sound film in *The Film Sense* (1948) and *Film Form* (1949) discusses the ideas of synchrony and counterpoint. In his collaboration with Prokofiev for the film *Alexander Nevsky* (1938), he went so far as to mirror the contour of the melodic line with the shot composition. Rising phrases on the soundtrack match soldiers huddled to the right hand side of the frame, in silhouette against the sky, while low-held string chords synchronize with long shots of a flat horizon.

Eisenstein's idea of counterpoint between music and pictures proposed that movement in pictures could happen at different times to similar or equivalent movement in music, creating a counterpoint between the two. This suggests the exchange mode. A very short example occurs in *Splatt!*. There is something of a climax at the text line "Swat the mosquito!", and as shown below, the ensuing "Splat!" is followed by a general pause, before "Dead mosquito".

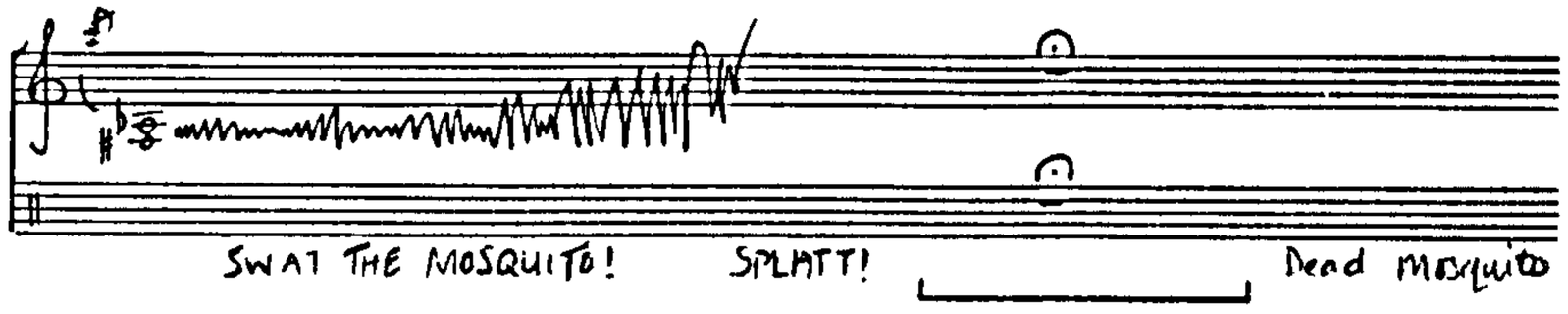


Fig. 8.10. Space for exchange in *Splatt!*

The pause is filled by three fast cuts on film, so that the energy of a texture of trills over "Swat the mosquito!" is thrown momentarily into the pictures. This is surely the beginings of an exchange mode of interaction between pictures and music.

Conclusion.

The working process of *Splatt!* enabled the design of the film to be led by the backbone, and the musical realisation on VT 1 Track 3 to be led by the backbone and pictures. There is a symbiosis between pictures and film that goes far beyond cartoon synchrony, or appropriate mood music as in the majority of populist cinema. Each has its own integrity; neither is compromised by the other, yet they are without doubt intertwined. The essence of the interrelationship lies partly in the dynamism between the two media; interplay may exist within one of three modes, exchange, differentiation and homogeneity. Whilst the moments of homogeneity in which pictures are matched gesturally to the sound function as structural staples, pinning sound and pictures together momentarily, the stretches of differentiation give elasticity against which the metaphorical staples can pull. A mode of exchange, in which the energy (not ideas) of musical or pictorial gestures may be thrown back and forth between the two media, or in which the *Enterprise* can punctuate the theme music from *Star Trek*, or music can punctuate pictures is a formal entity teeming with possibilities.

In a piece such as *Splatt!*, the backbone has a specific grounding role. As with all backbone realisations, it is essential that the backbone is not simply smothered but is heard as the generative force behind a piece. Here, the backbone is the reference point for the post-film realisation ensemble. If the pictures stray from the backbone structure or pacing, as one would hope, it can be tempting for a realisation group to stray with it, sometimes with disastrous results. During a try-out realisation, the musician I was working with was struck by the images of the floorboards, and wanted to play the same material each time they appeared on the screen. However, each time a shot was shown, the backbone was either mid-phrase, between phrases or had moved to a completely different piece of material. It served to underline that film music accompaniments are at their best when the music has its own power and integrity.

Lastly, this work could be taken to be excessively formalistic. Indeed, a film collaboration which is just a series of studies of roles taken between music and film could be without passion and the power to communicate anything more than a dry formalism. On the other hand, film music has almost reached "genre status", in that there are numerous conventions in orchestration, texture, melody, harmony and rhythm which are followed over and over by composers writing for film, and understood by film directors and audiences. The work in this chapter should be seen as a proposal for a framework for the relationship between music and pictures, a set of resources which can be used rather than a list of rules or categories which should be followed. It is intended as a complement to the stylistic customs of a populist film music composer, or in-the-moment, short-termist inspiration relied on by an unknowledgeable silent film accompanist. In the work of both, a sense of the whole is in danger of becoming lost, and at worst this can result in a string of disconnected miniatures.

Splatt! as a backbone gave a series of starting-points for the collaboration. Its simplicity gave flexibility to the film-maker. He was able to, for example, change the lengths of pauses, or interpret drones as either calm or threatening. The words and character of the music implied a strong image, that of the irritating buzz of insects which could then be creatively played-out. The music itself gave a rhythmic and gestural feel, as well as a structure and pacing with which the film-maker was able to work creatively. However, what makes the film dynamic is not just the strength of images moving on screen but also a sense of interaction between music and pictures

which goes way beyond the "one-to-one" homogeneity of a *Tom and Jerry* cartoon. There is an overall shape to the whole end product which derives from the careful pacing and moulding of well-paced music compositions, yet the film breathes as a film and not a pop video or opera film in which pictures merely service the music.

During the realisation, the backbone provided a way of grounding the character and passion the music and film express without any of the collaborators in the piece having to resort to accepted music-for-film or film-for-music conventions.

9. Conclusion.

The influence of the role-taking model

In Part I of this thesis I have proposed a model for free improvisation in which players create music by adopting player-functional and material-generative roles. The roles function within a framework of three modes of interaction. The model has spawned a methodology for music analysis and has provided a set of signposts which are useful for listening to and playing free improvised music. It has also been a technical resource for the composition and realisation of the pieces in Part II.

By the time I had started on the first piece, the model was already being developed and was influential to my compositional approach. For example, the bare backbones were all written with a projected player-functional role or set of roles in mind; in each piece, an early decision was made regarding whether the piece was to be based on solo, background, punctuating figures, etc. In *The Dark Box* and *Garden Garden*, the intended modes of interaction provided an additional starting point for the piece and ensured another layer of clarity.

The choice of roles and interactive modes was far from being an abstracted one. Having worked practically with these roles, I began to develop a sense of the way the roles felt, so that I was composing backbone solos working from the remembered feeling of creating a solo within an improvisation group, backbone backgrounds from my experience of how it felt to create a background texture. The way of hearing improvised music through the interaction of the musicians has deeply influenced and enhanced my approach to composition, thus choices have usually been made in response to concrete experience.

The Dark Box in a sense represents a "mature" work, since the whole piece is about duet roles interacting dynamically. Some of this happens during "windows", sections of open space for duetting, which are given shapes of interaction: to move from solo and background to solo and punctuation, for example. To compose this, I was working with the feeling of roles transforming between two people, so that in the end it was hardly surprising that the piece traced an emotional trajectory.

In all of the compositions I took the idea of roles to the realisation sessions, explaining the intended role of the backbone and suggesting suitable ways for the ensemble to interact with it. For example, *The Gathering Doubt* opens with a flute solo. It was suggested to the group that all we needed to do was find an evocative background texture. This was accomplished swiftly and without fussy detail, enabling the group to create a texture far more intricate than anything we would have been able to realise from precise notation. One stumbling block for inexperienced realisation ensembles is a tendency to seek clarity from pitch accuracy. This can lead to the group becoming bogged down in harmonic or motivic detail which is over-fussy, preventing an easy flow through the music. The use of roles provides a clarity of interaction; this is a useful alternative to seeking clarity from a choice of pitches, particularly in dissonant pieces.

In spite of the usefulness of the role-taking model as a compositional resource, there is a healthy discontinuity between the model for free improvisation and the nature of role-taking in backbone realisation. It is not possible to literally adopt a set of player function roles as the only basis for backbone realisation, and to allow these to change during the realisation process as a result of the players' freedom of expression.

There are two reasons for this. The use of a fixed backbone grounds the music making, and the piece is not ultimately shaped by a play-out of group interactions. Roles are still taken, of course, but they no longer are the primary generative force of the music. Secondly, the realisation process, however it is tackled, involves the players in re-working and refining ideas. Refinement of ideas can and does occur during free improvisation; players re-work ideas during the course of a piece or pieces. However, it is much more central to the backbone realisation process which so often uses the technique of cycling small sections of material, adding or changing one idea at a time. Good ideas are retained and worked on.

All of this has relevance to the practice of working with a realisation ensemble for the following reasons:

Intended player-function roles in the backbone can change during the realisation process; for example in *Splatt!* the backbone solo was sometimes usurped by the pictures. This is part of the developmental process. In practical terms, it is better to stick with a strong realisation idea even if it changes the intended role of the backbone. However, it is possible for the realised parts to drift from the backbone structure, or for them to cover up the backbone in a way that loses the original clarity. It is vital to ground the playing during the realisation process, keeping the clarity, starting simply, maintaining an awareness of the backbone itself. This, obviously, militates against "free" improvisation and purely interactive structures, and implies a role for the composer: to ensure the overall focus of the piece is retained. Lastly, the backbone realisation process should be concerned with the realisation ensemble becoming immersed in playing the piece, rather than experimenting with the model. Although the model is an important background influence on my work, priorities during a realisation session shift towards setting up an atmosphere and drawing the players into the spirit or form of the backbone, rather than allowing interaction to shape the music in a completely open way.

Whilst it should be acknowledged that role-taking has a different significance for free improvisation than for backbone composition, the model has an influential relationship towards the work in Part II: it has influenced my way of *hearing* improvised music and has thus inspired pieces which offer certain interactive starting points, as well as a sound world to

players. Through the practical aspects of my research, the model has become a practical approach to hearing music and feeling a group dynamic, as well as a set of technical resources for improvised music that can be used by and shared with other players.

A trajectory of compositions.

The pieces were completed in a slightly different order to that of their presentation in this thesis. This was as follows:

> *L'Amore D'Alfredo - The Gathering Doubt - Garden Garden - String Soundscape - Circus - The Dark Box - Splatt!*

Discounting *Splatt!*, which is something of a new departure, it is possible to demonstrate a trajectory through the work.

Alfredo was the best of an early crop of backbones, chosen because its form is pleasing, demonstrating the ideal that collaborative compositions should have as solid a compositional structure as fully notated pieces. The backbone parts have clear player-function roles; the voice part is obviously a solo, for example, but the piece was written and worked on before the details of the role-taking model were in place.

In *The Gathering Doubt* and *Garden Garden* the backbone and ensemble player-function roles became more specified. Whereas *Alfredo* is based on a vocal solo, long sections of *The Gathering Doubt* are based on various developments of one riff, which roots the playing. It thus has a material-generative role ("rooting" the structure - see Glossary[1]). *Garden Garden* contains melodic (solo) material, but also a long unchanging riff section at the end. Its new ground is that it was written and realised with its series of interactive modes in mind; a *differentiated* pulse section at the opening, a

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[1]Appendix 1.

homogenous melody, a call-and-response *exchange* section, and a *differentiated* riff at the end.

The difficulties that arose during work on *The Gathering Doubt* also took the research into a second dimension, as I began to consider my role as a "group leader", and the task of creating a good working dynamic in the ensemble to optimise the conditions for backbone realisation.

String Soundscape marks a turning point. Instead of a continuous backbone, it makes use of "windows"; space left in the score to be filled in by material devised by groups of players (Chapter 6). During the work on *Soundscape*, I began to clarify my role as director of the realisation process. At this stage, this was focused on how to move the group swiftly through the backbone material and realisation process before they became bored. Through a structured series of warm-up exercises, individuals were encouraged to bring their ideas and responses to the music.

In *Circus* the windows idea is developed to provide space for solo improvisations based on circus characters. The motley nature of these solos is balanced by tutti sections which mostly consist of the ensemble playing over a single riff. The windows are "composed in" in a more intricate way; they occur in crafted spaces, for example after cadences, and the spaces are worked into the overall flow of the piece. Long-term realisation decisions relating to the overall design of the piece were mapped out for the ensemble by me. This clarified my role as composer/director further - who better to make decisions affecting the large-scale structure of the realisation than the composer who knows the overall flow of the piece better than anyone.

Finally, in *The Dark Box*, windows are given an interactive shape and starting material. The timing of the changes in the interactions as well as the actual development of material is left open. However, there is a feeling to play for; in this case the feeling of being separate but complementary, moving towards complete homogeneity - the parts become as tangled as possible. This has been achieved by setting up a series of specified roles and modes of interaction. Here the music moves seemlessly from the exchange mode to the homogenous mode. The piece requires the two players to think long-term in their improvising. Although the overall harmonic, thematic and role structures were decided during the composition of the backbone itself, the clarinettist and I had to work hard to achieve the large-

scale forms of the windows sections. However, it was worth it to go beyond short termist improvising.

In terms of what appears on the scores, there is a move towards "windows", and a considered use of their potential for giving directed space to players within a framework which expresses some form of human interaction (individuality/group pressure in *Circus* and friendship in *The Dark Box*). However, there was something more personal happening. As I became more certain of the interactive model and its applications there was a move towards the use of my own intuition in the process of composition and realisation.

For example, many of the pieces make use of the notion of *character*. This permeates *Circus*, in which I aimed to create musically the environmental character of a run-down circus, and for each player to create a character to perform in it. It was essential, as explained in Chapter 6, to approach the music in a way that went beyond a pastiche portrayal. My own way of tackling the composition was to engage with the circus idea emotionally and using visual imagination, and this is what I tried to persuade the realisation group to do as well.

Hence, the realisation process involved some preparatory work in which the characters and their musical signatures were created away from the backbone. The key for the players during this process was to imagine, and to *feel* as if they were the character, be very open to how that came out as a signature on their instrument, and refine it by "measuring" it against the way the character was felt internally. What was successful was the way in which some of the players engaged with a totality of their characters - a creation of and self-identification with a circus performer, which was expressed through musical gesture.

It became clear, too, that music has the capacity to take us beyond the empirical to the imaginable, and that the realisations in general work best when there had been a shared "feel" for the piece among the members of the realisation ensemble. This depends on both the given music and the group. For example, it is possible to compose material that one feels is expressive of, or challenging for, a group. Before composing the backbone for *Circus*, I spent a day taking part in workshops with the realisation ensemble. From this, I had a sense of their easy-going playfulness and a certain skill-building

attitude to their work, as well as the slightly East-European sound they made. This was due partly to the instrumentation of the group (strings and accordian featured strongly), and partly due to an evolving style of playing that the group was finding for itself. The level of clarity of the backbone and realisation process also make a difference to the quality of the communication between the composer and ensemble. The backbone and process should use a verbal and perhaps musical language competent to the ensemble. Although some of the "Tutti" sections of *String Soundscape* may have resulted in music that was beyond the expectations or beyond familiar territory for some of the participants, it was arrived at through a process of building textures step-by-step from familiar string techniques or simple improvisation processes.

From the ensemble's side, groups generally function more easily when there is a willingness of individuals to empathise with backbone material and each other's playing. Players sometimes get stuck if they are unwilling or unable to listen to each other and follow a collective sound. The composer or group leader can facilitate this up to a point, but in my experience, in working with less skilled improvisers, this is something that either falls into place (as it did in *String Soundscape*) or does not (as, to some extent, in *The Gathering Doubt*, in which the singer and clarinettist were kept busy devising their own parts and becoming confident with the structure). In an ensemble that works well together, there is a willingness to follow a consensus or to share ideas, to share solo space, to allow roles to be taken and transformed. This is most likely to happen when the group has been playing together for some time, and an *identity* has begun to form. A composer coming into such a group is able to work with the group culture, its normative ways of interacting, its shared values or beliefs, as well as the interpersonal dynamics that bring changes to those norms.

To a limited extent, a group identity and how to work with it may be rationalised, measured and written up in a thesis such as this one. However, the "tuning-in" process undoubtedly occurs on an intuitive level, challenging all concerned to become engaged with the subtle signs and signals of "the other".

In other ways, *Splatt!* was also the result of a strong use of intuition. The backbone was written fairly quickly, with a clear set of player function roles in mind. However, the film-maker responded intuitively to both the words

and the feel of the music - there is a good match between the darkness of the music and the Gothic and sinister look of the pictures. All of the musicians taking part in the realisation commented at some time that they were following specific movements on screen as well as responding to the backbone, adding their own intuitive responses. Trusting a model and working process (not to mention film-maker and musicians) enabled me to lead a series of steps of unknown consequence with a confidence not that we would achieve a certain result, but simply that something very interesting was going to happen.

This was not simply blind faith. I felt as though I was acting knowledgeably, a knowledge coming from the model, from hearing related work and reading related literature, but also from earlier experiences that gave an intuitive knowledge of different musicians and the working process. Indeed, the overall relationship between Parts I and II of the thesis is that Part I provides experience (more than a model) that then becomes extended through the compositions. The model and the experience of defining it over the course of two years of improvisation sessions have opened up new ways of listening to music, and new ways of feeling my way through music. The immersion in improvising groups enables me to empathise more with players during backbone realisations, and my intuitive knowledge of how to lead a group, or draw qualities out of individuals is slowly becoming clearer. Looking back, it becomes increasingly difficult to regard the research here in terms only of its empirical data: the work has researched character, how to make space for intuitive responses, how to engage the expressivity of players, how to draw players into a musical or imaginal world through the use of backbones. This research has been achieved through doing and through practice, and empirical knowledge, experiential knowledge and a deepening of intuition have been objectives sought through the project.

Towards the Limits of Empiricism.

A scene from the USS Enterprise:

The alien "Q" has sent the Enterprise plunging millions of miles off course to an unknown part of the galaxy.

Captain Picard : Bridge, this is the captain. All stop.

(from the Bridge)
Crusher: Answering "all stop", Sir.

Picard: Status?

(from the Bridge)
Lt Cmdr Data : According to these co-ordinates, we have travelled 7000 light years ...

First Officer Riker (to "Q") : Why?

"Q" : Why? Why, to give you a taste of your future, a preview of things to come. Compère mise au capitaine! The hall is rented, the orchestra engaged - it's now time to see if you can dance!
(Hurley, 1989).

The analytical work in the early part of the thesis has taken an empirical approach; it "measures" or attempts to describe what there is, drawing conclusions from the results. The outcome is, I believe, a fairly autonomous model, not dependent on or derived from other music-analytical theory. This has been made possible by a quasi-scientific approach, in which the details of the model are the results of an empirical methodology. This in turn was inspired by role-taking in the music of Birtwistle and Stravinsky, and it provides a new way of understanding the structure of free-improvised music.

In common with other explorers, I aimed to tread step-by-step into new territory. Part I gives a new model for free improvisation, but the empirical nature of this research shares common ground with the traditional methods of music analysis, and the work can be located at the edge of analytical theory (Chapters 3 and 4). There is a safety in numbers, and I firmly believe that any work is better strengthened by its connection to, not dislocation from, other areas.

This desire to connect to traditional analytical theory has a sub-cultural significance in that there has been a (very) general tendency for free improvisers to see their work as underground, subversive or in some ways opposed to more conventional forms of music-making. The result is that

the music and subculture can be seen as something of a segregated minority. Given a choice, I would not wish to locate my work with free music in a ghetto, so another aim of this work has been to demystify free improvisation. This happens partly through the compositions and partly by practical dissemination, teaching, workshops and so on. However, I also hope to reach those that are unlikely to experience free improvisation or role-taking within a practical context. By devising a measured "experimental" methodology, some of the aspects of free improvised music have been grounded in a rational way. I hope that to some extent the smoke screen set up by some practitioners has been cleared.

Even so, within an art that depends on intuition and interaction, it is inevitable to find aspects of free improvisation and backbone realisation falling outside the confines of the empirical model. For example, the joy of sudden unexpected connection with another player, the excitement, humour, groping in the fog for ideas are essential feelings which charge an improvisation session. In Chapter 4, "Improvisation as Social Text?", it was necessary to extend the methodology itself beyond the interpretation of empirical data towards the interpretation of people's verbal and symbolic (drawn) reactions to their playing. The musicians who produced *Improvisation 3* were asked to describe the way in which they saw the group structure on that day. Their drawings and comments were interpreted not as representations of an absolute truth - a truth that was measurable and definable - but as suggestions as to how each person understood the intragroup relationships. I had to guess what they were really telling me (or not) by a mixture of intuition and personal knowledge, and even then what remained of my "results" was a set of possibilities. For example when the keyboard player stated "I don't know anyone in the group really" I knew he was not putting himself outside the group as such, but that it was in his nature to both iron out ambiguity, and underplay any hint of closeness.

Emotionality and expressivity have also been touched upon in the chapters on backbone realisation but, without a full invocation of psychological theories, it has not been appropriate to make these a measurable concern that could influence or help to define the empirical model. Even so, the thesis would not be complete without an acknowledgement of the realities of working with what lies beyond the empirical world.

The "other", the mysterious and imageable qualities of music are often at the heart of my compositions and are often the point at which I am best able to draw people into them. With some ensembles it becomes possible to enter a dream-like space in which the music seems to conjure associated thoughts, feelings, images or ideas. These in turn colour the music-making with character and vitality. Locating them in a perceptual field (Figure 6.17) connects them to the empirical thrust of the argument and, although a fuller exploration is beyond the scope of this project, the fact that everyone holds a melting-pot of creative resources within themselves should neither be forgotten nor devalued in favour of what can be abstracted and rationalised.

In setting out to explore a structural model of role-taking in free improvisation and backbone composition using an empirical mapping device, I have reached the edges of where that device is effective, realising after the event that the journey has gone beyond its original objectives. While there is no time to stay and explore the new space in this piece of work, the realisation echoes questions about the nature of knowledge and the delineation of what constitutes research (for example, the use of scientific/intuitive/creative paradigms) raised in the social sciences, and currently being debated amongst Arts institutions (Frayling, 1993/4; Davidson, 1995; Renshaw, 1996). In writing about the presence of the composer as researcher in backbone type work, Jane Davidson (1995) has argued that:

> ... rather than discovering a fact about the world, the researcher is intimately involved in constructing that fact. Rather than being a detached objective observer, he/she is an involved subjective participant without whom no facts would exist. ... rather than seeing music research as being the collection of knowledge about musicianship or the development of musical ability, it should be conceived (at least as much) as engagement in the process of exploration and reflection in being or becoming a musician.
> (Davidson, 1995: 37-38).

The essential interactive nature of group free improvisation

This thesis has described interaction as a generative force of free improvised music. The interaction of players influences the structure of the resulting music. Players experience this as a dynamic two-way process; one can respond to other people's ideas, and other players in turn may act on what one plays.

It is possible to improvise without interaction, to a pre-recorded background as recommended by Roger Dean (Dean, 1989), or to a pre-recorded track of oneself, as for example Evan Parker has done on his album *Process and Reality* (Parker, 1991). However, what is missed in both cases is the responsive nature of a live ensemble. Therefore, interaction must be part of any serious definition of group free improvisation, and must be taken into consideration in any exhaustive analysis.

Of course it would be possible to analyse just the harmony, but this would not result in a holistic interpretation of the piece. With most analytical models setting up a hierarchy, there is sure to be material unaccounted for at the end - ragged edges that do not "fit".

The player-function roles analysis avoids ignoring segments that do not fit, since all material is part of a solo or background or other role. The material-generative roles analysis does lead to a hierarchic view of the material in the piece. For example, the analysis of *Improvisation 3* demonstrates an organic hierarchy with most ideas related to an early gesture. However, it also shows *associative* connections to other material, and illustrates that there is material unrelated to the organic hierarchy that is crucial to the analysis *because* of its unrelatedness. Therefore, the methodology does not set out to reduce material down to a small set of ideas, though in seeking connections between different ideas some material is categorised in certain ways: motif *x* is like motif J_1 so let them both be called "set J". The method is not intentionally reductive, but it emphasises connections rather than differences, so differences are inevitably played down.

The real goal of the analysis is a set of material-generative roles obtained by tracing each player's path through the ideas structure, not the ideas structure itself. All fragments of material are important in defining a player's role, even "lone wolf" ideas that do not relate in an organic way to other gestures.

Ultimately, all material is seen to have meaning within the improvisations. The place of segments is not within an organic or reductive structure, but within an *interaction structure*. Interaction structures seldom come out as an organic hierarchy, but that is consistent with the rough-and-tumble of human interaction. Every idea matters, because the sum total of ideas is what constitutes the piece. It is thus not the task of players to create an improvisation with the kind of organic unity which has been an ideal of Western Classical music since before J. S. Bach - neither is it their task to conform to stylistic ideas. A player's task is simply to play. If one is to even begin to ponder the question of what makes a good improvisation, one should listen with ears attuned not to organicism but to interaction.

The work in Parts I and II gives a sense of the people in the music. It has become important to hear not only a series of harmonic or motivic ideas on the one hand but also more than just a series of interactions on the other. Though my aim is not to turn improvised and collaborative music into social text, I hope that the work here serves as a gentle reminder that music making is an essentially human communicative activity.

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Appendices.

Appendix i.

Glossary of terms.

Backbone : a composition for one or more instruments written with the intention of leaving space for additional parts. These are added by a musician or ensemble of musicians during the **realisation** or **fleshing-out process.** "The backbone" usually refers to the unrealised score (see also *bare backbone*), and "backbone composition" refers to (a) a finished piece post-realisation, or (b) the activity of writing a backbone score.

Background : player-function role in which the musical part forms a carpet of sound over which other players can play, for example, a drone, chords, static texture, riff. The part must necessarily be simple, perhaps achieving this through repetition or stasis of pitch material.

Bare backbone : the unrealised backbone, either as heard or as a score.

Block : player-functional role in which the part is blocking and interruptive.

Contrapart : a part in its own world, contradicting the *flow* of the music. For example: contrasolo - a solo part that clashes with or works against other parts, not necessarily other solo parts. A contrabackground would likewise be a background part contradicting other parts.

Counterpart : a part in counterpoint to another part in the same role; eg solo and countersolo, punctuation and counterpunctuation. There is an implied status hierarchy here; two solos of equal status would be two coexisting solos.

Differentiated mode : Interactive mode in which parts are heard in layers. Parts remain in the same role for some time.

Dissenting : material-generative role in which new thematic ideas are introduced, expanding the direction of the improvisation (as opposed to connecting back to previous ideas), but are not taken up by other players.

Exchange mode : Roles are heard not simultaneously, but one after the other, particularly two or more solo parts. The most common example of the exchange mode is call-and-response.

Fleshing-out : the process of backbone **realisation.**

Filling-in : material-generative role in which the player fills in thematic links between ideas in another part, connecting otherwise tenuously-related ideas; cf *mediating*.

Heckle : player-function role in which repetitive fragments are placed against another part, not in spaces or at the ends of phrases, but in the middle of phrases, to cause conflict; c.f. *punctuation*.

Homogenous mode : Interactive mode in which parts combine closely to form a homogenous texture; often the mode is brought about by players adopting the same role. Examples are heterophonous melody and textural accompaniment.

Ice-breaking : Material generative role in which new ideas are introduced to the improvisation, and subsequently taken up by other players.

Interaction structure : structure of a piece of music in terms of roles taken, interactive modes within which the roles operate, sub-grouping between players, closeness or distance between thematic ideas.

Material-generative roles : set of roles having a function towards the unfolding of material in free improvisation. Examples are ice-breaking, mediating, filling-in, contrasting, rooting (the structure), supporting, dissenting.

Mediating : material-generative role in which thematic ideas from two or more players are connected. Strictly speaking, this is uncovered by means of detailed thematic analysis, and is not always aurally perceivable.

Player-function roles : roles taken by members of the ensemble in free improvisation such as solo, background, punctuation, comment, block, counterpart, contrapart.

Punctuation : player-functional role in which short fragments of material interject in spaces (gaps or held notes) in another part. To remain in this role and not become a countersolo, the part should have a repetitive quality.

Realisation process : working process in which a backbone is fleshed-out, parts added and shaped by the *realisation ensemble*, usually under the direction of the composer. Hence the nouns **Realisation** and **Realised backbone** refer to versions of a fleshed-out backbone.

Rooting : material-generative role describing a part that stays with the same thematic material for some time, often in relation to block shifts in the improvisation structure. Also refered to as rooting the structure.

Solo : Role in which the part that stands out from the rest of the ensemble, derived from jazz and rock terminology. A solo may be the focus of

melodic interest, or simply a part demanding attention due to its drama or teleology.

Supporting : material generative role in which the player copies material already introduced to the improvisation as defined in a full analysis of thematic or gestural schemata.

Window: section within a backbone composition which has been left open for freer improvisation.

Appendix ii.

Playlist.

DAT 1.

1. *Garden Garden.*

The Neighbourhood

Lincoln Abbotts	Flute
Sean Gregory	Keyboards
Paul Griffiths	Guitar
Jackie Walduck	Vibraphone

Rec: Dave Foister, Guildhall School of Music and Drama, Dec. 1995.

2. *L'Amore d'Alfredo.*

Tirez la Tête

Sarah Goldfarb	Voice, flute, percussion.
Andy Nice	Cello
Barley Norton	Violin
Jackie Walduck	Vibraphone, percussion.

Rec: City University, May 1994.

Text: Fleur Mould (1992), from an untitled play for Single Step Theatre Co., Miroslav Holub (1987), "Love" in *The Fly*, Bloodaxe, Newcastle-Upon-Tynne, p.40, and Jackie Walduck.

3. *The Gathering Doubt.*

Carolyn Hier	Bass clarinet
Charlotte Shorthouse	Voice
Mark Valentine	Flute
Jackie Walduck	Vibraphone

Rec: City University, March 1995.

Text: Ivor Cutler (1984), "The Gathering Doubt" in *Large et Puffy*, Arc, Lancaster, p.19.

4. *String Soundscape.*

The following musicians from the Philharmonia Orchestra:

Justin Jones	Violin
Nick Whiting	Violin
Steve Levine	Viola
Mike Horovitz	Cello
Anita Langridge	Double bass.

Berkshire Young Musicians' Trust Senior Strings.
Bedfordshire County Youth Orchestra.
Brighton Youth Orchestra.

Rec: Mike Cox, Royal Festival Hall, London, May 1995.

5. *The Dark Box (of my shutting heart).*

Paul Bendsza	Clarinet
Jackie Walduck	Vibraphone

Rec: Paul Fretwell, City University, June 1996.

DAT 2

1 *Improvisation 1*
Richard Fox, tuba; Lisa Guile, alto saxophone; Ben Pitt, oboe;
Mark Valentine, flute; Jackie Walduck, vibraphone.

Recorded City University, March 1994.

2 *Improvisation 2*
Richard Fox, tuba; Lisa Guile, alto saxophone; Ben Pitt, oboe;
Dan Sanders, piano; Jackie Walduck, vibraphone.

Recorded City University, March 1994.

3 *Improvisation 3*
Alex Bondonno, tenor saxophone, Maurice Citron, bongos; Lisa Guile, alto saxophone; Ben Pitt, oboe; Lloyd Russell, synthesizer; Dan Sanders, piano; Mark Valentine, flute.

Recorded City University, February 1995.

4 *L'Amore d'Alfredo* (extract); early realisation.
Sarah Goldfarb, voice; Andy Nice, cello; Barley Norton, violin; Jackie Walduck, vibraphone.

Recorded Cafe Gallery, Southwark, London, April 1994.

5 *L'Amore d'Alfredo* (same section of backbone); later realisation.

Sarah Goldfarb, voice; Andy Nice, cello; Barley Norton, violin; Jackie Walduck, vibraphone.

Recorded The Red Rose Club, London, May 1994.

Tracks 6 - 11 are all attempts at realising a section of *The Gathering Doubt*. All tracks feature Charlotte Shorthouse, soprano; Mark Valentine, flute; and Jackie Walduck, vibraphone; except Tracks 6 and 7 in which Mark Valentine is replaced by Carolyn Hier, playing bass clarinet.

All were recorded at City University in February - March 1995.

6 *The Gathering Doubt*, realisation attempt 1

7 *The Gathering Doubt*, realisation attempt 2

8 *The Gathering Doubt*, realisation attempt 3

9 *The Gathering Doubt*, realisation attempt 4

10 *The Gathering Doubt*, realisation attempt 5

11 *The Gathering Doubt*, realisation attempt 6

Tracks 12 - 15 are solo improvisation from some of the players in *Circus*. Each improvisation is based on the idea of a circus character.

All were recorded at the church of St. George-in-the-East, London in November 1995.

12 Alison Blunt, violin, trapeze artist.

13 Luke Goss, accordion, clown.

14 Marit Lyngra, violin, lion.

15 Sarah Barker, cello, high wire walker.

VT 1

1 *Circus*

The Guildhall Ensemble (1995-6).

Sarah Barker	Cello
Alison Blunt	Violin
Andrew Burke	Clarinet
Nell Catchpole	Violin
Tudur Eames	Harp, percussion
Luke Goss	Accordian, percussion, spoken voice
Rachel Hills	Cello
Hélène Lieben	Violin
Marit Lyngra	Violin, percussion
Louise Matthews	Flute
Johannes Platz	Viola
Elouise Roberts	Voice, percussion
James Squire	Alto saxophone, percussion
with Nick Hayes	Clarinet, bass clarinet, percussion
Jackie Walduck	Vibraphone

Video rec: Dave Foister, The Red Rose Club, London, Dec. 1995.

Text: Louis McNiece (1949), extracts from *Circus* poems, in *Collected Poems*, Faber and Faber, London pp31-34; Michel Foucault in Rabinov, 1991 *The Foucault Reader,* Penguin, pp 185-6; Jackie Walduck.

2 *Splatt!* (Version 1)

Film: Lloyd Samuels

Sarah Goldfarb	Voice
Jackie Walduck	Vibraphone

Sound rec: Nye Parry, City University, Jan. 1996.

Text: Jackie Walduck

3 *Splatt!* (Version 2 - Portfolio version)

Film: Lloyd Samuels

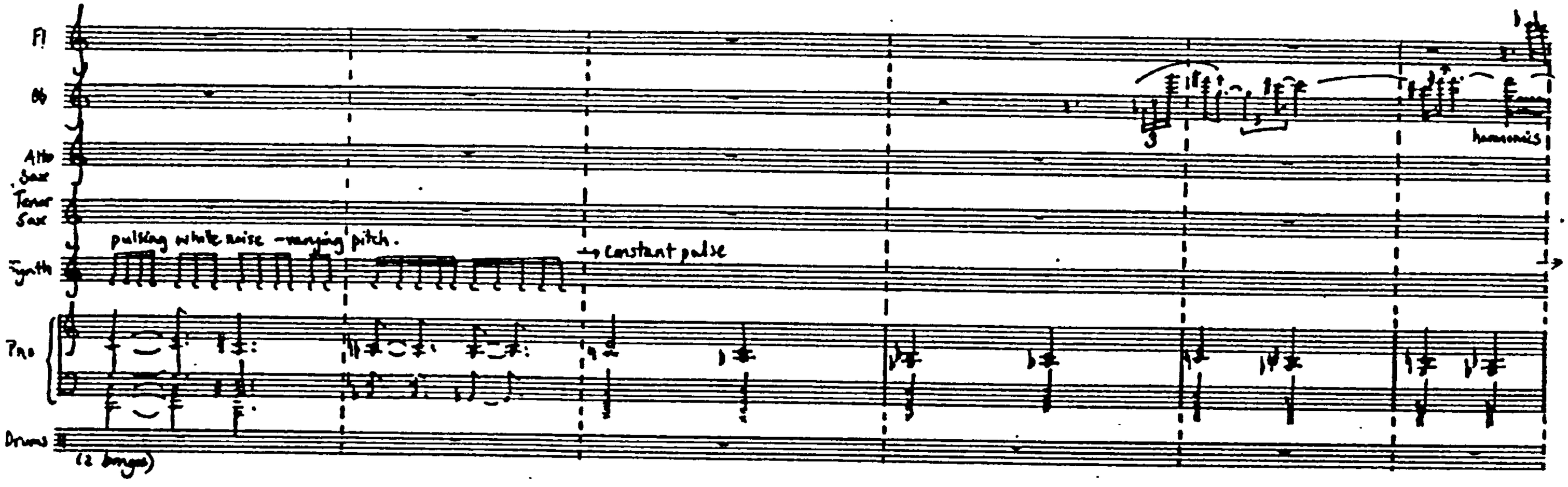
Paul Bendsza	Bass clarinet
Sarah Goldfarb	Voice, flute
Sean Gregory	Piano
Jackie Walduck	Vibraphone

Sound production: Nye Parry, with additional sound recording from Ambrose Field, at City University, July 1996.

Text: Jackie Walduck.

Appendix iii): *Improvisation 3* in transcription, with players' comments.

Bracketed numbers refer to the order of players' comments over two plays through. For example, 1) refers to the first comment made, its position on the transcript indicates when it was *made* in relation to the played back music (see Chapter 4 for methodology).



Mark
(flute)

Ben
(oboe)

Lisa
(Alt. sax.)

6) Dan brought it in, didn't he?

Alex
(Ten. sax.)

Lloyd
(synth)

8) The synth. and piano are accompanying. Also rooting. It's different sounds but part of the same thing.

Dan
(piano)

Maurice
(bongos)

7) That was the accompaniment ... they set the stage

7) Dan started off by .. accompanying, knowing someone would put something on top. Ice-breaking, but rooting the structure.

9) Ice-breaking .. a kind of accompaniment .. the synth comes.

5) Rooting on the piano... synth is a counterpart [to piano]

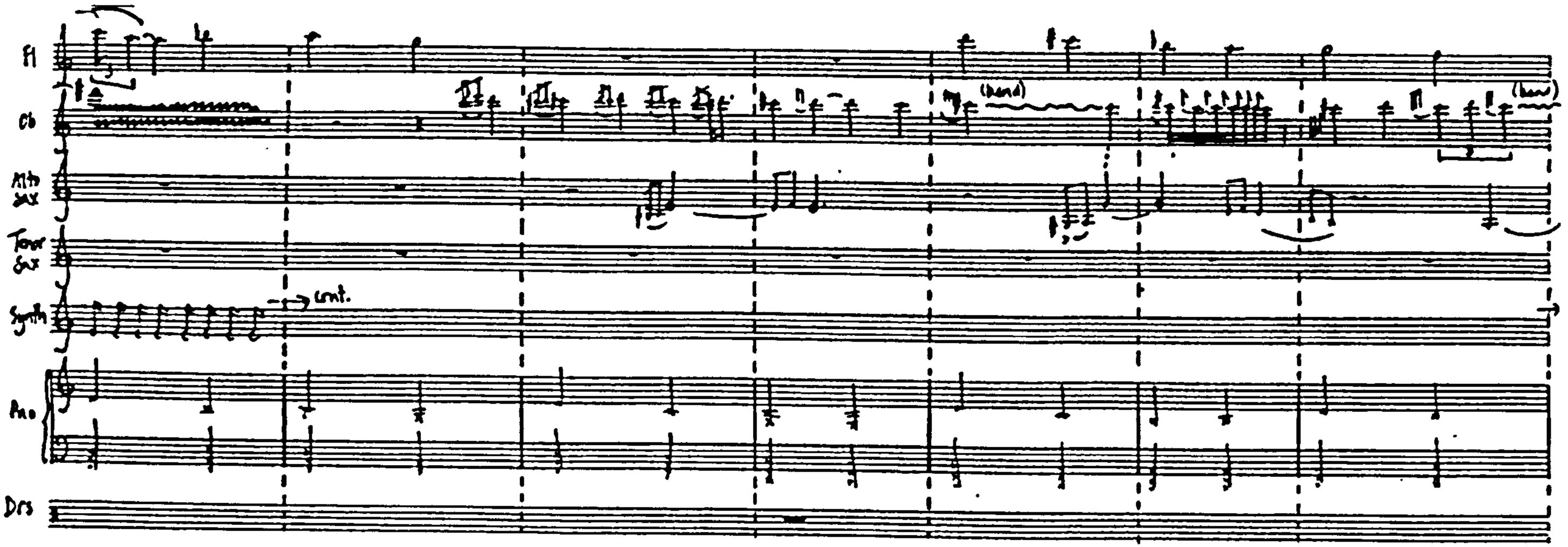
1) That's the beginning of the tune.

10) Ice-breaking and solo.

1) It changes the whole thing. It could have been anything up to there.

9) Ice-breaking .. it's not quite a solo because it's not goal-orientated It's on the same level as the background.

3) That's an acc.. [Synth part is] difficult to place - it's pretty well an accompaniment and not just a background effect.



Mark (flute)

1)It's brilliant.. so blatant like raw expression. It just inspired me

6) Ben [oboe] is soloistic. I heard me accompany what he did by way of a reflection. I'm .. part of the accompaniment but using some of [his] ideas.

1)The second interaction after I come in is the saxes filling the texture. What I was playing was very much me, everyone else plays their own version of that idea.

Ben (oboe)

8) I don't think [the oboe] is ice-breaking.. he's very much a part in his own world... he doesn't give his part over.

9)Mark (flute) is doing a .. supporting Ben's solo. I've come in and mediated between Dan and Ben. And [I] root the structure.

(1) →

1)I thought "punchy" when I came in - not creep in.

10) Mark is joining in with the solo.

Lisa (alt. sax.)

2) A counter melody by the flute.

11) Counterpart, the same kind of material but not so wild. Its a counterpart to the oboe

3) A melody by the [alto]sax. It doesn't stop.

12) Another accompaniment to the oboe. It's supporting the flute but they're taking it in turns between them.

Alex (ten. sax.)

Lloyd (synth.)

2)There's another one. It's a similar thing like a canon.

10) Counterpart to the oboe.

Dan (piano)

4) All the winds are fairly soloistic .. the flute is more of an accompaniment. No real soloist comes through.

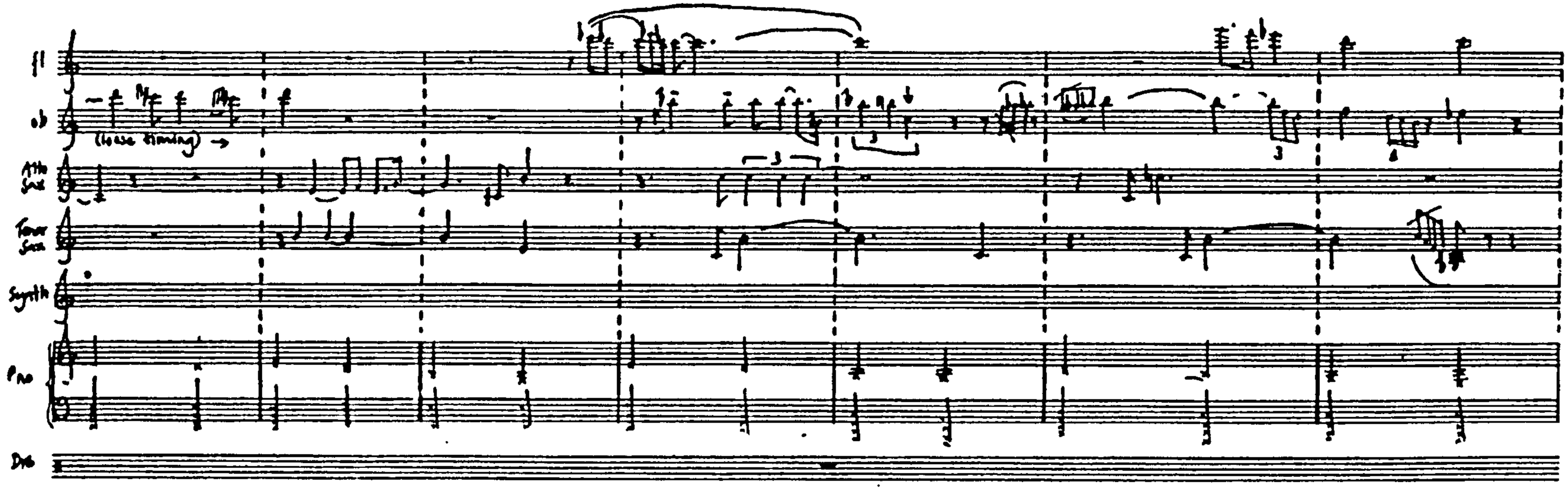
Maurice (bongos)

1) That's important. It takes courage to start a piece.

8) It's not really a solo .. it could be a solo or counterpart, but what happens is..

9) ... it's made into a solo when the [alto] sax comes in by being a counterpart.

2) The oboe just kept going. It didn't try to accommodate the sax.



Mark
(flute)

Ben
(oboe)

Lisa
(alt. sax.)

Alex
(ten. sax.)

Lloyd
(synth.)

Dan
(piano)

Maurice
(bongos)

7) I'm trying to work out whether the saxes are playing a counterpart or an accompaniment.

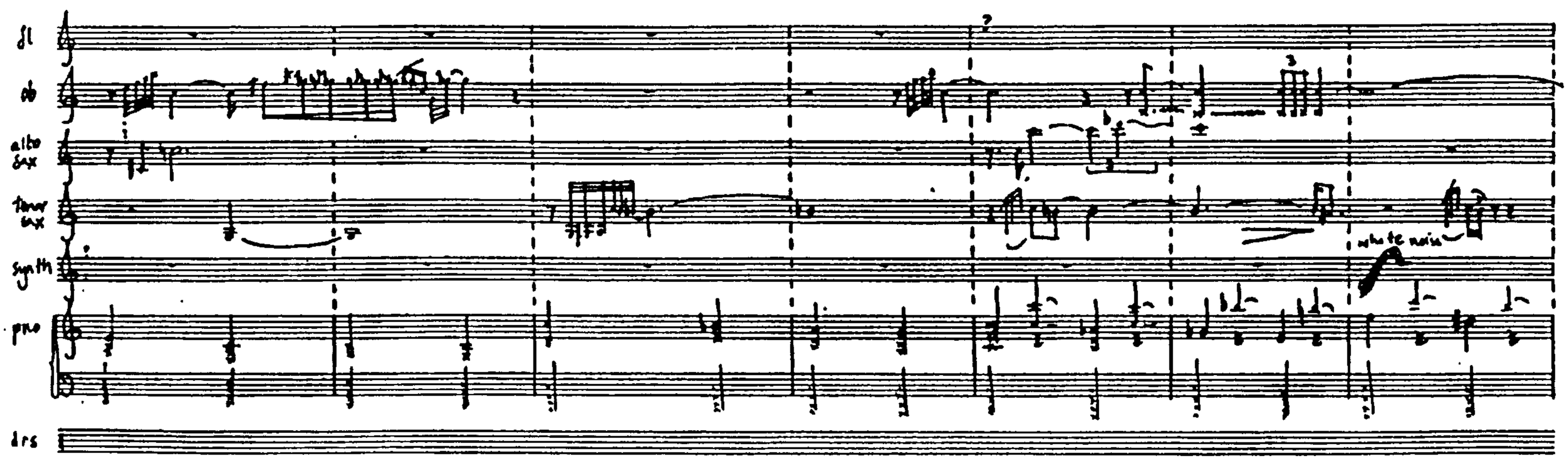
2) The saxes bring out their parts in my gaps which were for breath. .. When the saxes died away I came in again.

11) I'm going round the same notes.. I'm not rooting the structure, I'm making the harmonic world richer.

2) That was me. I wanted to punctuate something.
12) I was copying Ben's gestures .. It's Ben's part slowed down a lot. It means something that Alex sneaks in. He's put a counterpart between me and Ben.

13) It's more of an accompaniment. A kind of riff. Maybe it's a counterpart.

14) I'm wandering there... I was trying to add a counterpart.



Mark (flute)

8) I guess everything's evened out slightly. Everyone's commenting on the same motif.

3) It's that part that's the change. I start with the piano motif .. when the wind motif becomes strong, I can add a higher texture .. I felt the music needed a purer sound to go with the aggressive stuff.

Ben (oboe)

3) That was definitely a Lisa sax. [The music] almost became a polyphony, then Lisa's sax. jumps into the foreground.

Lisa (alt. sax.)

13) ..Alex takes over my part. I'm rooting, he takes over the mediating.

14) Then he [Alex]takes over Ben's. It's a take-over bid for the solo!

Alex (ten. sax.)

15) I'm trying to play with Lisa. I'm accompanying the counterpart... definitely supporting it. The oboe is rooting the structure because he's keeping that phrase.

3) I never noticed. Alex took that idea and repeated it.

4) It's equal between the saxes and the oboe.

Lloyd (synth.)

3) They stop and start again.

4) The piano's faster now.

Dan (piano)

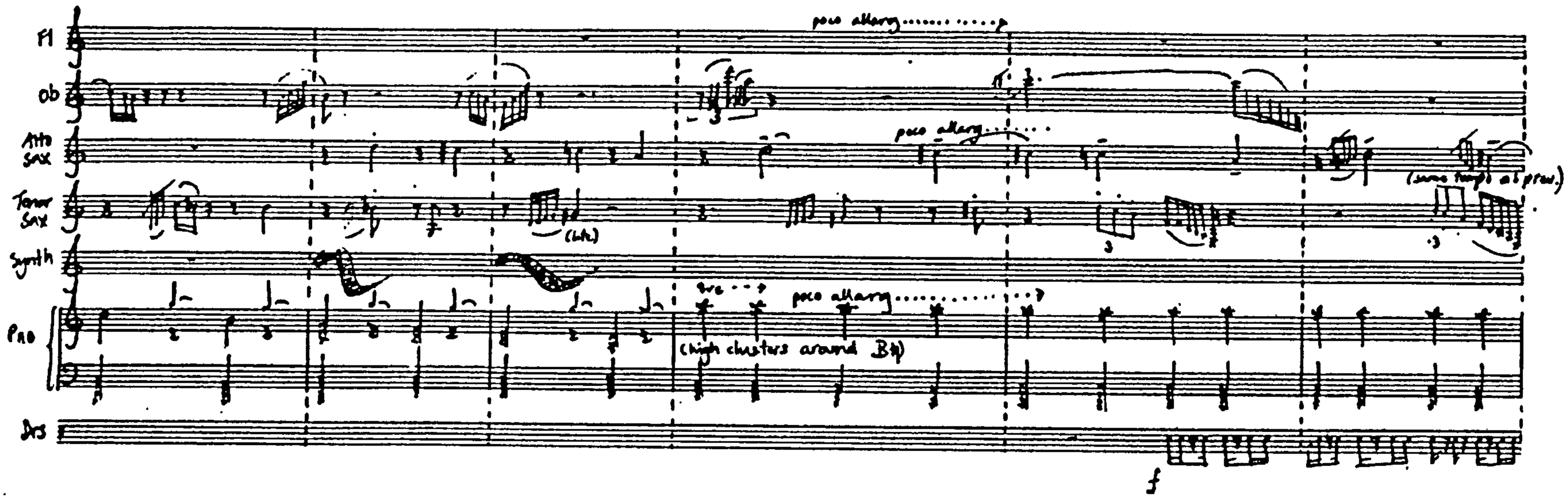
11) He's developed the piano idea. He's commenting on his own thing.

5) He's doubling the chords. It's very 70's space-rock.

1) That theme .. [is] a call and response between the winds.

Maurice (bongos)

3) By this time they're on two different vibes. But it sounds quite nice.



Mark (flute)

2) It's building up. The motif is waning slightly ... Everyone thinks there's going to be a change.

Ben (oboe)

As the wind sounds become more polyphonic, a couple (4) of parts come through, the idea fragments. The harmony in Dan's part is a comment. The repeated cluster became ecstatic.

Lisa (alt. sax.)

15) Alex definitely takes over. It's ice-breaking. He's taking over the solo spot, but it's not really a solo. He's blocking - he's stopped Ben.

16) Then Dan [laughter], still rooting but changing direction - he's kind of blocking that funny stumbling.

Alex (ten. sax.)

(16) (5)

16) Me and the oboe are playing together, counterparting each other, [I'm] mediating between the wild oboe stuff and stable sax stuff.

5) The piano's got grander .. [I was thinking] to play out more .. as opposed to accompany someone. It had built up. I was playing more and the others played less.

17) The sax. has a new part, supporting the piano from the beginning [with] fragmented chords.

6) The alto is copying the piano at the beginning.

Lloyd (synth.)

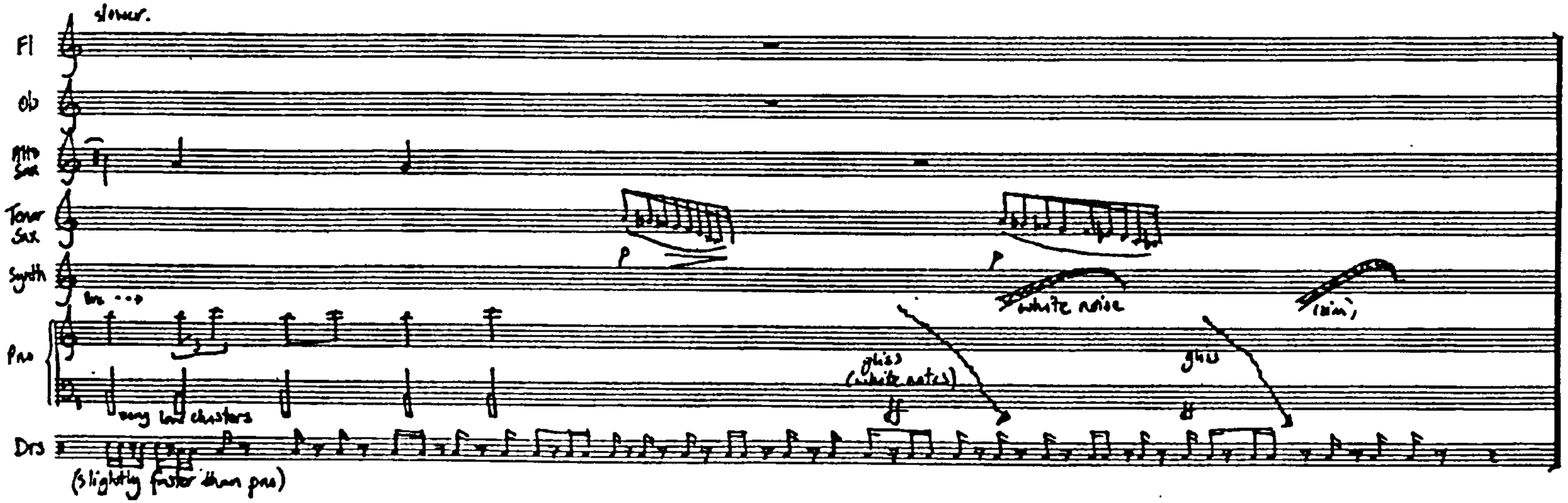
12) The oboe and sax. are commenting on the piano.

6) It's broken down a bit.

Dan (piano)

Maurice (bongos)

4) They seem to be repeating each other. They're trying to be similar .. [it's] grounds from which to like each other.



Mark (flute)

9) The percussion seems to be dissenting .. the rhythm seems not to be accepted by the other instruments.

Ben (oboe)

Lisa (alt. sax.)

5) That's me at the top.. Dan slowed the tempo, I was giving it a dying effect .. like the oboe's tragic death!

Alex (ten. sax.)

18) The piano goes dun- dun .. which is an ending. It's contrasting to the main tune .. well it's building up so it goes quite well with it.

19) The drums .. it's in its own world. It's dissenting because it's just happened.

7) The gliss on the piano which I tried to copy.

20) The crashes on the piano .. it's ice-breaking but it gets developed. It starts as an accompaniment but everything stops so its like .. a solo.

Lloyd (synth.)

13) The drum is dissenting.

7) Now he's trying to end it.

14) That's the block trying to end it.

Dan (piano)

5) The sax note with the [piano] off-beats. It's the rhythm of the piano and the tone of the winds.

Don't know what to call the drum .. It's very different to everything else. Would the [piano] gliss be called a block? (6)

Maurice (bongos)

10) Maybe the drums are a contrapart. It's different but not blocking

5) That was all over the place. I wanted to come in and start the process over again.

11) [Gliss] is a change of accompaniment .. no, maybe a counterpart to the [drums]. He's fed up with playing the accompaniment.

Mark (flute)		*4) Yeah .. I dunno - Dan makes it as final as possible with a run on the keyboard.*
Ben (oboe)	*5) I didn't realise it was about to end.*	
Lisa (al. sax.)	*4) I guess I didn't play a lot in that end bit... I can hear myself join in with Alex.* 17) The only bit where Dan does a gesture. Is that the first time the bongos are played? It's ice-breaking ... but it just stops, doesn't it?	
Alex (ten. sax.)		*8) Is that the end? .. It didn't sound definite .. we could have extended it.*
Lloyd (synth)		
Dan (piano)	*2) It was weird when the drum came in - it felt like something new but .. it finishes.*	
Maurice (bongos)		*6) That's the end .. For me it just petered out.*

Appendix iii: *Improvisation 3* in transcription with players' comments