

Redefining Coherence

**Interaction and Experience
in New Music, 1985–1995**

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Abstract

This thesis presents an analytical exploration of a number of works from 1985 to 1995, many of which have not previously received detailed attention. Although they stem from quite varied stylistic and aesthetic backgrounds, all these pieces are situated in a particular position within the tradition of Western art music: they show an approach which is neither ‘avant-garde’ in its commitment to continual formal and technical novelty, nor clearly associated with any other existing compositional school. Instead, they engage with a diverse range of models, both musical and external; intra-musical connections range from the legacy of the broader Classical and Romantic common-practice tradition to the varied timbral and formal developments of the twentieth-century avant-garde, whilst extra-musical connections seem almost endless, encompassing fields from art to astronomy, literature to horticulture.

Alongside this stylistic and referential plurality, they display an often seemingly intuitive approach towards structure and system, with their most striking musical effects often arising out of layered, non-hierarchical interactions between different materials and processes. As such, they present clear challenges to traditional conceptions of analysis, which are often based around the systematic generation of clear (albeit often very complex) organisational structures. It is argued that this music, in spite of these challenges, displays a striking level of expressive and aural coherence; conventional ways of understanding this term – whether they be based around unity of material or form or process – need to be redefined to take this into account. Chosen works are approached by way of a ‘patchwork’ of different perspectives and techniques: the core of the thesis is a series of four case studies which connect narratives of listener experience with analytical and contextual detail, making particular use of the clarifying potential of metaphor. These close readings are interleaved with chapters which consider the wider challenges and implications for the study of this repertoire, drawing upon a number of strands in contemporary musicological and philosophical thought.

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Author's declaration

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for Mum and Dad

1

Introduction

Repertoire and limitations

This thesis examines a number of pieces by a range of composers whose output offers several challenges to existing ways of writing about music. All these works come from the period between 1985 and 1995, with particular attention paid to the early 1990s; with the exception of Tōru Takemitsu, all the composers discussed are still alive today. Writing about recent music by living composers carries a number of benefits: alongside the excitement of being perhaps the first person to discuss a work in detail, there is a substantially shared context, with little need for the detailed historical and cultural fieldwork which necessarily stands behind many recent studies of earlier composers. This carries its difficulties too, however: with only a decade or so of hindsight, the task of classification – of separating out a welter of different interlocking themes and trends into manageable categories – is very challenging.¹ Moreover, the claim developed here – that the pieces under discussion offer a way into a new and broader understanding of musical ‘coherence’ – does not in itself carry particular implied historical or stylistic constraints, even though some shared threads do emerge as it is followed through. As such, some external boundaries are needed at the outset, to delimit the overall remit of the thesis.

Firstly, this is primarily a study of stylistic connections between specific *works*, not composers *per se*. Of course, broader considerations of compositional language and influence will play a role in the discussion, but since composers’ styles (and even aesthetics) often change radically over the course of their careers, something which is true of several of the figures represented here, the emphasis is on the development of an analytical approach which can offer convincing accounts of the particular pieces under consideration. Secondly, this study is fundamentally synchronic, not diachronic: it is not intended as an account of stylistic development over time, or a prediction of ‘the future

¹ The issues surrounding musicological writing about living composers are discussed more extensively in Cross, 2004.

of Western art music', but as an attempt to describe certain shared features present in a number of compositions during the given period. Again, this is not to say that diachronic considerations are ruled out altogether: at times the wider context of changes in a composer's style (or broader shared trends) may form part of the discussion, as far as they are useful, but this is not the main aim. Thirdly, the primary focus is on musical experience *per se*, rather than on questions of context. This stance will be explained in more detail below, when the broader methodology is presented. For now, though, it is enough to state that whilst more general cultural, historical and even political concerns are certainly not avoided, and do occasionally find their way into the discussion, they do so in order to deepen and clarify understanding of the aesthetic dimension of the music; moreover, a recognition of the basic status of all musical analysis as a form of commentary or interpretation, *rather* than as pseudo-scientific 'explanation', allows these different elements to coexist without deeper-level epistemological conflicts being created (but more on that below).

The selection of particular works from these constraints developed above all from the experience of critical, reflective listening over time; the list which results is thus very broad by some criteria, and strikingly narrow by others. The composers come from a variety of countries (Britain, Hungary, Finland, France, America, Japan), although the lack of any from Germany is notable; their development and associations cover a broad timescale, with Kurtág and Takemitsu closely connected (in earlier periods of their output) with the post-war avant-garde, Adès and Saariaho several decades removed from its particular struggles, and Dutilleux representing (if anything) an earlier, *pre-war* generation. Their stylistic and aesthetic backgrounds are equally diverse, ranging from the charged, expressionist brevity of Kurtág – with its roots in Webern and Hungarian literature – to the expansive and unabashedly triadic Debussy-esque sonorities of late Takemitsu. Almost all the potential 'post'-boxes of contemporary musical categorisation are here to be found, if one cares to look: post-spectral (Saariaho); post-Darmstadt (Kurtág); post-minimalist (Adams); even neo-Romantic (Takemitsu).

Beyond the 'post'-boxes: tradition, challenge, experience

The self-defeating absurdity of this list points the way, of course, to a consideration of the issues which might *connect* such a disparate group. What is striking is how quickly these connections begin to emerge once attention is shifted towards deeper considerations of aesthetic and approach. At the heart of many of the shared features of these compositions is the dialectic between tradition and innovation; here, the relationship between these two elements is rendered particularly ambiguous. (This explains the easy proliferation of 'post-isms', of course: these works are distinctive enough to defy easy categorisation according to existing 'isms', but shun the kinds of unifying technical devices or accompanying revolutionary rhetoric that might allow them to be grouped together under some new term.) At the most basic level, of course, all these compositions fall broadly within the Western concert tradition: they are written predominantly for established instrumental forces, to be performed as wholes in traditional concert situations, with very little sign even of the questioning of these conventions (through notions of the 'open work', notational indeterminacy, or the 'happening') found within the post-war avant-garde. Several of the pieces even fall into established generic categories: *Arcadiana* is a string quartet (and can also be seen obliquely as a cycle of variations), *How slow the Wind* is an orchestral tone-poem in the manner of *L'après-midi d'un faun*, and *ΣΤΗΛΗ* makes overt reference to the large-scale symphonic tradition of late Romanticism.

This seeming cultural conservatism is undercut, however, by the manner in which traditional elements are handled, and the freedom with which they interact with sonorities and techniques which are far less comfortable. Familiar gestures are placed within larger forms which alter their roles and experiential significance; elements of tonal language and processes of expectation interact freely with a variety of post-tonal structural techniques, and with passages where immediate sonority overrides any larger-scale syntactic concerns. The status of the past as 'a foreign country' (*pace* L. P. Hartley) is called into question through the use of quotation, pastiche and allusion, often without any sense of ironic detachment or distancing. Likewise, elements outside the 'purely musical' are equally available to these composers: their music draws frequently upon visual, literary and theatrical elements as a way of grounding particular expressive

or formal characteristics – something evidenced by the abundance of evocative or referential titles. There is certainly much in this music that challenges tradition: but rather than challenging from outside, through the wholesale rupturing of established conventions, here elements of tradition are ‘opened up’ by being freely and undogmatically combined with a wealth of other resources.

In a sense, this is in itself another challenge to tradition – not the ‘old tradition’ of Western tonality, but rather what might be called the ‘new tradition’ of modernist musical historiography, established over the course of the twentieth century as a particularly pervasive viewpoint.² This approach reads the musical developments of the last three hundred years (whether positively or negatively) in terms of a single ‘grand narrative’ which progresses inexorably from tonality towards atonality, through a process of increasing technical complexity which is seen as driven by historical ‘necessity’ – a phenomenon which Adorno calls ‘the irresistibility of modernism’ (1984: 29). The picture which this paints of an ‘arrow in history’, as Paul Griffiths describes it (2010: 6), can be construed in positive terms, as a process of ever-renewed originality and increasing sophistication (for example, in Whittall, 2003a, or Metzger, 2009); alternatively, it can be seen negatively, as the slow collapse of a tonal ‘golden age’ – viewing the present as ‘the end of history’, with further development or paradigm shifts seen as impossible (Timms, 2009: 15, 23). Indeed, in the writings of Adorno, perhaps the most influential theorist of these issues, both these viewpoints are held in irresolvable tension: as Max Paddison notes, throughout his work a historically continuous narrative of increasing material ‘integration and rationalization’ struggles against growing disintegration and discontinuity, a reflection of broader social dysfunction which cannot be undone; the result, in his *Philosophie der neuen Musik*, is that the two poles ‘become final, and no way forward is offered’ (Paddison, 1993: 265–6).³

Whatever their different stances on the implications for the future of music, what unifies all these viewpoints is their insistence on the necessity of continual innovation in the underlying *materials* of music, in order for broader historical ‘progress’ to be made

² For a more detailed critique of this viewpoint from a historiographical perspective, see Williams, 1993.

³ The necessary tension of these two positions in Adorno’s writings is evidenced by the vitriol with which he attacked the 1950s Darmstadt avant-garde for its optimistic portrayal of musical development in terms of technical progress towards a mythical ‘total rationalization’ (Adorno, 1955: 188).

Introduction

(where this is even considered possible); in practice, this has most often meant a disavowal of conventional vocabularies, whether the ‘tabooing of tonality’ (Bürger, 1992: 31, in Heile, 2009: 5), the avoidance of established genres or forms, or a less obvious but equally far-reaching rethinking of timbre or other musical elements. In these various forms, this historiography has dominated much writing on the musical *avant-garde* for several decades, even though, as Andrew Timms has recently argued, it ‘ignores the potential historical richness of modernism’ (2009: 23). The works explored here ‘challenge’ this worldview not theoretically, but practically; they simply present evidence of its inadequacy, in the shape of music whose eclecticism and free appropriation of the past does not render it in some way expressively deficient, incoherent or anachronistic. Yet to see this particular kind of ‘challenge’ as the primary basis for the aesthetic underpinnings of this music would be to miss the point altogether – and to risk simply continuing the same restrictive historiography of unending progress in another direction. Instead, it is this historiography itself which is placed aside.

The disavowal of a single linear narrative of modernist progress here raises the spectre of perhaps the largest and most influential of the ‘post’-boxes – that of postmodernism; yet this term is deliberately avoided throughout the thesis, a decision which perhaps warrants further explanation. It certainly does not stem from a desire to keep the debate framed in modernist terms. Indeed, several of the more general methodological characteristics noted below – the free appropriation of different analytical approaches as they become useful, the undercutting of rigid binary polarities, and the acceptance of analysis as simply another kind of interpretation – have much in common with aspects of the broader postmodernist project, as it has variously been defined. As a strand which informs the *methodology* of the thesis, then, postmodern influence is present to a certain extent throughout.⁴

When it is mapped on to the consideration of the *music* under discussion here, however, the situation becomes much more problematic. Jean-François Lyotard’s account of the postmodern condition (1984), published in English just as the period covered by this thesis was about to begin, announced the arrival of the term in mainstream philosophical discourse; yet nearly three decades later there is still no sign

⁴ For another account of the way in which postmodern thought might affect the practice of music theory, see Monelle, 1996.

of a consensus as to what role it can play in discussions of content and ideology within contemporary music.⁵ This problem is in part unavoidable: the massive act of reification implicit in such a catch-all term as ‘postmodernism’ raises significant difficulties with the complex constellation of socio-historical phenomena towards which it generally points, particularly when a discomfort with this kind of overarching classification is one of its recurrent characteristics – indeed, taking issue with the terms by which it is defined seems to have become an archetypally postmodern pursuit,⁶ and music is certainly not alone in facing these challenges. The situation becomes even worse if modernism and postmodernism are set up in binary opposition, when in fact the attitudes to which they refer are to a significant degree continuous and mutually interdependent.

At the close of his study of repertoire from a similar timeframe to this thesis, David Metzger (2009) reaches the conclusion that conventional oppositions of modernism and postmodernism are unworkable in the context of recent music. His solution is to replace the opposition with another, between modernism and pluralism, and then establish modernism decisively as the primary term by invoking it as a central ‘point of reference’ within the multiple strands of contemporary art: ‘works that disavow modernist aesthetics cannot help but evoke those aesthetics through denial’ (Metzger, 2009: 244–5) – a curiously circular argument that presupposes the same conception of Adornian historical ‘necessity’ towards which it is leading. The solution adopted here is more drastic: rather than speaking of music in terms of modernist or postmodernist concerns, both these terms have been largely abandoned – forcing a focus instead on the features of individual works, and especially upon the ways in which they might be said to produce ‘coherent’ expressive experiences.

The various ambiguities and innovations which arise from the handling of disparate elements here are important, but they are examined primarily in the context

⁵ A brief survey of the variety of positions which have been taken towards postmodernism in contemporary music might include Kramer, 1984 and 1995; Potter, 1996; the various contributors to Lochhead and Auner, eds., 2002 (and see also the reviews by Krims, 2004 and Sedgwick, 2004); Taruskin, 2005: 411–472; Metzger, 2009: 238–247; and Wierzibicki, 2011.

⁶ This definitional discomfort is an undercurrent in many of the contributions to Lochhead and Auner, eds., 2002, and is acknowledged explicitly in the introduction to that volume; see Lochhead, 2002: 4–5. Lochhead defends her use of the term as stemming from a desire to connect musicology more closely to other fields in the humanities, and from a pragmatic recognition of its widespread presence in more informal writings; here, where the focus is explicitly placed from the outset upon experiences of individual works, such concerns do not seem to outweigh the potential pitfalls.

not of ideological force but of experiential effect. This is the most important unifying thread between the works chosen for this thesis: although they engage with a variety of contexts, including both the broader Western classical tradition and the newer developments of the twentieth-century avant-garde, they bring them together into striking and powerfully coherent aural experiences which do not rely upon conscious theoretical knowledge of these contextual elements for their power. Indeed, in my own study of these pieces, I have been surprised by the range of listeners (including those who have little familiarity or patience with much of the twentieth-century musical avant-garde) who engage positively with them, finding them not only ‘interesting’ or fruitfully challenging at an intellectual level but moving, engaging, even beautiful or cathartic.

Structure and approach

The desire to concentrate attention on the experiential dimension of this music, rather than fixating on particular techniques or stylistic decisions, leads to some basic principles which can be outlined before embarking upon any more detailed considerations of methodology. Firstly, the approach needs to treat pieces as wholes: the use of small extracts all too easily encourages a ‘cherry-picking’ approach which removes the opportunity for musical resistance to particular ideas and statements. Secondly, close reading (or, rather, close listening) must be balanced with larger trajectories: passages which seem immediately problematic can often make more sense when considered in context (and if they still do not, this in itself carries important interpretative consequences which should be confronted), whilst broader statements about musical ‘shape’ need to remain open to the challenges posed by individual moments. Thirdly, where particular features and effects are shared by different works, connections should be made between them, so that specific musical experiences are not unhelpfully coloured by prevalent societal tendencies to consider composers in isolation (or cluster them into particular groups on the basis of categorisations which are often as much historical or ideological as stylistic).

Of course, these basic principles are immediately open to accusations of inconsistency: how can a study simultaneously treat pieces as individual, self-contained wholes, and also explore shared features between them? On the surface, these goals

seem mutually exclusive. I would argue, however, that they must really be kept in a careful dialectical balance: disconnected individuality and indifferent homogeneity must both equally be avoided. One recurrent theme of this thesis is the attempt to ‘open out’ contrasts which appear initially to be binary polarities, to show either that they can productively coexist, or that they can in fact be developed into more complex, multi-dimensional interactions; this is a primary goal of Chapter 4. The approach adopted here uses a combination of individual case-studies and more general discussions as a means to this end: detailed analyses of particularly striking works are interleaved with broader ‘conceptual chapters’ exploring the wider connections and resonances which these analyses set up. The case studies are the heart of the thesis; they came first in its development, with the conceptual chapters ‘growing out’ of them as a broadening and continuation of the issues which the pieces raised. The layout of the thesis, with each case study *preceded* by a more general chapter, is thus a conscious reordering of the real sequence of research, artificial but with a definite purpose: it allows the conceptual discussions to serve a ‘connective’ function, providing a transition from the concerns of the previous analysis and introducing the issues which will be paramount in the next.

The use of selected case-studies might seem a rather counter-intuitive way to explore more general principles: the argument might be made that it is simply another kind of ‘cherry-picking’ at a higher level than the discussion of chosen passages in isolation. But this standpoint is based around a view of intellectual development which places an unhelpful emphasis on universal, generalising principles, and which ignores the enormous potential of well-chosen examples to illuminate a situation. As Bent Flyvberg argues (in the context of social science, another subject where ‘grand theories’ need to be treated with great caution), there is often more value in a detailed, multi-dimensional study of a particularly problematic case than in reams of superficial data about more ‘normal’ scenarios, since ‘the typical or average case is often not the richest in information’: it is the extreme cases – the ‘black swans’, in his term – which test hypotheses to their limits (Flyvberg, 2006: 224–229).

Indeed, an emphasis on generalisable principles is itself equally at risk from a form of ‘cherry-picking’, in the selection of particular features to investigate and analytical methods to employ. Yet whilst such broad and shallow investigation tends to be limited by these choices throughout, detailed case-study work, with its greater

‘proximity to reality’, provides more opportunities for the complexities of the material to challenge the researcher’s own bias (Flyvberg, 2006: 235–6). And, indeed, the difficulty of reducing such cases to simple, flat ‘data’ illustrates their importance: it is all too easy for this kind of ‘reduction’ to be made into the basic aim of research, when in fact ‘the problems in summarising case studies [...] are due more often to the properties of the reality studied than to the case study as a research method’ (2006: 241). When the complexities of individual cases are allowed to unfold without the interference of restrictive ‘theorising’, the result is ‘a sensitivity to the issues at hand that cannot be obtained from theory’ (2006: 238–9).

All this leads naturally to the converse argument: that case-studies by themselves are quite enough for the aims of this thesis, and that broader conceptual chapters are likely to be superfluous and even potentially dangerous, if they lead to over-generalisation. In fact, this stance is quite common among writers who explore this grey area between ‘technical’ analysis and broader issues of interpretation and meaning. Much of Lawrence Kramer’s work adopts a case-study approach, for example: in 1990, after laying a general theoretical for musical interpretation, he then immediately urges the reader to ‘throw away this map before you use it’, stressing that the requisite skills are ‘learned only by example and performed only by applying tacit, unformalised knowledge to individual cases’ (1990: 14). As far as the need for all theoretical discussions to be grounded in (and limited by) concrete practice is concerned, I am entirely in agreement with Kramer.

Yet his command to ‘throw away the map’ seems more than a little disingenuous in the context of the present study. Fundamentally, of course, all writing about music is an act of communication; as such, it relies on shared assumptions of value, meaning and logic (if it is to serve its purpose). Avoiding the discussion of relationships between individual works does not somehow exempt us from such considerations, and leave us ‘free’ to unlock the ‘real’ significance of our chosen artefacts; it merely means that our own particular assumptions are being left unsaid and exerting their influence from underground – ‘tacit, unformalised knowledge’ becoming a euphemism for a

methodological *status quo* which remains unchallenged because it is never directly acknowledged.⁷

Within the arena of contemporary music, this is particularly evident in the tendency of writers (especially those who focus primarily on issues of compositional process) to discuss composers as figures in isolation. In an article which dissects the web of mythologising statements surrounding Ligeti's compositional language, Charles Wilson attacks the 'rhetoric of autonomy' which often accompanies composers' self-descriptions and, by implication, the writings of sympathetic musicologists. The prevalence of single-composer monographs and the frequent use of esoteric, composer-specific terminology to describe particular technical processes, he claims, reflect a wider cultural embrace of the myth of the creative artist as a necessarily unique, isolated genius, which has its root as much in market forces – the need to differentiate composerly 'products' – as in high-flown ideals of artistic independence (Wilson, 2004a: 7–9).⁸

At the same time, this rather cynical view certainly represents only one side of the story: as Charles A. Williams notes, the de-individualisation of particular composers or pieces of music, in the service of broader, 'objective' compositional theories, is just as clear a feature of modernist musical writing (Williams, 1993: 37–44). Indeed, the emergence of esoteric terminology which Wilson identifies is perhaps just as much a sign of resistance to this trend as it is of the pervasive spread of market values within the musical world. Williams argues, conversely, that writing about specific composers must acknowledge 'individuality and its corollary, stylistic particularity' (1993: 59). The desire to offer a middle way between de-individualisation and the 'rhetoric of autonomy', and to allow opportunities for 'tacit, unformalised knowledge' to undergo a certain degree of theoretical refinement, provides an additional basis for the interleaved structure of this thesis. The case studies and connective chapters have a symbiotic relationship: the broader, more abstract discussions allow important features of the pieces to be 'teased out' and explored in greater generality without unhelpfully

⁷ Kofi Agawu notes a related problem: much writing which claims to do away with the biases of traditional analysis ends up falling back on very conventional analytical methodology, under the banner of 'self-evident' insights (Agawu, 1997: 302).

⁸ See also Randel, 1992: 11 for further discussion of the emphasis placed on 'the composer as a creative force' in the formation of the musicological canon.

‘privileging’ them within the analyses themselves; likewise, the closer readings provide a test bed for the more general ideas, to ensure that they remain rooted in and limited by concrete practice. A particular aim for the connective chapters is to allow ideas from the wider musicological and philosophical arena (which often focus more upon the common-practice repertoire) to inform the analysis of this music. Moreover, in line with Flyvberg’s comments on the utility of ‘black swans’, individual case studies are linked to their accompanying connective chapters as particularly extreme examples.

Towards a methodology

Already, from the discussions of repertoire and structure, aspects of the desired methodology of the thesis are emerging. This approach arises out of the study of specific works, not composers or trends, but it uses these case studies to ‘tease out’ issues for wider reflection and the generation of fruitful connections; it is focussed upon aural experience, but this naturally draws upon other arenas as well. A number of quite basic questions still remain to be answered, however. Several are visible as ambiguities of language in the above statements: when I write of ‘aural experience’, for example, what do I really mean? And what constitutes an appropriate conceptualisation of this experience? Indeed, considering the matter more pessimistically, what (if anything) is there to be gained by such conceptualisation? Similar issues arise from other statements: the desire to consider works in context drives the inclusion of connective chapters, for example, but it is far from evident what kind of ‘context’ is being referred to here. More practically, whilst the desire to keep the study rooted in ‘concrete practice’ is mentioned several times, this demands clarification: for instance, spectral analysis and psychoanalytic interpretation are both in a sense ‘concrete’ approaches, in that they both take specific works and produce specific responses, but they are likely to consider their sources from very different angles (and may well come to widely divergent conclusions).

These questions are rendered more pressing, of course, by the knowledge that this thesis comes at the tail-end of several decades of wide-ranging (and often heated) debates within musicology – debates which have led to a thorough rethink of many aspects of the discipline, and in particular the sub-discipline of analysis. The adversarial positions of the 1990s have now largely been abandoned, with much recent writing

exploring the limitations of such binary, oppositional thinking; examples of this kind of approach include Björn Heile's critique (2004) of the simplistic portrayal of Darmstadt within much 'new musicological' writing, and Christopher Norris's attempt (2005) to outline a new perspective on the relationship between music analysis, deconstruction and theories of musical structure.⁹ Likewise, many of the essays within the 1999 collection *Rethinking Music* (ed. Nicholas Cook and Mark Everist) explore ways in which the discipline of music analysis might fruitfully be combined with insights drawn from other areas of musicology.

This thesis is not the place to retread any of these arguments, then, but rather to explore means by which the fruit of this more reconciliatory approach to scholarship – which emphasises the interlock and synthesis of contrasting strands, rather than their opposition – might be 'put to work', so to speak, in the discussion of particular musical experiences. Although a number of examples of this shift of emphasis in the work of other musicologists will be drawn upon and critiqued within the conceptual chapters of the thesis, then, the emphasis throughout will remain upon the practical application of these ideas to the study of specific works. In order to set a pattern for this, the questions raised above – about the roles played by 'aural experience' and contexts of various kinds within this thesis – will be 'answered' pragmatically within this chapter by means of a specific analytical demonstration; more abstract theoretical discussion of the issues they raise is saved for the following chapter (although the resonances of these questions continue, to some extent, throughout the thesis).

Introducing Arc-en-ciel

For this purpose I turn now to Ligeti's first book of piano études, which dates from 1985, the beginning of the period covered by the thesis; in fact, this collection is one of the milestone compositions which helped to set these temporal limits. The decisive stylistic shift which launched Ligeti's so-called 'latest style' (Bernard, 1999: 1) was apparent from the 1982 Horn Trio, and arguably had its roots even back in works such as *Monument-Selbstportrait-Bewegung* from the 1970s (Steinitz, 1996a: 15), but the

⁹ Norris's article arises as a response to a brief but forceful debate about the nature and importance of musical 'unity' which took place over a number of issues of *Music Analysis* in 2003. For the original exchanges, see Morgan, 2003; Chua, 2004; Dubiel, 2004a; Korsyn, 2004; and Kramer, 2004. Some of their discussion (and Norris's) connects closely with issues raised by Street, 1989.

piano études show a marked progression from these earlier compositions in their instrumental mastery, unity of conception, and breadth of influence. Their engagement with extra-musical ideas such as chaos theory and fractal self-similarity is well-documented, as is their incorporation of intra-musical allusions ranging from Chopin, Bartók and Brahms to jazz and African polyphony (Griffiths, 2001: online); moreover, each étude creates a powerful and strikingly singular expressive atmosphere from this cloud of influences (something which the variety of evocative titles reflects). In these features, as well as in their open but ambiguous relationship to Western tonality in general and to the tradition of the piano étude in particular, these works are emblematic of those discussed within this thesis.

However, they stand out from much of the repertoire explored here in their relatively process-oriented approach towards material and development: many of the études are based on quite well-defined generating principles which govern the way material unfolds in a manner which lends itself naturally to systematic formal analysis of various kinds. This is not to say that these processes are simplistic, of course – their effectiveness comes from the ‘hidden variables’ which Ligeti inserts into ‘initially deterministic systems’ (Steinitz, 1996a: 17) – but it does mean that they have generally received a level of analytical attention which goes far beyond that of the other works examined here.¹⁰ One exception, however, is the fifth étude, *Arc-en-ciel*, which seems (upon listening) to be far more intuitive and ‘unstructured’ than the others in the 1985 set; perhaps for this reason, earlier commentators on the book have tended to offer only a fairly restricted account of this particular piece, with more detailed analyses only appearing very recently.¹¹ Yet its effect is just as powerful as that of the surrounding études; in its penultimate position within the volume, it provides a moment of ‘suspended time’, poised and controlled but far from calm or static, before the climactic *Automne à Varsovie*. Rather than duplicating existing analytical discussion of the étude, this chapter will use *Arc-en-ciel* as a kind of ‘worked example’, an analytical sketch (necessarily schematic, but clear enough to provide an illustrative model) which is interleaved throughout the chapter – as the methodology of the thesis develops, so does

¹⁰ See, for example, Burde, 1993: 189–201; Dibelius, 1994: 220–8; Steinitz, 1996b; and March, 1997: 62–81.

¹¹ The two most in-depth analytical discussions of this étude to date can be found in Callender, 2007 and Rudman, 2009; the first focusses on harmony and melody, the second on rhythm and metre.

the analysis. What is being demonstrated here is thus a process, rather than an end-product; it is intentionally more ‘messy’ (and at times perhaps more naive) than the larger case-studies in the thesis, which try to ‘tidy up’ the various stages of their evolution into a single coherent account. Its interleaving with the broader conceptual concerns of the introduction serves, however, as a kind of microcosm of the structure of the thesis as a whole; the concrete sheds light on the conceptual, and vice versa.

How then might we ensure that an analytical account of *Arc-en-ciel* remains rooted in aural experience? One way is to begin the analytical process – after listening to the piece, of course – with an attempt to characterise its ‘heard effect’, before any specific techniques are brought to bear upon it (and perhaps even before consulting a score). Any such attempted verbalisation is bound to be inadequate, of course, overlooking certain aspects of the experience and overemphasising others, but the temptation to try and bypass these issues by appeal to more distanced, supposedly ‘objective’ analytical methods and terminology must be overcome: these rely equally upon other metaphors (pitch as space, for example, and rhythm as motion) which are all the more potentially restrictive because they go unacknowledged (Adlington, 2003: 303). Instead, descriptions which are intentionally ‘rich’ – exploring the points of connection (and also of contradiction) between the felt experience of the piece and the cloud of influences and expectations which surround it – can build up a solid basis for more detailed analytical reflection.

Here, a useful starting-point is provided by the title, which translates as ‘rainbow’. Within Western culture, a rainbow carries associations with light, translucency, evanescence, weightlessness, and a certain kind of melancholic beauty, appearing as it does at the conjunction of sun and rain; it is a highly-prized meteorological phenomenon because of its striking but delicate colour and its ethereal, almost otherworldly appearance (it is notable, in fact, that the rainbow features prominently in the mythologies of a variety of cultures, from the Norse *Bifrost* to the Aboriginal Rainbow Serpent and the Biblical tale of the flood). Certain characteristics of the *étude* resonate well with elements of this list, particularly in the opening bars (Ex. 1.1): the high register, quiet dynamic and predominantly ‘open’ sonorities create a sound-world which is itself noticeably ‘light’ and translucent; meanwhile, the pervasive but persistently ambiguous triadic references (scoreless listening reveals at the very least a

wealth of non-functional seventh chords) create a powerfully ‘bittersweet’ expressive quality. Thinking more broadly than immediate sonority, there is a sense of ‘weightlessness’ to the metre, phrasing and harmony of this opening which is difficult to pin down precisely through listening; this is one aspect which certainly merits more detailed investigation.

Andante con eleganza, with swing,  ca. 84 ^{*)}



p dolce, con tenerezza, sempre legato, molto espressivo

con ped.

Ex. 1.1: Ligeti, *Arc-en-ciel*, opening bars

Equally notable, however, is the *resistance* the étude offers to these initial descriptions. As the piece continues, it begins to challenge the rather one-dimensional, picture-postcard implications of its title: a gradual descent in register goes hand-in-hand with increasing dissonance, an increase in rhythmic complexity and a progressive *crescendo*, so that the texture grows increasingly ‘opaque’ and ‘heavy’; this happens as a series of cumulative but distinct (and at times almost jarring) ‘waves’, separated by brief returns to relative calm and consonance, which undercut any idea of this process as itself some kind of smooth, ‘rainbow-like’ contour. The final section of the piece reverts progressively to the rhythmic simplicity and high register of the opening – albeit not to its open, consonant sonorities – and a final *perdendosi* rise (moving off the top of the instrument) provides an effective musical gesture of dissolution. The overall effect, then, is a combination of beauty, simplicity and delicacy with unsettling, unpredictable and at times even violent tendencies: if there is no sense here (as with many of the other études) of a mechanism running slowly out of control, it is because no such mechanism is ever clearly established, and not because there is any real feeling of stability. *Arc-en-ciel* is a much more understated, constrained presentation of the same highly charged and uncomfortable expressive atmosphere which has such devastating effect in the next étude, *Automne à Varsovie*. Deeper analytical work thus needs to engage with the dual

characters of the piece, and relate its findings back to its underlying, rather unsettling aural effect; it is not seeking to ‘explain away’ the processes at work so much as to deepen awareness and appreciation of them through reflection.

Analysis and reflection

Although analysis always necessarily involves an element of reflection, the particular aims of this thesis mean that this aspect is especially important here. On the one hand, it describes its methodology, which is based upon sustained and imaginative reflection upon the aesthetic experience engendered by specific musical works; on the other, it refers to its intended goal, which is the ‘reflection’ back on to the works themselves of the insights gained through the analysis, so that their effect is heightened further. In one sense, of course, this is obvious; as Nicholas Cook reminds us, all such writing is a repertoire of means for imagining music, and accounts of specific works serve as cultural artefacts which gather around the work itself and influence later hearings of it (Cook, 1990: 3). Here, this is taken consciously as the central aim and basic methodological stance, however; ‘understanding music’ (in the context of the works studied in this thesis) is considered to be primarily an aesthetic act, rather than a logical, political or cultural one – although the interlinked nature of these different spheres means that such a statement is by no means exclusive. This position will be developed further in Chapter 2; for now, the focus is upon its methodological ramifications.

Characteristics of approach

This approach to analysis has a number of specific characteristics: it will be holistic, expansive, and pragmatic. Firstly, it will be *holistic*: it will treat works as whole experiences, and seek to consider them where possible in the light of their experienced context. This follows naturally on from the decision to concentrate upon works as they are heard, since the tension between aesthetic autonomy and contextual relationships underpins the experience of music in a wider cultural sense. At a concert (or in our homes, or on an iPod), we are presented with a succession of ‘moments’ which we experience both individually and as a collective whole; this experience is then itself compared to other, similar works and past situations, and may lead to future choices in

listening, performance or composition. Such a balance is also at the heart of aesthetic judgments on music: pieces are valued when they present an experience which is productively ‘unique’, yet this relies on the existence of some kind of shared technical and expressive vocabulary against which this criterion of ‘uniqueness’ can be measured, and (more broadly) in whose context the experience can be meaningfully processed.

It also allows the restrictive concept of aesthetic autonomy to be avoided, whilst protecting the primacy of aural experience from being ‘swamped’ in contextualisation. The set of influences and ideas surrounding the composition of a work provide a starting-point for the wider perspectives analytical work can bring to bear upon it, but these perspectives are always measured against the benchmark of reflective listening. This stance marks a break with the tendency to read musical works ‘against the grain’ of stated compositional ‘intentions’, interpretative tradition, or previous commentaries. The danger of such subversive reading is that it places the focus not upon the experience of the music, but upon whichever specific interpretative point the writer is trying to make; this attitude may be helpful with more established repertoire, where layers of sedimented descriptive tradition have caused our conceptions of it to stultify, but with music which is so young as to have virtually no analytical tradition at all, the first task seems to be to gain some basic familiarity with the music as it is experienced in the immediate contexts of composition, performance, and listening. Practically speaking, this means that each case-study begins with the experience of the work as a whole, before considering closer details in this light; it also means that the non-musical ‘ephemera’ surrounding a work (its title(s), statements and programme notes by the composer, unusual expressive indications in the score or unusual demands upon players) are taken as helpful indicators for the direction that the broader, more interpretative aspects of an analysis might take.

Secondly, rather than being reductive in scope, this approach will be ‘*expansive*’: because the goal is not ‘explanation’ in a logical sense but enrichment of aesthetic experience, the analysis will actively seek out external elements which mesh productively with its own reflections. This fits with Martin Scherzinger’s division of listening strategies within musical analysis into ‘immanent’, serving to reinforce pre-existent theories, and ‘imaginative’, serving to open up new and fertile connections (Scherzinger, 2004a: 272–3); here, an ‘imaginative’ stance allows links to be made

freely with extra-musical fields and concepts, as they arise – something that is helped by the particularly broad range of influences seen within the composers featured here. This stance also encourages a creative approach to the use of metaphor within descriptions of music: careful reflection on the most salient qualities of a *particular* musical experience, as part of the process of analysis, can allow metaphors to be chosen which will allow this experience to be more vividly evoked. Moreover, the ‘expansive’ approach also affects the theoretical dimension of analysis: it moves the emphasis from the rigid application of a specific explanatory ‘system’ to a freer patchwork of interacting methodologies, ‘a collection of conflicting theories which gather about the object’, in Daniel Chua’s memorable phrase (1995: 10). Given the particular omissions and inadequacies of each individual analytical method, and the highly multi-layered, non-systematic nature of this music, such eclecticism is crucial; taken together, a constellation of partial perspectives can give greater insight than any individual approach could produce alone.

Thirdly, this approach will be *pragmatic*: rather than working from first principles and incorporating musical examples as ‘test cases’, it will start from an experience of the music (through repeated listening) and return to this wherever possible. The obvious criticism of this approach, of course, is that any personal listening experience is inherently subjective; not only that, but putting it into words adds yet another layer of subjectivity, since the particular expressions chosen describe it will themselves serve to delimit and ‘freeze’ aspects of the experience which might otherwise remain hazier and more fluid (Adlington, 1997: 94–104). Yet this criticism (if it is valid) is certainly not restricted to accounts which are rooted in personal listening experience: a more self-consciously ‘theoretical’ approach would in fact run into the same problems, since the systematic descriptive metaphors used for the analysis would themselves result from particular ways of conceptualising the subject-matter, and would be equally constrained by the difficulties of verbalisation; the whole would be equally subjective, then, but without either the flexibility of a more pragmatic, eclectic approach, or the conscious acknowledgement of its own limitations.

Put another way, any account of music is bound to be as much an *interpretation* as it is an *explanation* (if indeed it can be viewed as an explanation at all). I would argue, however, that this subjectivity is not a barrier to useful musical writing, but a positive

starting-point for it: whilst a musical work will inevitably ‘sound’ different to different listeners, there may still be an overlap between their experiences of it, and within this overlap there may be some features which are amenable to verbalisation in the form of a careful but imaginative analysis. Such an analysis may even serve to expand the shared nature of the experience, allowing listeners to notice elements which they had not considered before; this is part of the role musical writing can play in wider culture, as Nicholas Cook notes (Cook, 1990: 4). This shared dimension reflects another basic motivation for the thesis. The widely-held association of contemporary Western art music with Byzantine (and often apparently arbitrary) structural complexity and detached anti-expressivism is one which the aural experience of these pieces directly challenges; whilst this experience is beyond verbalisation, the accounts presented here are an invitation to the reader to share aspects, at least, of that experience – each one spinning a ‘web’ of words around a hearing of a particular piece, offering a series of connections which may be freely traversed in an approach to the layered, but coherent, sensory core.

This might suggest that the approach taken here amounts, in effect, to a particular kind of ‘music appreciation’; but that may not be a bad thing. When the interpretative, personal aspect of musical writing is acknowledged, then it can give rise to a more conscious, thoughtful account through reflection on the listening experience and comparison with the score and with other external, contextual factors.¹² In this way, musical analysis can become both an outlet for the basic ‘need to share [...] enthusiasm and excitement’ about compositions which are found to be particularly striking (Samson, 1999: 54), and also a way ‘that analysts work on themselves to understand and improve their experiences of music they have chosen, as well as offering the possibility of musical self improvement to their readers’ (Guck, 2006: 207) – with the slight proviso that ‘self improvement’ here might better be understood, without the moralistic overtones (the term carries more than a hint of ‘self-betterment’), as an enriching of experiential possibilities. The further advantage of an approach like this is that it provides a constraint on the eclecticism of an ‘expansive’ mindset, and one which

¹² Le Guin (2004) stands as one particularly extreme, and strikingly honest, attempt to mediate between listening experience and what an music theorist ‘knows’ about a score, and to use the points of disjunction between the two as the raw material for constructing richer interpretations.

fits well with the broader focus on aesthetic experience which is adopted here; whatever other analytical techniques and extra-musical ideas are brought into the writing, they are delimited by the desire to clarify rather than obscure what has been heard.

Defying gravity: analysis, reflection, and Arc-en-ciel

The previous analytical ‘interlude’ identified a number of intriguing features which were audible within the opening of *Arc-en-ciel*; it also noted the process by which the effect of this opening was gradually undermined (and then partially reinstated) over the course of the piece. These heard elements can form the starting-point and guiding constraints for more detailed analytical investigation, using a variety of different techniques as they prove useful. This ‘sketch’ will restrict itself to one particular aspect, the ‘weightless’ quality of the *étude* which was noted earlier (but which could not immediately be linked to any specific feature of the sonority). Examination of the score, and of others’ writing upon the work, provides several interacting explanations for this sense of weightlessness; two will be discussed here, both linked to the difficulty of segmenting the moment-to-moment experience of the piece in any clear way.

The first is rhythmic. The *étude* is based around a whole series of polymetrical schemas: each bar pits a right hand which is notionally in 3/4 against a left hand in 6/8, as the subdivisions of the score show, but this is further complicated by additional sub-groupings in each hand, in the form of melodic lines which emerge out of the underlying semiquaver figuration, and increasingly complex cross-accentuation. Moreover, as Jessica Rudman notes, the phrasing of the opening right-hand melody itself suggests strongly a 4/4 structure, at least for its first three bars (Ex. 1.2); and the opposition of 4/4 and 3/4 cycles recurs at a number of other structural moments, as well as providing an analytical justification for the empty bar at the close of the *étude* (Rudman, 2009: 8–9). Not only that, but all these higher-level subdivisions are themselves at odds with basic issues of metrical perception: given the slow tempo of the *étude*, it is semiquavers rather than crotchets (or dotted crotchets) which are likely to be heard as its basic *tactus*; even the fairly localised, bar-level contrast of 3/4 and 6/8 thus occurs beyond the threshold of the ‘psychological present’ necessary to hear polymetrical patterns directly (Rudman, 2009: 5).

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The image displays a musical score for the piano introduction of Ligeti's *Arc-en-ciel*. The score is written for two staves, treble and bass clef, in 3/4 time. The tempo and mood are indicated as *p dolce, con tenerezza, sempre legato, molto espressivo*. The first system shows the opening bars with various rhythmic groupings and phrasing. The second system continues the piece, featuring a triplet of eighth notes in the first bar. The score includes dynamic markings like *p* and *con ped.* (con pedal).

Ex. 1.2: Ligeti, *Arc-en-ciel*, 4/4 groupings in opening bars

The result is that the various interacting metrical relationships here are elevated into structural features; whilst the surface is thus heard initially as stable, slow and continuous, its higher-level groupings are ambiguous, aperiodic and uncertain. Throughout the first half, these higher-level ambiguities gradually ‘collapse’ into its surface: metrical groupings of semiquavers reduce over bars 3–7 from dotted quavers to quavers and then eventually push the semiquavers themselves into polyrhythms of increasing speed, before being abruptly ‘reset’ in bar 9. This metrical trajectory, a series of ‘waves’ which collapse unpredictably (the first ‘wave’ is bars 1–8, the second bars 9–13b, the third 13c–15), offers one account for the shift in mood (and felt ‘weight’) over the course of the étude.

The second aspect is harmonic. As noted earlier, *Arc-en-ciel* is striking for its use of open, jazz-tinged triadic sonorities; these never connect in any functional way, however, moving instead by thirds or chromatic ‘side-steps’, and in fact the continuous semiquaver figuration, combined with the pervasive metrical ambiguity, often serves to blur the boundaries between adjacent sonorities altogether. In the opening bar, for example, subdividing the harmonies according to the rhythms of the right hand produces one set of harmonies, whilst subdividing it according to the left hand produces

another, totally different set (Ex. 1.3) – and this ambiguity only deepens as the harmonies of the piece grow more complex. The perceptual implications of the use of triadic sonorities cannot be ignored: just as with the interacting polymetres, the slow tempo here means that the various interlocking harmonic possibilities do form an important part of the heard experience (unlike other, faster études, where they function more as timbre); the continual but subtle shifts of notional ‘key’ generated by the constant harmonic motion and the ambiguities of grouping mean that listeners are constantly being forced to reorient themselves and their expectations. The complexities of this piece do not map easily to specific compositional techniques – in fact, it seems quite likely that this étude was composed primarily intuitively, with the more strictly-conceived disintegrative processes of other études notably absent. Rather, the ‘challenge’ arises from ambiguous combinations of familiar elements, in a way which is primarily based upon the subversion of perception rather than of conscious theoretical understanding.

The image shows a musical score for Ligeti's *Arc-en-ciel*. It consists of two staves of music. The top staff is in treble clef and the bottom staff is in bass clef. The time signature is 3/2. The tempo and performance instructions are *p dolce, con tenerezza, sempre legato, molto espressi*. The music features complex harmonic layering with various chords indicated above and below the notes. The chords are: Cmaj7, Dm, Fm, Cmin7, Em, Gm, and Bbm. A double asterisk (**) is placed above a note in the upper staff.

Ex. 1.3: Ligeti, *Arc-en-ciel*, layered triadic sonorities in opening bar

This does not imply that nothing can be gained by further reflection, of course. In fact, an examination of aspects of context can mesh helpfully with the above analytical observations, and deepen the heard experience. We can now draw new connections from the title, for example: one is the presence of constant harmonic ‘surprises’ and the blurring of individual sonorities within the étude. Given the longstanding metaphorical associations which exist between aspects of pitch and harmony and physical colour (something evident even within the term ‘chromatic’, for example), and given Ligeti’s

own particular predilection for making musical sketches in a variety of colours (one of which adorns the cover of the facsimile edition of the études), it is perhaps not too far to make a specific imaginative connection here with physical reality: the rainbow itself presents all the colours of the spectrum as a continuum, within which our own named colours are simply chosen ‘segments’ subject to ambiguity, and never overlapping exactly with those of other languages, or even the perceptions of others within our own language-group (Eco, 2003: 185).

A second ‘rainbow’ connection links the rhythmic dimension with wider considerations. One notable source of inspiration in the composition of the piano études was the scientific field of chaos theory, which explores the means by which simple processes can generate results of irreducible complexity (Steinitz, 1996a: 13). In many of the études, the musical ramifications of this are very clear: developmental patterns are established early on which lead rapidly to textural disintegration – a process which fits naturally with our understanding of the term ‘chaos’. This is the case with the first étude, *Désordre*, for example, where two very clear and regular phrase-structural processes (looping melodies in the right and left hand) which are slightly out of sync cause a rapid degeneration into disorder – one that is compounded, from very early on, by further disintegrative interventions on the part of the composer (March, 1997: 76–8). With *Arc-en-ciel*, however, the delicate expressive atmosphere of the étude, and the way it frequently reverts to the textural and harmonic simplicity of the opening just before things get out of hand, mean that it is perhaps more difficult to see the connections, since the overall effect is never ‘chaotic’ in the broader sense (whereas *Désordre* sounded chaotic even in its first bar).

Yet examination of the rhythmic structure of *Arc-en-ciel* reveals a set of emergent interactions between different metrical layers which is as complex as any of the other études in the book, and which leaves the listener with (if anything) *more* perceptual ambiguity to process than *Désordre*, where the underlying disintegration is relatively deterministic. Weather phenomena are a recurrent theme in popular scientific explanations of chaos theory: Lorenz’s canonical analogy for the far-reaching implications of small divergences in initial conditions is that of a butterfly, flapping its wings in Brazil, which sets off a tornado in Texas (Hilborn, 2004: 425). Tornadoes are chaotic in both the scientific and non-scientific senses, of course, so the appeal of the

image is clear – but a rainbow, although beautiful and seemingly static, is an equally chaotic phenomenon in a scientific sense, arising from the chance intersection of water droplets (numerous and unstable) with light. The effectiveness of *Arc-en-ciel* can be understood, in one sense, as its ability to combine the traditional associations of the rainbow with an undertone of its ‘chaotic’ source, without either ever quite taking control.

Redefining coherence

As the foregoing examination of *Arc-en-ciel* demonstrates, the methodology of this thesis is intended to develop a way of writing which does greater justice to the multi-layered nature of this music than conventional analytical or interpretative approaches. In particular, I want to challenge the assumption that music which cannot be easily fitted into a specific technical or stylistic ‘school’, or whose surface is resistant to any individual descriptive methodology, is therefore of interest to scholars primarily for its disjunction or pluralism, when in fact the resultant *effect* of these disparate elements is often powerful and strikingly cohesive. The basic research task for this thesis, then, is to explore the means by which these varied and sometimes seemingly-contradictory interacting features ‘add up’ to an experience of such force and cohesion – and how the sense of cohesion itself is *dependent* on the multi-layered nature of the underlying materials. This leads to the claim that these composers are ‘redefining coherence’ as something which arises from the experienced interaction of multiple independent strands of material and reference, and that analysis must adopt new strategies and explore wider connections if it is to engage usefully with this music. The structure of the thesis – four in-depth analytical case studies interleaved with four broader ‘connective’ chapters – reflects this multiplicity.

The first chapter explores the challenges which this repertoire presents to conventional analytical notions of coherence: it examines the way that particular epistemological frameworks have coloured the work of other writers upon this repertoire, and suggests that combining established analytical techniques with a broader focus upon aural experience (a stance which reflects wider trends towards the revival of the concept of the aesthetic within art) might provide a helpful perspective upon the particular strengths of this music. This leads into a study of Thomas Adès’s string

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quartet *Arcadiana* (1994), a work whose subtle and highly coherent evocation of memory, nostalgia and timelessness is dependent on its fractured and multi-referential form. The third chapter explores the way in which analysis (which is, at its root, about ‘breaking up’ complex systems into simpler elements) might deal with music where the interaction of different elements is characterised by a seemingly irreducible pluralism and multi-directionality, such that no single approach to ‘breaking up’ seems to make sense. This is accompanied by an analysis of Kaija Saariaho’s *Solar* (1993); the furious energy of this work is based around a variety of interactions of harmony, rhythm and expectation, which are modelled here using a series of ‘semiotic squares’ derived from the work of A. J. Greimas. These are used to expand upon the concept of ‘harmonic gravity’ which Saariaho refers to in her programme note.

The fifth chapter moves to larger-scale formal concerns; it considers the ways in which this music handles the tension between individual compositional moments and the effect of the whole, focussing in particular on the importance of ‘surface’ in this music, and the role which metaphor can play in constructing useful analytical accounts of large-scale form. This is followed by a study of Tōru Takemitsu’s *How slow the Wind* (1991), an orchestral tone-poem which (like many of Takemitsu’s late works) is striking for its control of timescale and progression; the ‘slowness’ and moment-focussed quality of the work – not wholly static but certainly not conventionally developmental – is explored through an analysis which combines close detail with broader discussions of structural relationships, drawing on the composer’s own comments on his aesthetic. The seventh chapter confronts the issue of expression within this music: it examines a number of different musicological perspectives on this question, before reflecting briefly upon the importance of particular focal instants as points of ‘coalescence’. The final analysis explores György Kurtág’s *ΣΤΗΛΗ* (1994), for large orchestra, an unusual and deeply affecting evocation of different aspects of grief; it stands as a clear example of the way that external reference, gesture, and coalescence can be harnessed in the service of a particular, and very powerful, expressive effect.

Connections 1: Coherence, experience, aesthetics

Defining coherence: theory and practice

The title of this thesis states its aim as ‘redefining coherence’. Before coherence can be ‘redefined’, however, it must of course first be ‘defined’; this is by no means a simple task in relation to music. The word itself (according to the *Oxford English Dictionary*) derives from the Latin *cohærere*, ‘to stick or cleave together’; its connotations of adhesion (‘stick’), permanence (‘cleave’) and unification (‘together’) have led to broad usage as a generalised abstract term which emphasises the bringing-together of possibly diverse elements in a stable and unified whole (Oxford, 1989). From the outset, however, the most useful application of the term for music is far from clear, because its referents are so difficult to pin down: what are the ‘elements’ of a musical composition that might thus be made to ‘stick’, and what does it mean for them to ‘stick’ together, anyway? What is the ‘whole’ that might result? How might this ‘sticking’ be seen in any sense as lasting outside the moment of performance, when there is no independent physical object – as in a painting, or a novel – that might be seen as the location of this new ‘wholeness’? And what metric is used to judge notions of ‘consistency’ in the putative ‘whole’, anyway?

These questions arise from basic problems in the philosophy of music – issues of the ontological status of individual works, the temporal nature of the art-form, and the relationship of composers, performers and listeners in musical experiences. Given that the focus here is above all on the practical consequences for the study of a particular repertoire, these broader problems cannot be allowed to take over the attention entirely; nonetheless, they will at points arise naturally in conjunction with the pieces studied – and this is part of the justification of the concept of coherence (however it may be ‘redefined’) as a linking thread throughout. Different angles upon some of these questions will thus recur throughout the connective chapters of the thesis: the problem of isolating elements within a composition – of the ‘breaking up’ function of analysis, in other words – is the focus of chapter 4; the perception of wholes (and processes

operating over wholes) is an important strand within chapter 6; and one particular aspect of the ‘sticking’ process – the role played by expression – is explored within Chapter 8. In a sense, then, the (re)definition of coherence promised by the title takes place performatively, over the course of the thesis as a whole.

However, from a more pragmatic perspective concepts of musical coherence are implicit in most music-centred activity. It is a commonplace that absorbed participation in music – whether as a performer or as an actively engaged listener – has the potential to alter the perceived passage of time, to ‘stretch’ the window of the experienced present so that extended (in the case of Bruckner or Mahler, highly extended) musical *gestalts* such as melodies or harmonic sequences seem to be perceived as a ‘whole’ in ways which conflict with existing knowledge about working memory. Moreover, these processes leave behind in the memory a sense of ‘wholeness’ and singularity about a given musical experience which contrasts strikingly with the often highly varied, complex details of the music as it was heard at the time. These characteristics fit well with those given in the definition of coherence above: the joining of multiple moments in temporal experience into a perceived whole which has some durability to it, even if it is a whole which exists only as a kind of remembered trace (and even then as something as much imagined as real, a helplessly partial ‘smoothing-over’ of the complexity of temporal experience).

This is something which musicological writing relies upon just as much as any musically-engaged activity. In the analysis of Ligeti’s *Arc-en-ciel* presented in Chapter 1, for example, a number of expressive features were identified from an experience of hearing the piece; these were then associated with particular technical processes, and connections with broader interpretative metaphors were suggested as a way of exploring their implications further. Such an approach relied on assumptions of ‘coherence’ at a number of levels. Firstly, it assumed that any two performances of the piece, and two listeners’ perceptions of these performances, would share enough in common that these descriptions of expressive features would be intelligible. Secondly, it assumed that the expressive qualities identified within the piece were dependent on specific connections between technical processes, listening experience and the metaphorical dimension provided by the title, such that it would be possible for an analysis to make some of these connections explicit. Thirdly, and most germanely, it assumed that the features

identified within *Arc-en-ciel* appeared with enough consistency across the étude that they could be presented as in some way representative of the whole experience, and not simply as ill-advised inductive extrapolations from a particular gesture or bar – even though the analysis often defended its conclusions with reference only to a particular, small section.

This final assumption is one which can be justifiably attributed to the composer as well as to the analyst, of course; in separating this piece notationally from those which surround it in the collection, and giving it a title of its own (one whose expressive connotations are undeniable), Ligeti too is presenting it as a self-contained ‘whole’. As such, he is both ‘cleaving together’ a variety of musical gestures, some of which seem at odds with one another, but also deliberately ‘cleaving apart’ these gestures from those of the preceding and following études (just as a pianist would under most concert circumstances take care to differentiate it from the surrounding pieces in the programme, whatever they may be). A concept of coherence – practical and technical as well as expressive – is thus clearly visible in any account of conventional Western concert practice.

This does not, of course, imply that ‘conventional’ musical practice is, or should be, taken as normative. Much musicological thought from the 1980s onwards has in fact served to call into question the generality of a number of aspects of these observations, tracing them instead to particular, culturally-contingent perspectives which can all too easily be used as tools for exclusion and control. Taken as guiding precepts for abstract theory, then, they seem to provide rather shaky ground. Indeed, one of the arguments of this thesis is that aspects of this conventional, ‘common-sense’ definition of coherence need to be turned on their head if musical writing is to engage productively with works such as those which are explored here. Nonetheless, there is certainly a danger of throwing the baby out with the bathwater. Understanding the root of a conventional notion of musical ‘coherence’ in particular cultural or psychological preoccupations does not thereby disqualify it from having value as a guiding metaphor for much musical experience; it merely gives us greater leeway to ‘stretch’ it, or replace it altogether, if different circumstances arise which seem to warrant such drastic action.

The danger of discarding established, experientially rich concepts such as this altogether is that they leave a hole which is most often filled not by other accounts of

experience, but by increasingly abstract theory; eventually, musicological writing grows so detached from narratives of listener experience that it becomes a self-perpetuating discipline, divorced entirely from the real joys and sorrows of composition, performance and listening. Sticking to a conventional, ‘common-sense’ definition of coherence leads to much-impoverished engagement with much new music in the Western art tradition; throw away the definition altogether, however, and encounters with this music are likely to remain restricted to those areas where it overlaps with other, more theoretically self-supporting areas of discourse, such as abstract compositional theory, literary criticism or philosophy. What is needed is a ‘redefinition’, a recognition of the real and felt integrity of the experiences which result from these works, in terms which do not exclude crucial elements of their effect.

Existing literature

One way to evaluate the importance of these issues in the context of contemporary music is to examine the current state of musicological writing around this repertoire, and around the four main case study composers in particular. Beyond the broad sweeps of the introductory article or programme note – which are often startlingly insightful, and certainly convey the enthusiasm which these composers can inspire, although they are obviously limited by their enforced brevity and relative superficiality – these writings tend to fall into three broad types. The first is compositional theory: description of, or speculation about, the techniques which underpin a particular composer’s working process, especially as they compare to stated influences or to the nearest available ‘school’. This kind of writing has a strong pedigree in contemporary music, of course, following in the pattern of the ‘composer theorist’ established by (among others) Schoenberg, Boulez, Stockhausen, and Babbitt; however, here it often stands in contrast with the far more ambivalent attitudes of the composers themselves, and (perhaps more importantly) it can all too easily lead to what Taruskin calls the ‘poietic fallacy’, the

idea ‘that what matters most [...] in a work of art is the making of it, the maker’s input’, with the experience of listening devalued or ignored altogether (Taruskin, 2004: 10).¹

The second type of writing arises out of this, but is less concerned with specifics of compositional process: it represents a more abstract, free-standing approach to musical theory and analysis, concerned with the development of particular systematic methodologies for approaching the complexity of these works – often with a view to demonstrating their structural ‘unity’ or ‘integrity’ according to a given analytical measure. Here, again, this stance often sits uncomfortably with the polyvalent experiential qualities of this repertoire; even relatively successful analytical accounts (such as the discussion of Adès’s *Arcadiana* in Roeder, 2006) can only achieve systematic consistency by focussing on a particular, highly circumscribed subset of the musical ‘data’, and the result is that important analytical ‘grit’ – often crucial to the broader expressive effect – is sidelined.

The third type of writing is the kind of wider, contextually-aware study which has often been associated with the ‘new musicological’ movement, attempting to bridge the gap between musical discussion and more general concerns of culture, ideology and meaning. Its refusal to consider the musical work ‘in isolation’ lends a refreshing breadth of reference to much of this writing, and the resulting reflections often provide startling new perspectives on aspects of a composition which are very difficult to ‘analyse’ in more conventional music-theoretical terms. Yet the deserved caution with which the concept of artistic autonomy is treated here can often lead to a relatively superficial engagement with musical detail, as if the idea of the ‘music itself’ having a function inspired a kind of squeamishness; the result is that rather than playing an equal role in the discourse, the purported object of discussion (the experience of a piece of music) is turned into a bit-player, a source of isolated examples for another argument altogether.

¹ Of course, this does not mean that compositional process or ‘abstract’ musical structure should be altogether ignored; as Graubert notes in his critique of Taruskin’s position, ‘the way a piece was constructed [...] determines what the piece is’ (Graubert, 2004: 22). Nonetheless, there are many more factors at play in the connection between these two aspects than much compositional theory takes into account.

Thomas Adès

The literature surrounding the youngest of the composers studied here, Thomas Adès (b. 1971), is a good example of some of the issues involved. A number of writers note the combination of technical rigour and expressive force in his music, as well as its free stylistic eclecticism. Arnold Whittall's *Grove* article describes Adès's ability to blend 'vividness of detail with a clear sense of compelling overall design', and his characteristic combination of allusive distance and 'genuine pathos' (Whittall, 2001b: online). Christopher Fox places these observations in the context of the composer's more recent music (much of it outside the remit of this study), making a fruitful association with the aesthetic of Surrealist painting;² he identifies the role played by motivic 'proliferation' and carefully-controlled temporal proportions in holding together the wide range of gesture and allusion (Fox, 2004: 43-5). Fox's argument is supported by a sequence of illuminating but tantalisingly brief analytical commentaries; elsewhere, such music-focussed discussion is rather sparse. Edward Venn's study of meaning in the orchestral work *Asyla* presents a 'formalist' reading of the fourth movement as a contrast to the predominantly 'hermeneutic' interpretations found in programme notes and press reports (Venn, 2006: 94–96); however, his decision to base this reading almost entirely around broad architectural divisions and voice-leading analysis, with little consideration of other parameters such as rhythm or texture (let alone the relationship between analytical 'findings' and the heard experience), renders his conclusion – that hermeneutic interpretations offer a richer and more emotionally-engaged understanding of the piece – inevitable (Venn, 2006: 115–16).

Two discussions which focus upon the particular composition studied here, *Arcadiana* for string quartet, adopt more appropriate analytical strategies; nonetheless, they still leave important questions about the heard effect of the music not only unanswered but unasked. John Roeder (2006) offers a careful analysis of selected extracts as part of a larger argument about the use of layered perceptual continuities in Adès's musical language; his article is a convincing demonstration of controlled complexity at the note-to-note level, but contains only limited examination of the way these elements are shaped into larger formal processes, or of how these intricacies relate

² This connection is one that Richard Taruskin has also made; see Taruskin, 1999.

to a listener's heard experience and to the varied associations of the movement-titles and quoted materials. By contrast, Arnold Whittall (2003b) explores the multi-layered allusions of the quartet, paying particular attention to the movements 'Et...' and 'O Albion', but does not consider the wider dramatic arc of the piece or the aspects of its construction (such as those explored by Roeder) which are 'neutral' in terms of their referential content, but equally effective at an expressive level.

Part of the difficulty with both approaches is their selective close reading; neither offer detailed discussion of more than a few bars of the piece at a time, yet with repertoire as mercurial and multi-faceted as this – music where multiplicity is made into an expressive force – a more synoptic perspective is crucial if a balanced view is to be presented. Moreover, both Roeder and Whittall build their readings around particular assertions about the nature of Adès's compositional aesthetic. In Roeder's case, the use of layered temporal continuities is taken as an indicator (following Jonathan Kramer) of the 'postmodernism' of Adès's work (see Kramer, 1981); Whittall, for his part, sees the free use of quotation as a sign of an increasing freedom, in the new generation of which Adès is a part, from the 'anxiety of influence' which (according to Joseph Straus) so influenced the stylistic decisions of many twentieth-century composers (see Straus, 1991). The issue with both of these texts is one of focus: the ordering and analysis of musical examples is so carefully dictated by the interests of the specific verbal argument (which in both cases is a valid one, but only one of many such arguments that the music could support), that the musical examples necessarily become primarily 'illustrations', confirming adjuncts to the discussion. What is overlooked is thus the layered complexity of the whole piece, which arises from the interaction of a variety of contrasting elements – some of which fit into Roeder's and Whittall's theses, but others of which do not.

Kaija Saariaho

On the face of it, Kaija Saariaho (b. 1952) would seem like a good candidate for more holistic and eclectic approaches to analytical writing: she has spoken frequently about the wide-ranging creative sources for her work,³ and is also unusually forthcoming

³ Particularly illuminating interviews can be found in Beyers, 2000, and Saariaho and Service, 2011.

about its basis in clear and singular sonic images, as well as the means by which these are realised; moreover, her music is also striking for its combination of immediate physical impact and broader imaginative connections. Yet there remains strikingly little writing on her music in English, and that which exists again shows a tendency for coherent discussion of musical experience – which is as rich and ambiguous here as it is with Adès's music – to be obscured by broader contextual issues. There are a number of brief but helpful discussions of her music within broader studies of the contemporary repertoire (Emmerson, 1998: 159–161; Adlington, 2003: 316; Metzger, 2009: 163–7, 182–195), but more extended writings tend to focus either upon the relationship of her own compositional techniques to the broader 'spectralist' school with which she has been associated in the past (Pousset, 2000; Lorieux, 2004; Kankaanpää, 2011),⁴ or else her status as a 'woman composer' (Moisala, 2000 and 2009; Sivuoja-Gunaratnam, 2003). Although these studies do produce a number of helpful insights, there remains the sense that musical extracts are introduced primarily as tools in an argument which is once again primarily classificatory, either the establishment of a particular stylistic 'school', or a broader (and more disconcerting) exercise in gender separation; this is particularly evident given Saariaho's open distaste for the very term 'woman composer', and the 'ghettoization' of her music which it implies (Moisala, 2000: 172).⁵

Perhaps the most detailed discussion of Saariaho's mature style in primarily music-theoretical terms is found within Spencer N. Lambright's (2008) study of the vocal works in the decade leading up to her first opera, *L'amour de loin* (2000), which combines analytical detail with discussion of the aural effect of particular techniques; this adds up to a rich picture of the composer's musical language in this period. At the same time, the decision to focus attention purely on the vocal music means that some of the technical ambiguities of Saariaho's style over this decade are overlooked; her

⁴ These writings are, of course, heavily reliant on Saariaho's detailed 1987 article 'Timbre and Harmony'; given that she now describes *Verblendungen* (1984), the centrepiece of that article, as 'very stiff', and characterises her more recent compositional processes as 'not at all systematic or mathematical' (Saariaho and Service, 2011: 11), this tendency to focus upon detailed compositional technique is perhaps now less helpful.

⁵ It must be admitted, however, that Saariaho's assertion here is somewhat contradictory: in person she shows herself very happy to talk about the influence of her gender on her compositional development and interests (as the interviews in Moisala, 2000 and Saariaho and Service, 2011 show). On the other hand, this may demonstrate a concern to treat discussion of her music, and of her as a composer, as two interlocking but separate worlds (it is notable that her reference to 'ghettoization' is a concern as to the reception of her *music*, not of *herself*).

preference for comprehensible text-setting, and the role a number of these pieces play as stylistic ‘studies’ for the opera, mean that the rather grittier, more volatile qualities of instrumental compositions such as *Amers* (1992), *Solar* (1993) or *Cendres* (1997) do not feature. Moreover, although the study contains a detailed account of the relationships between musical materials and dramatic action in the opera, there is little discussion of the wider issues of text-setting, external allusion and emotional drama which arise in the aural experience of the other examples studied.

A recent multi-author collection (ed. Howell, Rofe and Hargreaves, 2011) on the composer marks perhaps the beginnings of a more integrated discussion of her output and interests, combining close readings of specific works (grounded in concrete experience) with broader imaginative reference. March (2011) presents a ‘constellation’ which combines analysis and broader critical reflection on pieces by Saariaho, Boulez and the British composer Richard Causton, connected by the trope of the ‘cinder’. Although the use of this guiding metaphor means that the readings of these pieces are necessarily highly specific, it nonetheless serves to establish convincing links across different contexts; moreover, the resultant interpretations are grounded throughout in a variety of closer analytical accounts (all of which emphasise sound above notation). Several other chapters explore other recurring tropes within Saariaho’s output, including dreams (Oskala, 2011), the physicality of performance, particularly in relation to the flute (Riikonen, 2011), and the transformation of conventional musical ‘topics’ into contemporary forms as carriers of meaning in the operas (Hautsalo, 2011).

Other chapters examine individual compositions in a manner more explicitly indebted to traditional analytical methodology, yet still responsive to imaginative possibilities. Rofe (2011) explores the perception of temporality in the related works *Nymphéa* (1987) and *Nymphéa reflection* (2001), focussing in particular on her highly physical, process-based handling of musical material and on the control of proportion. Howell’s (2011) analytical discussion of two concertos, *Graal théâtre* (1994/7) and *Notes on Light* (2007), emphasises the centrality of principles of opposition (both local and global), and of a ‘cyclic’ approach to musical material, within Saariaho’s music; although the materials and formal arcs of these two pieces differ substantially from *Solar* (whose larger shape is rather unconventional), both these issues are central in my account. Finally, Hargreaves (2011) uses the dual metaphors of the network and the

crystal to explore the complex perceptual experience of *Du cristal* (1990); this produces a textual ‘network’ which illuminates, in particular, the way often-neglected parameters such as timbre, texture and tempo interact with more conventional harmonic and rhythmic processes, forcing constant shifts in perceptual ‘position’ (a concern which recurs in the discussion of *Solar*).

Tōru Takemitsu

The literature concerning the Japanese composer Tōru Takemitsu (1930–96) presents a particularly striking divide between closely ‘theoretical’ and more broadly ‘contextual’ approaches to new music. Whilst the composer’s own (numerous) writings tend, with one or two exceptions, to favour philosophical contemplation rather than theoretical discussion,⁶ a few English-language commentators have attempted to redress the balance; however, in general, the resultant emphasis is squarely upon compositional technique, and the experience of hearing the music is rather sidelined.

Peter Burt’s analytical survey (1998), the most comprehensive study available in English, illustrates these issues.⁷ Burt describes the intended outcome as ‘a sort of *Technique de son Langage Musical*’, à la Takemitsu’s beloved Messiaen (1998: 52), and the result is a ‘paradigmatic’ layout – a kind of ‘taxonomy’ of particular techniques illustrated by numerous small examples, and grouped by musical elements (pitch, rhythm, timbre, and so on). This approach provides extremely helpful insights into the consistent features of the composer’s technique across the various stylistic ‘shifts’ of his career, and into the relative influence of Eastern and Western aesthetics on his language. However, it leads to a rather skewed perspective: musical examples are rarely more than a few bars long, and the focus throughout is on the mechanics of composition, with traditional analytical biases very much in evidence (for example, pitch-organisational techniques get 148 pages of discussion, whilst rhythm, tempo and spatial layout together get only 23). Treatment of ‘macroscopic form’ is restricted to the manner in

⁶ A selection of translated writings can be found in Takemitsu, 1995; among these, ‘Dream and Number’ represents a rare and much-discussed example of detailed compositional theory (Takemitsu, 1987; for commentary, see Burt, 1998: 53–4, and Koozin, 2002: 31–2),

⁷ Burt’s thesis was rewritten as a monograph, *The Music of Tōru Takemitsu* (2001), whose analytical detail is rearranged into a more conventional chronological sequence; the general analytical tenor remains the same, however. The thesis is used as the primary version here, in spite of its earlier date (and more esoteric structure), because of the additional detail it contains.

which blocks of material are laid out or repeated; there is no discussion of form as a dynamic, developing process, even though perceptual ambiguity at large scales – shifting expectations, surprising recurrences – is a defining quality of Takemitsu's late music in listening. Fundamentally, the decision to break pieces apart for the purposes of technical comparison removes any opportunity to explore the formal and expressive coherence of individual works; in that sense Burt's study is symptomatic of a wider tendency in discussions of new music to overvalue compositional technique – 'composition-in-reverse', as Charles Wilson puts it in his review of the subsequent book (Wilson, 2004b: 131) – and to overlook the qualities which are tied more clearly to the experience of listening.

A more nuanced approach is found in the work of Timothy Koozin, whose various writings on the composer show an ability to combine detailed analysis with broader considerations of aesthetic and heard effect. In Koozin (1991), he traces the organisation of pitch in a number of solo piano pieces, noting the use of the octatonic scale III⁸ as a referential base from which the details of each piece emerge through a series of linear relationships and 'deviations'. His analysis provides useful insights into the striking harmonic consistency which is evident in Takemitsu's output even at its most structurally complex; the idea of structural 'levels' within his music, and the contrast these provide with the fragmentation and seeming structural 'flatness' of it in performance, both recur in my analysis, although his particular analytical apparatus (with its rather uncomfortable Schenkerian implications) does not. Elsewhere (in Koozin, 1993) he explores the connections between particular recurrent sonic gestures in Takemitsu and broader concerns of his aesthetic, in particular the quasi-spiritual function assumed by silence; his study thus presents a striking new angle on the composer's fascination with Messiaen. Finally (in Koozin, 2002), he expands this to present a more general exploration of the importance of specific gestures to his musical language; in his late compositions, Koozin argues, individual melodic figures serve as nexus points for the combination of harmony, timbre and metaphor which generates the expressive character of a particular work.

⁸ This terminology is taken from Pieter van den Toorn's analyses of Stravinsky; see Koozin, 1991: 125 and van den Toorn, 1983: 50.

Perhaps rather surprisingly, however, it is two composers (in a pair of tribute-articles from 1987) who most effectively defy the general tendency to talk about Takemitsu primarily in terms of compositional technique, rather than heard effect. Bernard Rands quickly disclaims any attempt at structured analysis, instead presenting a broader reflection upon Takemitsu's aesthetic as filtered through his writings; although the result is inevitably rather general, his intuitive approach does lead to significant insights about the role of melody, and the importance of pacing to the effect of his pieces (Rands, 1987: 478–9). Roger Reynolds's article is more detailed, although equally wide-ranging in its reflections; notably, he includes a refreshingly direct description of *The Dorian Horizon* (1966) from the perspective of a listener. This approach produces a number of insights into Takemitsu's control of formal development (and, again, the importance of pacing) which could not have been gained through score analysis or discussion of 'compositional technique' alone (Reynolds, 1987: 481–3).

György Kurtág

Of the four 'case study' composers discussed here, György Kurtág (b. 1926) is the most well-represented in the academic literature; more than this, the body of writing which exists on him is striking both in its breadth of reference and in its willingness to engage with the issues of expression, listener experience, and tradition with which this thesis is concerned. This stems partly, perhaps, from the especially knotty qualities of much of the composer's music: his own multi-referentiality, openness to reworking and highly compressed aesthetic all provide ample opportunity for broader philosophical and interdisciplinary discussion. The overlap with literature has been particularly well-studied: Alan E. Williams (1999) traces the brevity and fragmentary quality of Kurtág's style back to the laconicism of Hungarian language and poetry, and the tradition of the aphorism in particular; elsewhere (with Michael Kunkel), he explores the overlap with Samuel Beckett, another artist famous for his terseness (Kunkel and Williams, 2001). Meanwhile, Zoltán Farkas (2002) traces the composer's relationship with the late German Romantic poet Friedrich Hölderlin, by following the development of a distinctive chromatic motive through a number of Kurtág's compositions which are associated with the writer; my own study takes his work further by considering the possible deeper expressive significance of this connection, in particular as it appears in

the 1994 orchestral work *ΣΤΗΛΗ*. The composer's several song-cycles provide a particularly fruitful source for comparisons with literature, of course: Arnold Whittall's discussion (2001a) of the settings of German (Kafka, Hölderlin again and Lichtenberg) provides the basis for a rich exploration of the importance of fragmented, momentary, non-organic structures to the composer's aesthetic – his songs are frequently 'anti-Lieder' and his cycles 'anti-cycles', subverting convention not simply for their own sake but as a means to a particular depth and immediacy of expression. Several of these themes feed directly into the account presented here.

Even within discussions of Kurtág's purely instrumental music, there remains a similar breadth of reference. Some work focusses on the details of compositional technique: Sylvia Grmela (2002) carefully categorises the different varieties of quotation and repetition in the string quartet *Officium breve*, whilst Benjamin Frandzel (2002) considers its handling of pitch-structure and formal process; the brief case-study below attempts to combine insights from their approaches with a broader consideration of the aural and expressive dimensions of this piece. Simone Hohmaier (2001) explores related issues from a different perspective, using sketch-study to examine the strikingly sophisticated 'play' with pre-existent material (here, Bartók and Wagner) which is such a feature of Kurtág's compositional process; her discussion develops even further the composer's complex and unusual relationship with the broader Western tradition and the 'burden' of the historical canon – an issue which comes to the fore in the discussion of the expressive dimension of *ΣΤΗΛΗ* (and its first movement in particular). Other writers trace patterns across the composer's recent output more generally. One recurrent subject is its 'latent theatricality'; Williams discusses this both in his work with Kunkel and in a subsequent publication (2002), whilst Richard Toop (2001) traces the shift from chamber music to larger, spatially-distributed forces which culminated in *ΣΤΗΛΗ*.

Toop is not the only scholar to write about *ΣΤΗΛΗ* in particular; its unusual status within the composer's output (the first wholly orchestral work in 40 years, arising from a high-profile residency with the Berlin Philharmonic), and perhaps the especially provocative way in which it handles a very 'public' genre, have brought it to relatively widespread attention.⁹ Most discussions of the piece are relatively superficial

⁹ See, for example, Griffiths, 2010: 370; Ross, 2009: 580–1; Adlington, 2003: 315; Beckles Willson, 1998: 19–21.

introductions, or commentaries on the circumstances of its composition, but a few offer deeper analytical considerations: Bernd Asmus (2000), in particular, presents a comprehensive overview, combining broad formal analysis with some interpretative considerations rooted in the use of quotation and the repetition of material. The analysis presented within this thesis builds on Asmus's observations, but attempts to expand them with reference to the wider literature on Kurtág's aesthetic, and the concepts of layered expressivity developed within this thesis; the intention is to 'flesh out' the literature surrounding this work with an account which both considers the moment-to-moment experience of the music in more detail (at some points, such as the opening, even tracing its shifting effect on a beat-by-beat basis), and attempts to address the strikingly powerful effect of the piece as a whole, drawing on the multi-layered resonances of its title and the circumstances surrounding its composition.

Experience and aestheticism: a conceptual framework

As Fred Maus has noted, many seemingly intractable scholarly disagreements reduce ultimately to disagreements about vocabulary, rather than about the ideas which underpin such vocabulary; for example, two scholars might come to blows about the status of a particular work as 'organic' simply because one conceives of organicism in all-encompassing, Schenkerian terms, and the other primarily as a helpful metaphor for particular means of treating motivic materials. What both parties need to recognise (Maus reminds us) is that each word they write is 'the tip of a conceptual iceberg', dependent for its precise signification upon a particular conceptual framework which is pervasive but usually covert (1999: 186). Put another way, any claim to present any kind of knowledge or truth about music is necessarily underpinned by a particular epistemology as to 'what sort of truth it aspires to' (Cook, 2002: 78). The open acknowledgement of this underpinning will not stop a writer's claims from being called into question, but it will ensure that critique is directed at the real arena of dispute (the framework itself), rather than being sucked into circular and irresolvable word-games. The task here, then, is to identify (and to some extent defend) the basic conceptual framework of this thesis, since it is this framework that provides the foundation for the particular redefinitions of coherence which the analyses developed here present.

Simply put, the emphasis from the outset is on *experience*, and the viewpoint chosen is above all *aesthetic*. These works are chosen above all because of their aural effectiveness rather than any because of any necessary sense of integration or unity found within the score or by a particular analytical method (hence ‘experience’); moreover, the kind of effectiveness described here is one which can most easily be described as ‘aesthetic’ – the sense of satisfaction (both emotional and intellectual) which emerges in listening cannot easily be equated with any particular logical, political or physical aspect of the music or its experiential context, but is nonetheless seen as of value in itself. Descriptions of particular concrete features thus arise (as Chapter 1 described) out of a desire to conceptualise and contextualise – and thus to deepen – the experience, not to reduce it to a particular defining feature or process. Asserting the primacy of aesthetic experience as a methodological decision is, of course, very different from asserting its ontological *autonomy*: saying that we can make useful comments upon musical experience from an aesthetic perspective is very different from saying that this perspective is the *only* ‘real’ one, or even that it stands intrinsically detached from other perspectives.¹⁰ There is a barrier here that needs to be broken down: the aesthetic is not treated here as a separate ‘sphere’ of reality, to be examined in isolation (and preferably through detached, reverent contemplation), but rather as something which is co-dependent upon, and interacts with, all other aspects of experience. Giles Hooper identifies an unhelpful tendency in the musicological writing of the last three decades to conflate a variety of highly divergent strands of philosophical thought about the nature of art, such that the concentration upon formal features seen within much analysis is presumed tantamount to epistemological objectivism, rather than purely as a pragmatic decision to fix attention on one aspect of a very complex whole (Hooper, 2004: 313–15).

Hooper argues that the idea of the ‘music itself’ (a concept which is associated here with aesthetic experience, since both describe a perspective which is taken as available to the senses and intrinsically meaningful) is ‘a necessary presupposition of our ability to communicate with one another about some kind of common musical

¹⁰ Indeed, even at the height of the modernist project the principle of aesthetic autonomy was adopted by many as a deliberate ideological position, rather than arising purely out of naive or malignant transcendentalism; for a provocative recent defence of this concept against charges of elitism, see Scherzinger, 2004b.

object' (Hooper, 2004: 320). Whilst this single-mindedness can often morph into an unhelpful focus upon methods of composition, or insular theoretical systems (as was seen in the literature overview above), it can also serve as a useful way of allowing those elements which are unique about a musical performance to enter the wider critical discourse upon music, without immediately being crowded out by other concerns. The ostracism of an aesthetic mode of perception as being somehow antithetical to critical discourse ignores the pragmatic character which is intrinsic to all theoretical writing; as Cook notes, 'the validity of any theory is underwritten not by its objective truth [...] but by intersubjectivity', by the degree to which readers themselves can verify the conclusions presented, and even the most supposedly scientific (or critically-aware) music-theoretical writing 'derives its performative effect from a multiplicity of models of truth or justifiability' (Cook, 2002: 98–9, 102).

For this reason, desire to fix attention upon the 'common musical object', and to value the unique experiential possibilities which it provides, certainly need not go hand in hand with a rejection or denial of all the breadth of context which stands behind it; indeed, part of the process of 'redefining coherence' (as will become clear throughout this thesis) is the recognition that insights from areas other than the 'purely musical' can in fact serve to *enrich* aesthetic experience. Accordingly, any discussion of music from an aesthetic perspective will necessarily draw in other features and viewpoints as it progresses, in so much as they interlock with the aesthetic dimension. (For example, the account of Kurtág's orchestral work *ΣΤΗΛΗ* which forms the final case-study draws on the thought of the late German Romantic poet Friedrich Hölderlin as a way of reflecting on the particular kind of grief-stricken nostalgia with which the piece is so charged; the multi-layered connections with Hölderlin found in other works by the composer offer an additional context for this juxtaposition.) What matters here is the methodological decision to make the aesthetic dimension of experience the primary source of attention, so that it provides the index to these more free-ranging integrations.

An 'aesthetic turn'?

This decision reflects a more widespread trend (what might be called an 'aesthetic turn') in recent writing about contemporary Western art music. This is particularly notable within studies of the archetypal 'modernist' repertoire of the Second Viennese School

and mid-twentieth-century Darmstadt; a number of new studies of this repertoire have attempted to move beyond the highly technical and ideological nature of the composers' own commentaries, and the often polemical responses which they have inspired,¹¹ drawing attention instead back to the particular heard experience which the music offers.¹² Their readings emphasise its aesthetic force – what Hooper calls its 'brute materiality' (Hooper, 2004: 319) – as a prime aspect of its effectiveness and artistic significance.¹³ Often, this also allows discussions to open up far beyond the close structuralist considerations of 'conventional' contemporary analysis: for example, Paul Attinello (2004) reads the expressive qualities of 1950s high modernism as a continuation of the exploration of the 'violent ineffable' seen within Rilke, undercutting the analytical tendency to focus upon its structural 'unity', and allowing its fractured angularity to come to the fore as a powerful aesthetic achievement.

This reflects a larger shift in thinking about the relationship between aesthetic writing and broader issues of ideology and control. Martin Scherzinger argues that reflections on the aesthetic dimension of music, far from serving to isolate it from its surrounding contexts, can actually have potent political and cultural ramifications, if they are allowed to '[open] doors of imaginative possibility' rather than being used purely to reinforce pre-existent theoretical norms (Scherzinger, 2004a: 272). The desire to explore the possibilities of this kind of approach in relation to more recent repertoire, where the problem is less the polemical statements of composers themselves and more the absence of detailed musical attention of any sort, is one of the primary motivations for this thesis.

In a volume dedicated to explorations of the experiential dimension of modernist music, Arved Ashby invokes Susan Sontag's famous essay 'Against Interpretation' as a

¹¹ For examples of this more polemical kind of writing, see, for example, McClary, 1989; Subotnik, 1987; and Taruskin, 1996b.

¹² Other instances of this approach within music can be found within dell'Antonio, ed., 2004, and Ashby, ed., 2004.

¹³ This 'aesthetic turn' has parallels with a wider tendency (sometimes referred to as the 'new aestheticism') which has become prominent from the mid-1980s onwards within philosophy and writing on the arts; this approach seeks to reopen a space for the discussion of 'aesthetic' values and modes of discourse within the wider intellectual sphere (with a particular focus on issues of politics and ethics, which are predominantly absent from my own approach). For a relatively distanced overview, see Shrimpton, 2005; more detailed (and ideologically committed) discussions can be found in Beech and Roberts, eds., 2002, and Joughin and Malpas, eds., 2003. For a broader discussion of the ethical dimension of musicological writing, see Morris, 2004.

model for the kind of listening which (he claims) contemporary repertoire so desperately needs: her call for an ‘erotics of art’ in place of over-reaching interpretative edifices raises the possibility of ‘a pristine listening, a hearing unencumbered by ideology’ (Ashby, 2004b: 40). Although such optimism is perhaps rather utopian, Sontag’s ideal remains starkly relevant: in one sense it prioritises exactly the direct, involved sensory experience which constitutes the aesthetic mode of perception (although Ashby does not use that term). And if it is accepted that such a mode of perception is by no means wholly separate from its context or from questions of interpretation or meaning, but that there is in fact a two-way interaction between all these aspects, then it becomes clear that a focus upon the aesthetic is primarily a question of balance, of where the interpretative buck stops; Sontag herself argues this, targeting her attack not against the practice of interpretation in general, but against the particular kind which ‘excavates’ beneath the experience of an artwork in search of contradictory sub-texts (1966: 6), and in so doing allows the method of reading to dominate the artwork being read – each theory ‘challeng[ing] art to justify itself’ (1966: 3). An aesthetic focus means perhaps simply to reverse this pattern of dominance, to allow interpretation to proceed from and return to particular experiences of art, with the verbal account aiming not to uncover something hidden and counter-intuitive, but rather to expose the subtleties of what is already there and provide a fitting complement to them, like the act of polishing and setting a gemstone.

In addition to her opposition of hermeneutic and erotic approaches, Sontag invokes a second polarity which has particular relevance for the methodology adopted here. Alongside her plea for a return to writing that ‘reveal[s] the sensuous surface of art without mucking about in it’ (Ashby’s ‘pristine listening’), she calls also for a renewal of formal analysis, especially of the type ‘that dissolves considerations of content into those of form’ (Sontag, 1966: 12–13). Once again, there is a delicate balance here to be preserved. Sontag’s essay is meant to provoke, not develop; so she does not trace the ramifications of these two positions, the formalist and the sensory. Within music, the difficulties of both are clear, however. A wholly formalist approach very easily leads to its own kind of ‘interpretation’, wherein the necessarily metaphorical vocabulary of musical analysis ends up reducing musical works to particular schematic representations, so that their surface – the very thing Sontag wants to emphasise! – is

virtually erased. Yet analysis which purely ‘reveals the sensuous surface of art’ is all but impossible, since all our vocabulary for writing about music is dependent on metaphors which are helplessly contingent, and thus necessarily impose interpretations of their own; once these are stripped away we are left only with cold, hard (and decidedly un-erotic) perceptual psychology, or silence.¹⁴ Attinello’s focus on the expressive qualities of Boulez, Barraqué and Maxwell Davies – the ‘sensuous surface’ of their music – thus largely ignores the formal processes which lie behind this surface; on the flip side of Sontag’s coin, Scherzinger’s argument for the return of the aesthetic sees this primarily as a return of formal analysis – albeit of a particularly open, imaginative kind. Both these aspects are important, of course, but even more crucial is the acknowledgement that they are tightly intertwined, and that an account of musical ‘coherence’ cannot afford to ignore either of them.

Coherent rites: Kurtág’s *Officium breve in memoriam Andreæ Szervánszky*

György Kurtág’s 1989 string quartet *Officium breve in memoriam Andreæ Szervánszky* (henceforth *Officium breve*) is a clear example of a composition which ‘redefines’ coherence performatively. The striking and visceral (and certainly ‘coherent’) impact of this work arises, in the moment of performance, out of the interlock of sonority, gesture, ‘intra-musical’ process, external reference and the audience’s own expectations; whilst discussion of any of these elements on their own might lead to a somewhat underwhelming assessment, the way in which they ‘coalesce’ in the end-result is difficult to ignore. The ‘sensuous surface’ of this quartet is certainly not straightforward: as with most of the composer’s more extended compositions, *Officium breve* is structured as a cycle of fragments of varying lengths (several lasting only a few bars), which run the gamut from open-string and quasi-tonal material (Ex. 2.1a)) to highly dissonant textural interplay (Ex. 2.1b)) and more extended passages of serial polyphony.

¹⁴ Of course, all human cognition is in itself necessarily dependent on metaphor; for the classic text on this, see Lakoff and Johnson, 1980.

a)

Sostenuto, quasi giusto

Musical score for the opening of movement III. The score is in 7/5/7 time and features a piano part with a dynamic marking of *p, dolce, espr.* The music is characterized by a slow, sustained tempo.

b)

quasi doppio più lento, calando al fine

Musical score for the close of movement IV. The score is in 4/4 time and features a piano part with a dynamic marking of *pppp sub. molto sul tasto, appena sentito*. The music is characterized by a slow, sustained tempo and includes triplets and a section marked [II].

Ex. 2.1: Kurtág, *Officium breve*: a) opening of movement III;
b) close of movement IV

The unity of the score as a free-standing, autonomous work is called into question, too, by Kurtág's fondness for quotation, re-use and extra-musical 'play', which is very much in evidence here: several of the movements revolve around different arrangements and variations of Webern's Cantata op. 31, whilst the coda offers a direct quotation from a 1948 string Serenade by the quartet's posthumous dedicatee, Endre Szervánszky (Kurtág, 1989: 20). Where no clear external allusion or homage is involved, self-reference takes over: six of the movements are simple transcriptions of earlier pieces by Kurtág (Grmela, 2002: 375), including two variants on a 'Hommage á Szervánszky' from the third book of *Játékok* (Walsh, 1989a: 526). The 'patchwork of mental associations

and musical references' which seems to be the basis of Kurtág's compositional thinking here (Walsh, 1989a: 526) might easily come across as somewhat overwrought, particularly as far as questions of experiential coherence are concerned.

Yet its overall effect remains strikingly singular: the whole *does* add up, and feel 'right', in a way which cannot be accounted for by material correspondences alone. The title – describing a 'brief office' of remembrance, with clear liturgical connotations – offers the most obvious expressive basis for this concentrated unity of effect. *Officium breve* is a stark ritual whose non-linear character is essential to its force. An intensely personal and deliberately wordless requiem, in its 'microcosmic' character (Grmela, 2002: 376) the quartet tiptoes around the borders of something which the shaped gestures and material cohesion of conventional expressivity cannot reach. Further examination of the sources which Kurtág incorporates reaffirms this aspect: all of the pre-existent movements incorporated here stem from pieces which were themselves written *in memoriam*, and the Webern cantata carries strong mystical connotations both in its text and in its status as the composer's final work. Memorial and the liturgy of mourning thus become defining qualities for the expressive dimension of this piece.

Moreover, an awareness of this dimension also inflects an experience of the 'musical' content of the quartet. The idea that this piece is a ritual – seeded by the title and steadily reinforced by the way material is presented – gives the whole a conceptual coherence which can transcend surface differences: the timeless, compressed gestures of a rite invite attention not in terms of surface homogeneity or long-range development, but in terms of the particularity of individual moments. Stark juxtapositions are central to the emotional language of ritual, particularly where acts of memorial are concerned; while the formal architecture of a requiem is characterised by careful, solemn repetition and a timeless, detached quality, these are structures designed to give space and rhythm to unruly and agonising outpourings of grief. Kurtág's handling of this ritual is certainly far from the overt emotional directness found so frequently in more traditional musical requiem settings (or, indeed, in portions of *ΣΤΗΛΗ*, discussed in Chapter 9), but there is nonetheless an intensity here in the presentation of material – either as quiet, stuttering, inexact repetitions of small gestures (see Ex. 2.1a)), or as stark chromatic clusters and interlocking micropolyphony (Ex. 2.2 and see Ex. 2.1b) and 2.5c)) – which renders it frequently uncomfortable; it does not allow listeners to keep their distance. Like the

clipped phrases of a funeral ceremony, there is a sense here that every gesture carries weight.

The image shows a musical score for Kurtág's *Officium breve*, specifically the opening of movement IV. The score is written for a quartet and consists of five measures. Above the staves, the time signatures are 3/8, 4/8, 3/8, 2/8, and 3/8. The key signature is one sharp (F#). The dynamics are marked as *ff* (fortissimo) in the first and third measures, *pppp* (pianississimo) in the second measure, and *più ff* (more fortissimo) in the fourth and fifth measures. The instruction "(con slancio)" is written above the fifth measure. The score features chromatic clusters and a variety of note values, including eighth and sixteenth notes. A *ff* marking with a hairpin symbol is placed below the first measure, and another *ff* marking with a hairpin symbol is placed below the fifth measure. The word "(sempre ff)" is written below the first measure.

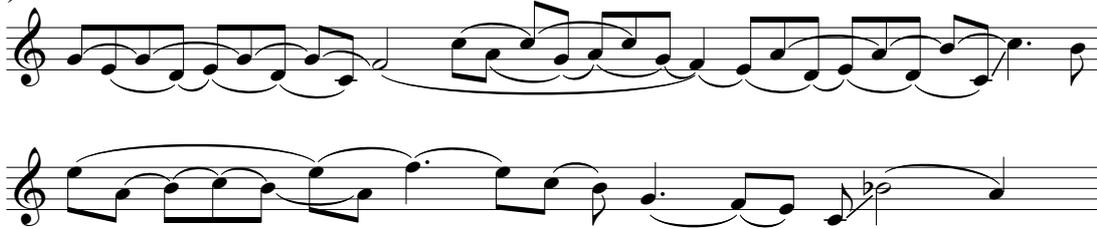
Ex. 2.2: Kurtág, *Officium breve*: chromatic clusters, opening of movement IV

This expressive layer provides a frame for the other formal and motivic processes of the quartet, creating a context within which they can have a coherent effect. If its 16 movements seem somewhat overwhelming from a structural perspective, in performance the divisions between them are far less clearly-defined – the first three movements largely blend together as one, for example, as do the two (VIII and IX) which directly precede the Webern. Rather, it is the presence of abrupt juxtapositions in harmony, texture or playing technique which expose the underlying structure: the gamut of extended techniques and dynamic contrasts employed in movements V and VI (or to a lesser degree in VII), for example, compared to the more conventional string timbres of the Webern quotation which forms X, or the rich *cantabile* unison of XI in contrast to the stuttering, muted sonorities of III or XII.

These audible contrasts provide an experiential basis for the ritualistic qualities of the piece, and as such also serve to set up a listening environment characterised by attention to immediate sonority and no expectation of longer-range development. But there is a further, less obvious strand to the aural coherence of the quartet, one that arises from motivic connections whose universality act as a counterbalance to the sectional divisions of timbre and gesture. Although the external connections of influence and memorial provided perhaps the immediate compositional basis for the

inclusion of passages from Webern and Szervánsky, the particular quotations chosen are far from arbitrary in their pitch-material: Benjamin Frandzel notes that both are characterised by a particularly single-minded exploration of neighbour-note motions, diatonic in the Szervánsky and chromatic in the Webern (Ex. 2.3), and figures based upon these motions recur throughout the quartet (Frandzel, 2002: 385).

a)



b)



**Ex. 2.3: neighbour-note connections in Szervánsky and Webern quotations
(from Frandzel, 2002: 385)**

Moreover, the harmonic contrast between the different quotations becomes in itself another defining structural process. Frandzel argues that the quartet traces a dramatic trajectory that shifts gradually from the Szervánsky-derived diatonicism of the opening movements to the saturated chromaticism of the Webern (which remains unique in the quartet for its wholly even distribution of the chromatic scale), before returning gradually to Szervánsky-based material ready for the closing quotation (Frandzel, 2002: 386–393). Alongside this arch-like handling of harmonic environment, there is another, more cumulative process of pitch-centricity at work here: Sylvia Grmela notes the frequent use of the pitch C as a pedal or an axis of symmetry throughout the quartet (Grmela, 2002: 379–80), something which is most evident in movement XI, during which it appears no fewer than ninety-six times, often in unison (Ex. 2.4).



quasi f, dolce, sonore, tenuto

**Ex. 2.4: Kurtág, *Officium breve*, opening of movement XI
(reduction of near-unison texture)**

In this context, the affective power of the final Szervánsky quotation is very clear: it combines powerful external connotations of memory, nostalgia, and loss with the intervallic and gestural connections of the Webern quotes, as well as with the C pitch-focus which has been alluded to throughout; indeed, the specific transpositions which Kurtág uses mean that its opening melody could even be heard, at pitch, as a kind of diatonic reworking of the Webern material (Ex. 2.5a) and b)), whilst the C-G fifth of the opening triad sounds in its immediate context as a direct gesture of resolution, the final stage of the forceful process of chromatic expansion which closed the previous movement (Ex. 2.5c)).

The image contains three musical excerpts labeled a), b), and c).
 a) A single staff in treble clef with time signatures 2/2, 3/2, and 4/2. It starts with a whole note G2, followed by a half note G2, and then a quarter note G2. The dynamic is *pp*.
 b) A four-staff score in 3/4 time. The top two staves are in treble clef, and the bottom two are in bass clef. The dynamic is *pp* and *espr.*.
 c) A four-staff score in 6/4 time. The top two staves are in treble clef, and the bottom two are in bass clef. The dynamic is *molto*. It features chromatic expansion and a C-G fifth interval.

Ex. 2.5: Kurtág, *Officium breve*, connections in final Szervánsky quotation:
 a) opening viola line of Webern quotation, movement X;
 b) opening of movement XV;
 c) chromatic expansion, close of movement XIV

It would be perhaps too straightforward to read this movement as a kind of ‘arrival’ which can only be understood after the fact, such that the quartet is interpreted as a kind of ‘reversed theme and variations’ (Grmela, 2002: 378); this would simply take a relatively straightforward conception of coherence in terms of material transformation and recurrence, and apply it retrospectively to the remembered experience of the whole. In fact, the movement is more like a sudden ‘coalescence’: it draws all the various

strands of the quartet together for a moment, but it is not in itself responsible for the overall coherence; this arises just as much from all the other strands described above – from the ritual character of the title to the global connections of interval and pitch-content – as it does from any conventional sense of ‘resolution’. Indeed, as with most of the many ‘points of coalescence’ seen within this thesis, the closure which the final movement offers is only temporary: the quotation trails off unfinished at its close, its expressive impact thus remaining poised between grief and comfort, memory and hope. A precise, singular and ultimately highly coherent aesthetic experience thus arises out of the careful layering and interweaving of different elements – motivic shapes, recurrent sonorities and gestures, tonal allusions and ‘extra-musical’ connotations – into a delicate, precarious, highly concentrated whole.

Disguised continuity, hidden variation: Adès's *Arcadiana*

The questions of aesthetic focus and experiential coherence which were raised in the preceding chapter become especially relevant in the context of Thomas Adès's 1994 string quartet *Arcadiana*. As with Kurtág's earlier *Officium breve*, the formal structure of this work poses considerable challenges to any straightforward understanding of aural coherence. On the surface, it appears above all an exercise in fracture and disruption, with even its highest-level sectional divisions generating a highly ambiguous set of relationships. It is made of seven short movements which play continuously; as the composer explains in his programme note, the odd-numbered movements all follow on directly from one another, such that they would form an unbroken musical thread if played consecutively (Adès, 1994: iv). This thread is deliberately destroyed, however, by the insertion of additional movements between these connections, each one sharply distinct and singular in mood. As if this level of separation weren't enough, every movement has its own set of external references and associations, reflected cryptically in its title: these range from the operatic (Mozart's *Magic Flute*), to the visual (paintings by Poussin and Watteau), to the mythical (Lethe, the river of forgetfulness in Greek legend). At one level, then, *Arcadiana* is set up as an exercise in fragmented discontinuity – it is hard to see how a listener could trace any supposed underlying 'thread' within the quartet amid such fracture. From this surface reading, disruption would be expected to dominate the aural experience.

In some respects this is true; the overall shape of *Arcadiana* certainly cannot be seen as 'cleanly' structured and continuous in the way a Mozart quartet (or even a more 'public' work such as *Asyla*) could be. Yet such fracture does not necessarily result in the kind of static conception of time and teleology seen in some approaches to discontinuity; in fact, the tacit association of these two features itself stems from an overly linear understanding of formal development. Within a highly organic conception of formal growth, teleology becomes so deeply entwined with gradual, linear change

that it is difficult to see how it could continue in its absence; musical energy is always seen as being rooted in the cumulative 'unfolding' of a particular 'kernel' of material.

What *Arcadiana* shows, however, is that formal rifts generate their own energy and tension, and that this can be harnessed very productively within a work which is itself still driven by some sense of teleology. In this reading, then, the focus shifts back a layer: a sense of overall shape and direction stems not from the momentary tensions and releases of specific 'unfolding' materials, but rather from the larger breaks and redirections of formal rupture. Adès's description of the music conjures up a 'thread' which the listener can never directly hear, and yet this 'thread' is itself something of an illusion. The continuity it projects is possible only *because* it is interrupted; the wide fluctuations of energy levels from movement to movement simply would not sustain any direct succession between its elements. The combination of the 'linear' expectations generated by the programme note and the overt 'dovetailing' of the even movements, once the listener's memory has begun to play a role, is that disruptive elements begin to be reinterpreted as *interruptions* within this imaginary continuity.

Seeing the quartet as an example of 'mosaic form', rather than 'fragment form', helps to clarify this shift in perspective. Close to, there is little to distinguish the two viewpoints: both forms are assembled from small, apparently disconnected sections, and individual mosaic 'tiles' do indeed seem static and undirected when viewed alone – simple flat blocks of colour. It is when the form is viewed from a distance, as a whole, that the distinction becomes clear: 'mosaic form' succeeds in uniting these disparate elements into a single, coherent expression, making use of – even at times working *against* – the divisions between individual fragments in the process. Just as the wider viewpoint of a visual 'mosaic' allows context to affect the interpretation of the role played by each individual element, so here memory proves increasingly crucial to a listener's understanding of the form as its moment-to-moment detail becomes less continuous.

This mosaic perspective also provides a way of rehabilitating *Arcadiana* within the context of Adès's broader output. The majority of the composer's work makes heavy use of pre-existing formal structures: for example, *Asyla*, the Violin Concerto and the Piano Quintet stand as 'commentaries' on symphonic, concerto and sonata form respectively, superficially following their divisions and trajectories whilst subtly

reshaping them to fit a more ambiguous harmonic and gestural language (Venn, 2005: 73). In this way, Adès's engagement with the past extends from the myriad quotations and technical allusions in his work, to encompass its larger shapes and structures too; his own approach to composition finds coherence in part through a revitalisation of features which are already ingrained within recognisable tradition. Read simply as an exercise in disjunct fragmentation, *Arcadiana* cannot be understood within this trend¹ – the profusion of references which litter its surface would have to stand alone, distinct from any wider stylistic context. Yet an approach which sees the quartet as a mosaic of interconnected miniatures also situates it as a kind of 'commentary' on another established formal archetype, the Romantic fragment-cycle. In particular, the constant tension between the autonomy of individual movements and their contribution to a wider arc points to the particular class of works which Jonathan Dunsby describes as 'multi-pieces', typified in the late piano miniatures of Brahms (Dunsby, 1983). In this way, *Arcadiana* is just as concerned with reworking and rethinking the implications of 'conventional' structures as the compositions which surround it.

Furthermore, the expressive source and referential 'content' of *Arcadiana* places the formal issues it raises – of the relationship between moment and whole, the connection between disruption and musical energy, and the role of memory – within a context where their ramifications are extremely powerful. *Arcadiana* is fundamentally a memorial work;² here, as so often, this personal stimulus opens out into a far wider exploration of death and memory which interacts with the unusual formal techniques used within the quartet. This interplay is twofold. On the one hand, an awareness of the underlying external impetus reveals a shared ground of associations which binds the titles of each movement together, at least to some degree: although the breadth of external allusion is very wide, all the references are connected in some way with the concept of a fleeting paradise – or, as Adès puts it, each 'evokes [...] ideas of the idyll, vanishing, vanished or imaginary' (Adès, 1994: iv).

On the other hand, the notion of *Arcadiana* as a conscious act of remembrance allows its use of 'mosaic form' to take on a significance beyond mere innovation *per se*.

¹ *Living Toys* (1993), another work from the period, is likewise unusually intricate in its construction (at least as intricate as *Arcadiana*); the presence of a clear, 'public' programme serves to mitigate this difficulty in performance, however.

² The score notes that the quartet is written 'For Ruth Breakwell (1913–1993)'.

The title of the quartet is a reference to Arcadia, the pastoral paradise of Classical thought, and its complex form allows the quartet to serve as a subtle chain of variations around this idea – a cycle of ‘little paradises’, ‘frozen moments’, each brief and transient but presented with Proustian immediacy. In this sense, memory is seen to be central to both external and internal understandings of *Arcadiana* – where its allusive content uses reference to evoke experiences of nostalgia, making the past present and timeless through hazy recollections. Formally speaking, memory is vital in allowing the listener to find a way through the complexity and disruption of the music itself – and even to hear it as something deceptively connected and directed, without ever negating the immediate quality of individual fragments themselves. Memory even provides a means to integrate the central oppositions of the work as it reaches its point of greatest ‘resolution’, the movement ‘O Albion’: here, a quite specific external recollection from Elgar’s *Enigma Variations* provides a focus within which the rifts in both internal and external material can be somehow ‘healed’, at least for a moment.

The multi-layered manner in which form is handled within *Arcadiana* creates a similarly rich and complex listening experience. Indeed, at one level this ambiguity is part of the point: by always remaining delicately poised between the stasis of the moment and the wider trajectory of a more directed form, we are allowed to construct our own understanding of the shape of the quartet in a way which a more conventional layout would not permit. At the same time, however, it is helpful to isolate some stages within the listener’s perception of the role played by discontinuity within the form, since this allows a clearer awareness of the way that this rupture eventually emerges as part of the underlying teleology of the work. Three levels at which a listener might hear this fragmentation have already been described: it might be understood as overt *disruption* (with no mitigating continuity), the *interruption* of an underlying thread, or even as something which is to some degree *integrated*. These provide a useful set of perspectives: each finds some justification both within the wider structure of the quartet and at the very local level of material and gesture, yet there does seem to be some progression over the course of *Arcadiana* towards the latter viewpoint, as the role of memory increases. Indeed, this last perspective – that of integration – is even responsible for a felt sense of ‘resolution’ at the close of the composition.

A high-level diagrammatic overview (Ex. 3.1) gives some idea of the kinds of tensions which this analysis will seek to explore. The diagram lays movements out with sizes relative to their notated durations, which gives some sense of the proportional relationships between them; tempi, metre and overall dynamic range are also marked,³ as well as specific external references and loose pitch foci for movements where appropriate. The layout also contrasts the natural analytical tendency to view a seven-part form like this as an arch (especially given Adès's comments on the importance of the central movement) with the odd-even 'thread'-based division given in the programme note. Finally, a number of the most important connections of material between movements are highlighted, based on four of the principal motivic figures which appear within the work.

A diagram like this serves to highlight the tensions created by the high-level structure of *Arcadiana*. The disparities between individual movements are very clear here, not just at the level of association but also of tempo, dynamic, metre and pitch-focus; yet they are matched by a strikingly broad overlap of material across the whole composition. There is also a clear dynamic contour, rising to its peak in 'Et...' and then falling sharply for the rest of the piece; after this point the music rises above *piano* only for a section of 'L'embarquement' which explicitly quotes an earlier movement. This centre-dominated shape reinforces an arch-form perspective, yet this raises problems too; proportionally speaking, it is clear that the final three movements are 'too long' in physical terms to balance with the first three – there is a clear process of temporal expansion which happens after 'Et...', but how this affects the listening experience remains an open question. The tension between unity and heterogeneity, the way in which perceived time can shift and perceived balance be created, the handling of dramatic energy and momentum – all these issues are paramount for an understanding of the effect of this quartet.

³ For some movements (such as 'Et...'), this range represents a directed dynamic progression, represented by a single arrow; for others ('Das klinget...', for example), there is no such order, and so two arrows are used.

Dramatic peak
fff → *ppp*
 2/4, ♩ = 30

<p><i>ppp</i> ↔ <i>p</i> (last bar <i>ff</i>) 6/8, ♩ = 76</p> <p>‘Venezia notturna’ <i>Barcarolle</i></p> <p>C# focus</p>	<p>imaginary ‘thread’ etc.</p> <p><i>fff</i> ↔ <i>ppp</i> 4/4, ♩ = 70</p> <p>E major (inaudible until end) ‘Magic Flute’ (Mozart)</p>	<p><i>p</i> → <i>fff</i> 6/8, ♩ = 44</p> <p>‘Auf dem Wasser zu singen’ <i>Schubert song</i></p> <p>A/E♭ → D/A♭</p>	<p><i>ppp</i> → <i>ppppp</i> (but trio reaches <i>f</i>) 3/4, ♩ = 156</p> <p>‘L’embarquement’</p> <p>Db major (E♭ focus in trio) Watteau painting (‘The Embarkation to Cythera’)</p>	<p><i>ppp</i> → <i>ppppp</i> 3/4, ♩ = 156</p> <p>‘Et... (tango mortale)’</p> <p>C focus at important points Poussin painting (‘I [death] am even in Arcady’)</p>	<p><i>pp</i> → <i>ppp</i> 4/4, ♩ = 28</p> <p>Emotional peak</p> <p>‘O Albion’ E♭ major (very clear) ‘Nimrod’ (Elgar)</p>	<p><i>p</i> → <i>ppppp</i> 3/4, ♩ = 35</p> <p>‘Lethe’</p> <p>no clear pitch focus (very loose A?) Greek myth (the river of forgetfulness)</p>
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Principal pitch materials:

‘Farewell’ motif (unpredictable 2-part line which crosses constantly)
 etc...

‘Cycles’ of fifths, in (0, 1, 5, 8) sets (on any note) – arrangement of hexatonic scale

Expanding-interval sequence (can be ‘folded’ in upon itself)

Melodic lines based around fifths and seconds, with decoration

Loose dramatic contour:

Ex. 3.1: Arcadiana, structural overview

Disruption: fracture and variation

On the surface, the most natural way for a listener to approach *Arcadiana* is to give up any hopes of continuity or teleology: just as its *smorgasbord* of external references seems to emphasise the individuality of particular movements, so the musical material at every level (from inter-movement divisions down to the specifics of texture and gesture) is filled with disjunction and sudden, startling *voltes-faces*. Such an impression is hard to square, however, with the high level of unity among the materials of the piece, and, indeed, in the shared 'Arcadian' associations of its movement titles; the direct experience of the work as 'disconnected' to an important degree forces a confrontation between 'unity' and 'heterogeneity' as opposite poles.

As with all the principal issues which the quartet raises, however, this confrontation is not restricted to the formal level; it also finds its way into the low-level detail of individual movements. Adès often creates a mismatch here between the deeper, unifying harmonic and motivic processes which underpin a particular movement, and the way in which they are articulated on the surface as texture, timbre and gesture. Every movement within *Arcadiana* derives at least part of its harmonic shape from the tension between fifths and tritones; yet the surface which results varies widely, and in many cases effectively serves to conceal such underlying connections.

Glitter, dazzlement and distraction: 'Das klinget so herrlich...'

The second movement, 'Das klinget so herrlich, das klinget so schön' ('That sounds so glorious, that sounds so beautiful'), is a case in point. Its basic materials are very simple: it consists of a repeating fifths-based melody, appearing first on the cello, then on the two violins. It is accompanied by a sequence of rather formulaic tonal harmonies which sound curiously familiar when isolated (Ex. 3.2). For all their individual simplicity and consonance, however, these two layers can, of course, never 'cohere' in a tonal sense; the melodic line is far too harmonically adventurous to co-exist with such a conventional harmonic progression.

a)

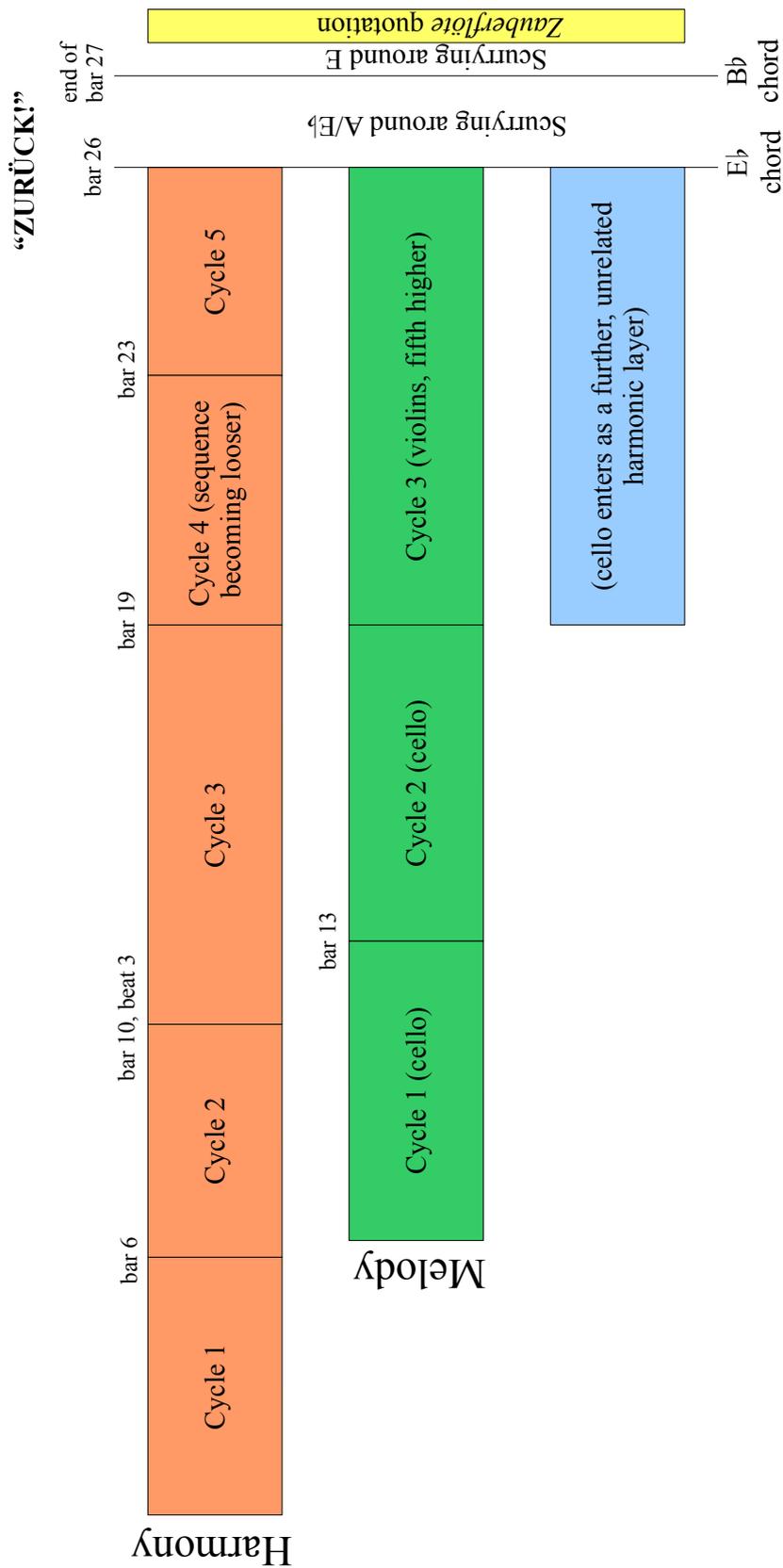
The image shows two musical staves. Staff (a) contains a cello melody in treble clef, starting in 3/4 time and changing to 2/4. It features various dynamics: *ff* *dolcissimo, lirico* and *molto rubato*. The melody includes several five-note runs and a triplet. Staff (b) shows an abstracted harmonic sequence in treble clef, consisting of a series of chords with changing voicings and accidentals.

b)

**Ex. 3.2: ‘Das klinget...’: a) cello melody, bars 6–12;
b) abstracted harmonic sequence**

The presentation of the materials makes this disjunction all too clear: the melodic and harmonic sequences progress at different paces, only very occasionally lining up into any common harmony (Ex. 3.3 shows an overview of the structure here).

In addition, the accompaniment is presented throughout in abrasive *con bravura* harmonics, high above the melody and often approached by harmonic *glissandi* or quasi-Classical scalic figuration. As such, we hear them not in functional tonal terms but simply as an omnipresent, hyperactive clatter of triadic sonorities – a sense of disorder which the highly unpredictable dynamic (ranging from *ppp* to *fff* with no warning) can only exacerbate. The result is that over the course of the movement, this surface disruption ‘seeps into’ the underlying material: once the two violins take over the melody at bar 19, both their line and the underlying harmonies become increasingly disoriented. The climax comes at bar 26, when the D# resolution which closes the progression is transformed suddenly into a ferocious E \flat major chord, marked “ZURUCK!” (‘BACK!’). The movement closes on a series of tritonal oppositions culminating in a bizarre, disconcerting quotation of the Queen of the Night’s aria ‘Der Hölle Rache’ from Mozart’s *The Magic Flute* (Ex. 3.4); such an intrusion sets the seal on a movement built around ever-increasing disruption.



Ex. 3.3: ‘Das klinget...’, overview of layers

Ex. 3.4: a) ‘Queen of the Night’ quotation in final bar of ‘Das klinget’;
b) sounding pitches of harmonics

Yet this surface presentation is not arbitrary. The use of clichéd tonal sequences (in stratospheric registers) and direct quotation serves to build up a musical ‘character’ which matches the implications of the title: ‘Das klinget so herrlich, das klinget so schön’ is a reference to the magical bells of the *The Magic Flute*, themselves agents of distraction within the opera. Indeed, in one sense the final quotation serves as a kind of musical *dénouement*: although its distorted presentation renders such connections largely inaudible, the underlying harmonic sequence for the movement is in fact a direct variant on the accompaniment to the Queen of the Night’s aria (Ex. 3.5; see Ex. 3.2b)), something which could only really be guessed with the help of the title and the final, overt reference. This movement is a ringing, *nobilmente* chaos which serves to ‘distract’ the listener through the sheer fascination of its sonorities; in order to do so it must disguise the underlying order of its material.

Ex. 3.5: Mozart, *Die Zauberflöte*, reduction of ‘Der Hölle Rache’, bars 24–9

Variation and the aesthetic of the momentary

This opens up a particularly helpful perspective on *Arcadiana*: an understanding of the quartet as based upon variation principles (and, in particular, upon the notion of the ‘characteristic variation’) offers a solution to the impasse between unity and heterogeneity. Variation is a means of exploring individuality *within* unity; it allows specific, often quite extreme treatments of underlying material to be explored without the coherence of the material itself being compromised. Unlike many other conventional formal principles, there is neither any implicit sense of teleology, as in sonata form, nor even of a rondo-like ‘departure and return’;⁴ as such, momentary detail is much less likely to be subsumed into the workings of a larger process, and the listener is left with more freedom as to how they listen.

The absence of any principal ‘theme’ makes it difficult to see this quartet as a set of variations in the traditional sense, of course; yet here, too, there is an important precedent. The incorporation of the principle of the ‘character piece’ into variation form – something seen as early as 1677, in the variation-sets of Alessandro Poglietti (Sisman, 2001: online) – shifts the focus from thematic alteration to the projection of a particular ‘character’; the result is that the theme may no longer be seen as the most important aspect of the composition – although it is omnipresent, it need not be wholly audible. Elgar’s *Enigma Variations* took this to its limit (and inspired generations of amateur detectives) by positing a ‘hidden theme’ which lay behind the whole set; the link with this specific work is an important one for *Arcadiana*.

An overview of the quartet demonstrates a wealth of low-level connections between its various movements; these shared materials serve as sources for the creation of very distinct individual ‘characters’ within each movement – often reliant on localised disruption for their effect, as ‘Das klinget...’ showed. These characters are themselves connected, via the implications of their titles, by the ‘hidden’ theme of the fleeting paradise, however, ‘as if each were a different view through a kaleidoscope’ (Griffiths, 2007: 4); the interaction of multiple ‘perspectives’ on material

⁴ Both teleology and ‘departure and return’ can, of course, be added to a variation-set by the use respectively of a directed process, such as increasing rhythmic complexity or a repeat of the basic theme at the close of the set. In some cases (the late Beethoven piano sonatas, for example) this allows variation to serve as an alternative to these other forms – adopting their sense of direction to the extent that the overall structure required it, but presenting it with a strikingly different quality.

which is never explicitly present serves to build up a picture which is surprisingly powerful, and all the more so because it refuses to reduce its subject-matter (which, after all, is outside the bounds of explicit representation) to the established tropes of musical lament or consolation.

Grit, grime and decay: 'Et...'

The fourth movement of the quartet, 'Et...', offers a further perspective on this 'hidden theme'; it also serves to illustrate the way in which disruption operates within the 'middle-ground', between the high-level ruptures of whole movements and the low-level *bizzarrie* of 'Das klinget...'. This movement has its fair share of localised ferocity, of course: a shuffling but rhythmic⁵ 'deathly tango', it stands, in Adès's expressive phraseology, at the 'dead centre' of the work (Adès, 1994: iv); and in character it is almost grotesquely physical, its presence here akin to the inclusion of a grinning skull within a *memento mori* painting. The opening bars make clear the violent mood which is predominant here (Ex. 3.6).

Ex. 3.6: 'Et...', opening bars

⁵ This is the literal meaning of the initial marking '*strascicato ma molto ritmico*'.

Again, this character is connected to its external reference: the title is a (partially eroded) allusion to Poussin's painting *Et in Arcadia ego* (1637–8), which depicts shepherds in the Classical paradise of Arcadia discovering a tomb; it is thus a hint towards the inevitability of death and decay even within the most idyllic setting. This movement thus stands as the point within *Arcadiana* where the reality of death intrudes most obviously upon the evocations of 'Arcadia'. It is also the point at which unity and disintegration are most clearly at odds: the tango makes reference to material from a number of other movements (most obviously the falling figures of 'Auf dem Wasser zu singen' at bars 10–11 and 22, and the viola part from 'Venezia notturna' from bar 33 onwards), and yet the fundamental listening experience is one of disintegration and destruction. This is reflected not only within localised gesture, which incorporates almost every timbral technique used within the quartet (from extremes of *sul pont.* and *sul tasto* to Bartók *pizzicati*, exaggerated *glissandi* and a wealth of different articulations); this movement also sees a coherent deeper structure overwhelmed by disruptive forces, in a much clearer and more consistent way than within 'Das klinget...'. 'Et...' is effectively a passacaglia; the chromatically-descending contour of its ground-bass (Ex. 3.7) is perhaps the most overt reference found within *Arcadiana* to the usual conventions of musical lament.



Ex. 3.7: 'Et...', ground-bass

The passacaglia structure is followed quite carefully throughout the movement, yet Adès's control of texture, phrasing and register nonetheless serves to project an array of different moods on top of it – such that, for the listener, whatever unity it provides is not obvious but rather achieved 'in spite of' the musical surface. Ex. 3.8 shows the chief characteristics of the different cycles here: there are a number of points where some aspect of the ground-bass is strikingly 'undercut' by other elements of the music.

Cycle	Bars	Features
1	1–9	Opposition of vertical (violins and cello) and horizontal (viola)
2	10–17	Violent quasi-unison <i>glissando</i> melody in violins (inc. heavily distorted expanding-interval motif)
3	18–27	Complex cross-rhythms pushing across barlines (two 3/16 bars inserted)
4	28–34	Viola solo continues cross-rhythms (as well as vertical/horizontal opposition)
5	35–40	Multiple falling lines in independent rhythmic patterns around viola solo (which is rising)
6	41–47	Sudden drop in dynamics (overlaps with previous cycle by a bar), shift to harmonics
7	48–59	Restrained texture, rising line in bass, opposition of violins and viola/cello

Ex. 3.8: 'Et...', summary of passacaglia cycles

In bars 23–27, for example, one small motivic figure is repeated obsessively and arrhythmically until it overrides the underlying triple metre, bringing about the first rhythmic unison of the movement and forcing the insertion of a 3/16 bar before the next cycle (Ex. 3.9). Similarly, textural disunity among the different instruments is used as a disruptive force: from the opening, where the viola is set against the chords of the rest of the quartet, this continues until the climax of bars 35–37 (Ex. 3.10), where each part is locked into its own independent polyrhythmic layer (Roeder, 2006: 137–8).

The total separation of this climax marks an extreme point, and it actually destroys the clear divisions of the underlying ground-bass, since it takes two cycles to complete; the gradual, vertiginous descent which it provokes (all instruments moving slowly down from harmonics to the open C of the cello) brings the level of aggression down to a restrained, but still menacing *pianissimo*. The final cycle reverses the downward inflection of the bass and brings more explicit tritonal oppositions into play in the opposed C and G \flat of cello and viola. There is thus a larger shape to 'Et...', which sees an already fearsome opening taken to its most extreme point before coming to a more subdued close; yet each cycle within the form appears more as an isolated

Disguised continuity, hidden variation: Adès's Arcadiana

Ex. 3.9: 'Et...', bars 23-7

Ex. 3.10: 'Et...', bar 35

'episode' than as part of a connected sequence of events, and any sense of teleology only arises after the fact.

This movement thus presents a kind of localised version of the 'variation principle' underpinning the whole quartet: unifying techniques allow each fragmentary moment to be understood as part of a wider whole, but are never overtly present to the extent that they 'intrude' upon the individuality of the moments themselves. This is reflected in the particular formal structure Adès chooses for the movement: *passacaglia* is itself a highly stylised type of variation-sequence, and the high level of sectional control and separation this stylisation allows is crucial to the effect here.

Fog, wandering and arrival: 'Venezia notturna'

One further perspective on the affective power of discontinuity within *Arcadiana* comes from the opening fragment, 'Venezia notturna'. Here, disruption is not manifest as surface chaos or violence, nor does it overtly undermine a regular underlying structure or progression; the movement never rises above *mp* until its final bar, and there is no sequence here which repeats with sufficient regularity to be distorted. Discontinuity arises instead out of a wandering textural and motivic incoherence: the impression created is one of gently layered, rather unfocussed events and gestures – a wash of sounds overlapping in the night air, as the title ('Venice at night') suggests.

Here again, this effect is carefully controlled. The opening is striking for its harmonic and textural unity, treating the quartet as one 'super-instrument' in order to traverse a single sequence of fifths (Ex. 3.11); thereafter, however, both forms of unity are jettisoned. Instead, there is a tripartite division of instruments (violins, viola, cello) and a corresponding partitioning of material: the viola continues to circle aimlessly around the fifth sonorities of the opening in *barcarolle* rhythm, the cello insists upon a conflicting C minor triad, and the violins alternate between loosely whole-tone material, full of tritones, and a sequence of expanding intervals, never establishing any sense of metre (Ex. 3.12). Yet over the course of the movement, a number of points of 'arrival' are established: the instruments coalesce, almost in spite of themselves, at a number of important moments, climaxing with a perfect cadence onto a minor-9th sonority on G (a tritone removed from the opening C#) at bar 23. Ex. 3.13 summarises the way these points are distributed within the form.

Disguised continuity, hidden variation: Adès's Arcadiana

a) *sul tasto* *ritardando* - - - - -

ppp *pizz.* *arco, sul tasto* *p espr.* *p* *ppp* *ppp* *(gliss. legg.)* *p* *ppp*

Ex. 3.11: 'Venezia notturna', opening

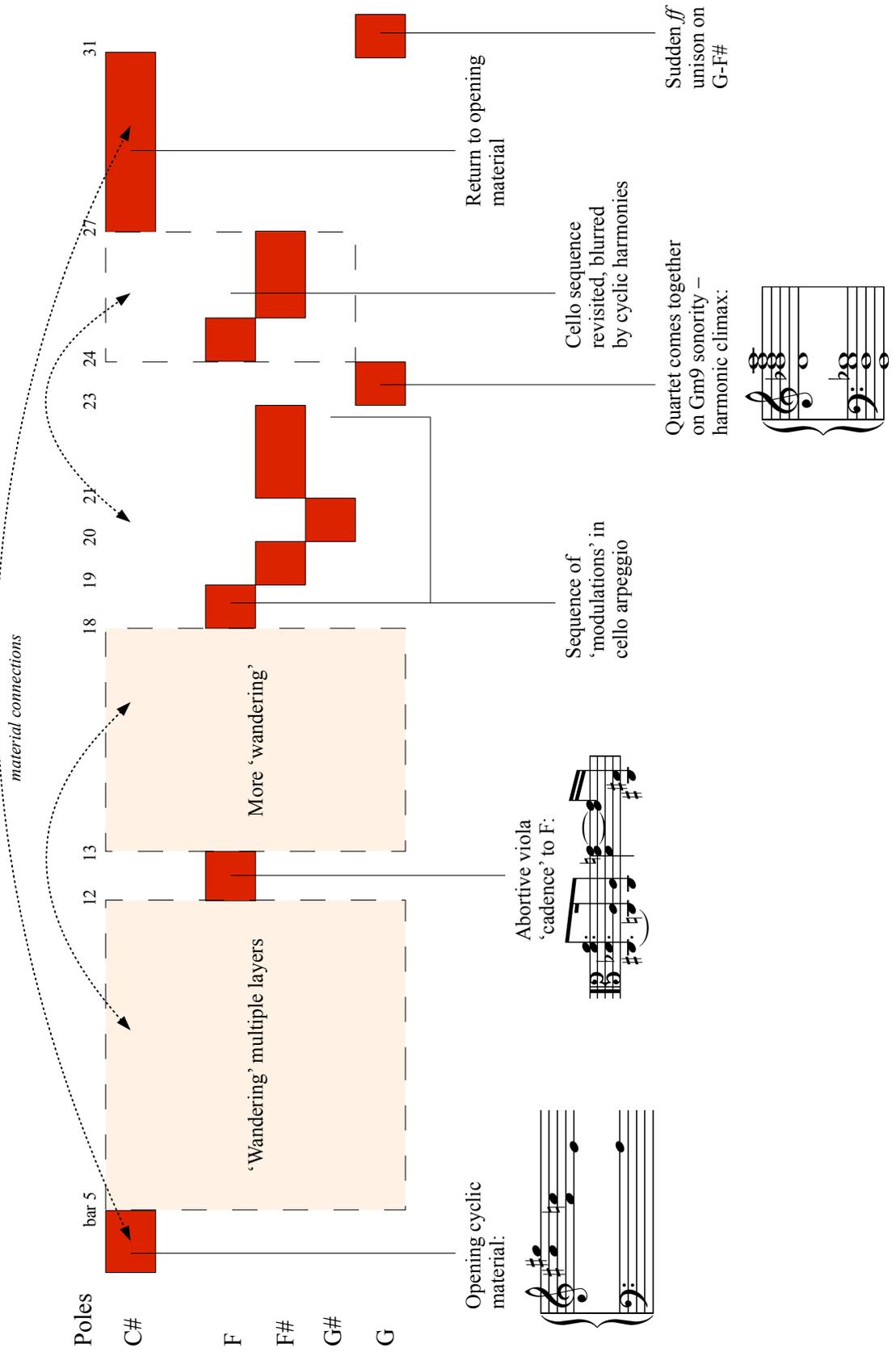
a)

bisbigl., senza vib.

b) *ppp* *bisbigl., senza vib.* *ppp*

c) bars 6-9 bars 12-15 bar 17 bar 19 d)

Ex. 3.12: 'Venezia notturna', a) viola part, bars 5–9; b) expanding-interval sequence in violins, bars 10–11; c) alternating violin lines and d) quasi-whole-tone mode



Ex. 3.13: 'Venezia notturna', aural 'landmarks'

This contrast of incoherence and unexpected arrivals serves a dual purpose. Motivic 'wandering' is used as a way to introduce much of the main material for the quartet without having to connect it together in any way: the opening chordal pattern and the expanding-interval shapes of bars 10–11, in particular, recur constantly throughout the work, and the loosely whole-tone violin figure of bars 7 onwards reappears later on as well; in addition, bars 10–11 introduce (almost inaudibly) a falling 'lament' figure which will later recur exactly at pitch within the ground-bass of 'Et...' (Ex. 3.14). The disconnected layering of instruments, likewise, highlights texture as a central structural device within *Arcadiana*; it thus prepares the listener for the various manipulations of later movements, and makes the climactic textural 'coalescence' of 'O Albion' all the more striking.

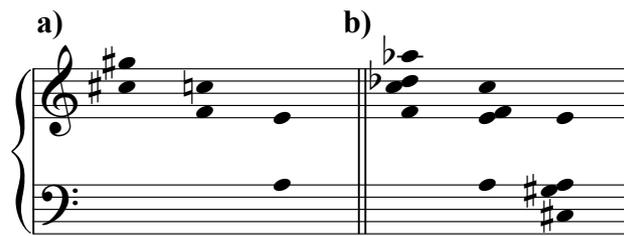


Ex. 3.14: 'Venezia notturna', 'lament' bass in cello, bars 10–11

Perhaps more importantly, however, the way in which wandering and arrival interact has significant expressive results. In spite of the sense of incoherence which 'Venezia notturna' initially creates, in the end it does follow a tritonal trajectory, and articulates it with clearly audible 'landmarks', usually tonal chords and fragments of familiar musics (such as the barcarolle figuration in the viola, or the shred of waltz-like material heard at bar 23). Yet it is crucial to the character of the movement, and to the aesthetic of the quartet as a whole, that each of these points of contact between layers should appear suddenly and unexpectedly, like objects looming out of night-time fog; at no point is the ephemeral character compromised by any revelation of the formal scaffolding which holds it together.

This feature, again, is present as much in local material as in larger shapes: the sequence which opens the work (and which proves a recurrent source of harmonic material throughout) is particularly striking for its non-linear articulation of arrival. The sequence is based upon a traversal of the hexatonic collection by means of semitonally-

displaced fifths (Roeder, 2006: 127);⁶ although it is cyclically 'closed', in effect it is both magical and disconcerting, traversing a sequence of quasi-tonal sonorities by unprepared, unexpected jumps (Ex. 3.15) – and thus mirroring on a low level the oblique motions of the movement as a whole. At the lowest as well as the highest level, Adès uses carefully-handled disruption to combine the 'vanishing, vanished or imaginary' qualities of a fragmentary treatment with the long-range control needed to give an extended musical composition communicative and affective force.



**Ex. 3.15: 'Venezia notturna', opening: a) basic fifth-sequences;
b) quasi-tonal layering of harmonies**

Interruption: linearity and energy

An examination of the way in which discontinuity is articulated within *Arcadiana* thus reveals that its presence does not preclude the establishment of moments of 'arrival', and hence of some teleological sense. Rather, it forces these moments to be approached by 'sidesteps' rather than directly, appearing as if out of nowhere and leaving the listener with the job of situating them within their own understanding of the work. Adès's own programme note makes this task more explicit by presenting an imagined thread which encompasses all the even-numbered movements of the quartet, and which the odd-numbered movements interrupt; this then suggests a listening strategy based upon 'broken linearity' rather than upon outright disconnection.

⁶ Recent work by Richard Cohn has explored the widespread use made of this collection within the late Romantic repertoire, as a means of constructing wholly non-functional but nonetheless still comprehensible modulatory patterns; the 'uncanny' quality which he associates with it there is wholly apposite to its appearances here, too (see for example Cohn, 2004: 286).

Inter-movement connections and growing momentum

A broad overview of the immediate connections between movements (Ex. 3.16) gives a synoptic perspective on the situation as Adès describes it. On paper, the connections of pitch and gesture across the 'thread' are certainly relatively clear, but there are two significant problems which arise with it in the context of listening. The first, of course, is that this 'thread' represents a considerable abstraction from performance. None of these connections can be directly 'perceived' as such; if they are to be noted at all, they have to be reconstructed entirely within a listener's memory – which leaves the idea of a primarily *experiential* coherence resting on rather shaky ground here. The second problem is less obvious, but it offers a helpful viewpoint on the first: it has to do with the control of tension across the whole work. All the 'imaginary' connections between these movements are in reality rather superficial: pitch, register and motivic material certainly coincide, but elements such as tempo, overall dynamic or (above all) dramatic 'energy' are often strikingly mismatched between adjacent segments of the 'thread'. For example, it is very difficult to see how the aggression with which 'Auf dem Wasser' closes could lead straightforwardly into the stylish, controlled grace of 'L'embarquement'.

At the same time, however, there is a gradual shift in the relationship between these 'thread' movements and their 'interruptions'. Initially, the separation between the two types of movement is abrupt and complete: 'Venezia notturna' ends on a sudden, brusque *fortissimo* 'coalescence' which is wholly alien to the rest of the movement, and is separated from 'Das klinget...' by pitch-complementation techniques as well (neither movement shares any focal pitches in common). Likewise, the G[♯] which opens 'Auf dem Wasser' ensures a break with the E major sonorities it follows. These separations gradually diminish over the course of the quartet, however; there are clear voice-leading links between the A[♭] dominant sonority which closes 'Auf dem Wasser' and the opening of 'Et...', and the prominent C-G[♭] tritone within the chord also looks ahead to the focal opposition of the following movement. From this point on, there is a striking *rapprochement* between adjacent movements in material terms, however strongly their 'characters' may differ; by the end of the work, there is a sense that even the 'interruptions' to the thread are somehow part of the thread itself.

Disguised continuity, hidden variation: Adès's Arcadiana

The image displays a musical score for Adès's *Arcadiana*, illustrating inter-movement connections between movements I through VII. The score is organized into two columns of systems. Solid arrows indicate 'real' continuity, while dotted arrows indicate thread-based continuity.

- Movement I:** *Venezia notturna*. It begins with a *ppp* dynamic and concludes with an *attacca* marking.
- Movement II:** *Das Klinget so herrlich...*. It begins with a *ppp* dynamic and concludes with an *mf* dynamic.
- Movement III:** *Auf dem Wasser zu singen*. It begins with a *pizz.* dynamic and concludes with a *poco f* dynamic.
- Movement IV:** *Et... (tango mortale)*. It begins with a *pizz.* dynamic and concludes with a *mf* dynamic.
- Movement V:** *L'Embarquement*. It begins with a *ppp* dynamic and concludes with a *ppp* dynamic.
- Movement VI:** *O Albion*. It begins with a *pp* dynamic and concludes with a *pp* dynamic.
- Movement VII:** *Leche*. It begins with a *ppp* dynamic and concludes with an *etc.* marking.

Connections are shown as follows:

- Real Continuity (Solid Arrows):**
 - From the end of Movement I to the beginning of Movement II.
 - From the end of Movement II to the beginning of Movement III.
 - From the end of Movement III to the beginning of Movement IV.
 - From the end of Movement IV to the beginning of Movement V.
 - From the end of Movement V to the beginning of Movement VI.
 - From the end of Movement VI to the beginning of Movement VII.
- Thread-based Continuity (Dotted Arrows):**
 - From the end of Movement I to the beginning of Movement III.
 - From the end of Movement II to the beginning of Movement IV.
 - From the end of Movement III to the beginning of Movement V.
 - From the end of Movement IV to the beginning of Movement VI.
 - From the end of Movement V to the beginning of Movement VII.

Ex. 3.16: Inter-movement connections in *Arcadiana* (solid arrows represent 'real' continuity, dotted arrows thread-based continuity)

What this demonstrates is that in fact the larger trajectory of the quartet is not 'broken', but rather *reinforced*, by the insertion of contrasting movements; there is a symbiotic relationship here between the 'thread' and the 'interruptions'. The tensions introduced by large-scale discontinuity create an increasing sense of momentum which the more continuous movements can exploit. It is this underlying formal conflict which provides the motor behind the developing dramatic arc. Again, these large-scale issues find close parallels in the musical detail: a number of passages within the quartet exploit the tension between sectional division and linear continuity as a means of altering the large-scale energy of the form. In particular, the two central thread-movements offer contrasting perspectives on this relationship: each sets up an opposition between linearity and discontinuity, but the 'victor' in each is different.

Continuities and developments: 'Auf dem Wasser zu singen'

The third movement, 'Auf dem Wasser zu singen' ('To be sung upon the water'), presents perhaps the clearest and most audible process of the whole quartet: it follows the gradual 'destruction' of a clear and singular thread by means of its own superabundant multiplication.⁷ The basic material for this process, the expanding-interval sequence first introduced early in 'Venezia notturna', is itself both linear and cumulative in intervallic and rhythmic terms (Ex. 3.17); once again, larger-scale patterns emerge as a consequence of small-scale material.

(regularly increasing pitch intervals)

① pizz. singhiozzando

50 40 30 16 16 18

(regularly decreasing durations)

((nearly) equal durations)

Ex. 3.17: 'Auf dem Wasser zu singen', intervallic and rhythmic direction in initial motif (from Roeder, 2006: 126)

⁷ This trajectory – unity which multiplies until it self-destructs – is strikingly similar to that found within the third movement of Ligeti's Violin Concerto; see Chapter 8.

The result is a movement which appears almost as a kind of 'development section' within the larger form of *Arcadiana*; disconnected layers and textures are replaced by single-minded growth and building intensity. The most striking surface manifestation of this new cohesion is seen within Adès's handling of instrumental texture: here, the whole quartet is treated as a single, unified 'super-instrument' throughout, with lines of material shared freely between instruments according to range – a feature which is unique to this movement.

This is not to say that the underlying processes are straightforward. The expanding-interval motive which opens the movement is quickly joined by a second, a fifths-based 'chorale'; from the outset, these two types of material ('horizontal' and 'vertical') are connected by a web of interactions, convergences and delayed echoes which all influence the gradual accumulation of intensity. John Roeder uses this opening as core material for his own discussion of the concept of 'co-operating continuities' within Adès's music – that is, the idea that the composer's language distorts our perception of time primarily through the varied intersections of multiple 'streams' of continuity (rhythmic, pitch-based or gestural) at any given point (Roeder, 2006: 122). Roeder's observations are very helpful in highlighting the way in which listener perception is balanced between linearity and separation here, such that a single, continuous 'path' can be heard to 'branch' and multiply over the whole movement.

The presence of such continuous elements certainly does not mean a return to conventional linearity, however. 'Auf dem Wasser...' is as striking as 'Venezia notturna' for its moments of sudden, unexpected tonal 'arrival'; and it uses these as a means of controlling the underlying multiplicative process, not as spurs to further development. Latent within the 'chorale' material is the recurring hexatonic fifth-sequence (Ex. 3.18); and there is a marked tendency, at points where the texture reaches climactic saturation, for some configuration of this sequence to come to the fore – often pausing or redirecting the 'threads' of the expanding-interval motif as it does so. This is most obvious in bars 20–22, around the centre of the movement, where three layered cycles of this sequence 'coalesce' onto a B-F# sonority, allowing a return to the opening material a third lower (the E♭-D opening *glissando* heard as startlingly effective 'major-minor' triad).

Ex. 3.18: ‘Auf dem Wasser...’, chorale line in violin 1, bars 4–8, with fifth-sequence from ‘Venezia notturna’ marked

What is most notable here, however, is that the ‘intrusion’ of such larger-scale discontinuity upon low-level growth serves to *restrain* a powerful sense of underlying linearity; the ‘thread’ is now definitely in the ascendancy, to the extent that its dynamism becomes potentially destructive. This is seen very clearly in the final section, where the pitch-contour and rhythmic compression of the expanding-interval motif is allowed to dictate the shape of the section as a whole. A brief return to the opening material at bar 30 begins a long-term notated *accelerando* in this motif; by bar 35 the texture has transformed into a cascade of aggressively overlapping descents, which eventually ‘stratify’ into a simple, tritonal D-A \flat opposition.⁸ The fiercely open-ended nature of the coda forces a linear connection with the movement that follows, and thus begins the rehabilitation of interruption with thread which will characterise the rest of the work.

Dancing divisions: ‘L’embarquement’

Viewed in large-scale structural terms, the mounting aggression of ‘Auf dem Wasser zu singen’ can be seen as a response to the surfeit of disruptive energy introduced by ‘Das klinget...’; it is clear that the ‘interrupting’ movements play a crucial role in the control of energy across the quartet. ‘L’embarquement’ occupies a quite different position within the structure, since it directly follows ‘Et...’, the overall dramatic climax; as such, it is perhaps unsurprising that its perspective on linearity and discontinuity is very different. In fact, it takes up a small fragment of material from ‘Auf dem Wasser’ – the very opening three notes – and places it in a context as developmentally static and

⁸ This is itself prefigured within the expanding-interval material, which is based (as Roeder notes) on two tritonally-opposed triads (Roeder, 2006: 126).

tranquil as the earlier movement was cumulative and forceful. There is little of the overpowering tension of 'Auf dem Wasser'; rather, 'L'embarquement' acts as 'light relief' after the fury of 'Et...'. Nonetheless, some conflict between forces of architectural separation and those of linear continuity is still maintained.

The image shows a musical score for the opening of 'L'embarquement'. It consists of four staves of music in 3/4 time. Each staff begins with the instruction 'con sord. arco' and 'ppp poss. sempre'. The music is characterized by a repeating block homophony. The first staff has a melodic line with a flat sign. The second and third staves have similar melodic lines. The fourth staff has a bass line. The score includes various musical notations such as slurs, accents, and dynamic markings. The key signature is one flat (B-flat major or D-flat minor).

Ex. 3.19: 'L'embarquement', opening

Here, structural clarity is present at every level: the material itself is reduced to simple, repeating block homophony (Ex. 3.19); there is heavy use of tonal material (predominantly in D \flat major, along with occasional forays into G, its tritonal opposite, such as bars 11–18); and overall form is in fact that of a ternary scherzo with trio – a format which is itself conventionally built upon nested layers of repetition. These block structures are mutually reinforcing: the clear separation of different sections and elements means that any brief tension in one aspect (a passage of heavy dissonance, for example, or of metrical irregularity) is unable to 'escalate' in the way it could in 'Auf dem Wasser', because other features are acting to reassert stability. The predominant impression is of feather-light, delicate composure; sheer velocity is here a greater source of energy than textural or harmonic tension.

Once again, this approach is also bound up with the character being evoked: the title refers to the Watteau painting *L'embarquement pour Cythère*, depicting a group preparing to sail to a mythical island idyll. The atmosphere, as with almost any Watteau

painting, is one of *fêtes galantes* sophistication; in response, the movement treads a careful balance between calm, diversionary detachment and a certain refined expressive quality, taking on an almost Classical approach to form, texture and material as it does so.

This does not mean that it is devoid of progression or even of conflict, however. 'Et...', for all its aggression, certainly did not serve as a 'resolution' of the basic issues of the work; and 'L'embarquement' still contains a great deal of tension – it simply handles it in a different way to 'Auf dem Wasser'. From the beginning, metrical displacement is used as a means of articulating energy – this is very visible in the playful shifts of the opening three-note motif, but it becomes far more intrusive in bars 32–48. The hexatonic fifth-sequence of 'Venezia notturna' also comes into play as a means of destabilising the harmony from bar 20 onwards (Ex. 3.20).



**Ex. 3.20: 'L'embarquement', bars 20–22,
hexatonic sequence (boxed) in harmony**

The trio focusses principally on these fifth-sequences, supplementing them from bar 60 with a 'ghostly' recollection of the two-violin melody from 'Venezia notturna'; in this context, such shadowed recognition carries a disturbing weight, matched by the timbres of the 'shadowy', low-tessitura viola solo and *flautando* upper strings, and marks this section as the apex of tension within the movement.

Although the ternary structure does ensure a return to normality, it is nonetheless 'tainted' after this section. The triplet patterns and shadowed harmonies of the trio continue into the second scherzo (which begins at bar 72 with a repeat of the central 'lyrical' passage); the viola has to fight to make its melody heard. When the principal material returns, it is transformed, incorporating this triplet figuration as a final, startling

rhythmic disruption; as this texture reels apart in the coda, disintegrating into harmonics and open strings, we are left with a low violin G – a tritone removed from the D \flat focus of much of the movement.

In spite of its careful block separations and controlled harmonic clarity, then, 'L'embarquement' ends by ceding to the same thread of transformative tension which ran through 'Auf dem Wasser'. The gradient is reversed this time, though: instead of hearing a single line gradually pulling itself apart (interruption overcoming linearity), we witness the progressive 'erosion' of a series of clearly-demarked blocks of material by means of metrical, textural and referential 'blurring' – linearity overcoming interruption. The drastic change of pace is certainly an important element here: extreme velocity becomes a (partial) substitute for the deeper inner tensions of earlier movements.

Integration: mosaic and 'resolution'

Once the various disparate elements of the quartet can be perceived as standing in relationship to a single imagined thread (whether as part of it or as interruptions), it becomes clear that the interaction between these two types of material is a crucial element within the energy of the quartet at its various stages, to the extent that it is possible to trace the progression of one in relation to the other. This 'mosaic' perspective – 'stepping back' from the form to view individual elements in their wider contexts – allows the work (at last) to be heard as a cohesive whole, rather than as an exercise in disruption or an evocation of damaged linearity.

Memory, memorial and the moment

Within this approach, a very subtle balance is achieved between momentary detail and long-term form. Each movement, whilst retaining its own distinct 'character', also reflects – and contributes to – the wider sense of tension or release which is present at any point within the larger shape of the quartet. The far more detached and understated manner in which 'L'embarquement' handles the material from 'Auf dem Wasser' reflects the changes brought about by the fury and textural saturation of 'Et...'; there is a sense by this stage, then, that interruption is as crucial a thread to a listener's

understanding of the work, and that both form part of a larger arc which *can* be heard as developmental in some sense. This effect, as with the sense of 'broken continuity', is highly dependent on memory: later movements return to motives and gestures which were introduced at earlier stages, using them as 'stable points' against which the listener can perceive the far-reaching changes of energy and momentum. The temptation to read this in wholly linear, goal-oriented terms must be resisted, however. In fact, *Arcadiana* presents almost an inverse to the ideals of 'developing variation': here, progression is driven not by cumulative alterations in basic materials, but by the composer's manipulation of formal boundaries and of the harmonic and expressive contexts in which these materials (which remain relatively stable) are found. Nonetheless, over the course of the quartet this still results in a coherent and audible process of transformation, one which forces the listener to take a far more active role in 'constructing' the form than a conventionally motive-driven composition might.

At this stage, it would be tempting to draw parallels with the more 'teleological' tradition of Western classicism (particularly that of Beethoven), where material is deliberately presented with 'defects' that provide the impetus for an extended period of development which 'solves' and re-integrates them. Perhaps this, too, could be reversed: the 'defects' could be located within the form rather than the material of the quartet, and the 'solution' likewise sought within some kind of final 'reconciliation' between previously-opposed formal segments. There is a danger of oversimplification here, however: the fractured quality of this quartet is never 'resolved' in so explicit a manner. Indeed, this sense of fragmentation is crucial to the immediate effect of *Arcadiana*, and to its memorial stimulus: its cycle of 'vanishing, vanished or imaginary' moments are heard as timeless *because* they are always in part detached from one another, each presenting a single expressive atmosphere which never connects wholly with those of the movements around it – however much they might be unified referentially by the external ideas which underpin them. Seeing this fragmentary approach as simply a 'defect' which the quartet attempts to 'solve' misses the whole purpose of the form; the

memorial aspect of *Arcadiana* is rooted in an acceptance and an exploration of transience, and thus of disconnection.⁹

A moment of coalescence: 'O Albion'

Adès may not offer any simplistic 'solution' to the fractured quality of the quartet, but neither does he leave its tensions wholly unresolved at its close. Instead, he balances the demands of the two by using one particular fragment as a self-contained statement of *integration*, drawing together the various materials of the quartet into a consistent and cohesive (albeit rather alien) language for one brief and transitory moment. This 'focal point' is found within 'O Albion': here, form, material, texture and reference are unified in a way that is attempted nowhere else. This point of 'coalescence' allows the main tensions of *Arcadiana*, many of which stem from its fragmentary character, to be assuaged without imposing any simplistic 'resolution' which would negate its subtle balance of fracture and continuity.

The sense of unity necessary to this integration is achieved by appealing directly to external associations. Referentiality is a central feature of *Arcadiana*, of course, but here it reaches its peak: 'O Albion' is a *devotissimo* evocation of British pastoralism which can be seen to take as a direct model the 'Nimrod' movement of Elgar's *Enigma Variations*, compressing it from 43 to 17 bars (Fox, 2004: 44). This reading is supported by Adès's veiled comments on references to 'more local fields' in his programme, the circumstances in which the work was premièred (at an Elgar festival, in 1994), and the use of 'characteristic variation' as a formal archetype in general; as noted earlier, the idea of a 'hidden theme' here ties it even more closely to Elgar's set.

Yet the specific source, apart from the 'Arcadian' connotations of its idyllic pastoralism, is here not the whole story. As Arnold Whittall points out, the key and hymnic quality of the movement also link with the 'Cavatina' from Beethoven's op. 130 quartet (Whittall, 2003b: 22); and the connections of genre, and of position within a fragmentary multi-movement form, are perhaps even more significant there. As with other passages within *Arcadiana*, what matters most is not the specifics of material

⁹ In this respect, it offers a number of parallels with Beethoven's late quartets, which similarly undercut the teleological drive of conventional development; the overt allusions to the 'Cavatina' movement of the Op. 130 quartet in 'O Albion' (discussed below) are the most obvious manifestation of this connection.

reference but the general character which is evoked – yet 'O Albion' goes beyond other movements by wholly integrating this expressive atmosphere into its underlying language. With earlier sections, there was always some level of distance between the overall character of a movement, its treatment of the basic materials of the quartet and its use of overt quotation or pastiche; in both 'Venezia notturna' and 'Das klinget', for example, different types of material and character are distorted and layered in such a way that they retain independence for much of the time, only 'converging' at particularly important moments. Here, however, these barriers are removed: the underlying stimulus of the movement is allowed to transform the basic materials of the quartet, rather than simply being used as a striking 'context' within which they are viewed unchanged.

This transformation relies upon the use of coherent functional tonality within this movement: the various fragmentary materials of the quartet are integrated with one another by being re-contextualised within a tonal framework where everything has a clear place and role – since the tonal system, at its height, embraced textural and rhythmic concerns as well as purely harmonic or motivic ones. Thus the rising figures of the opening (and the suspensions which run throughout the movement) are built upon the basic fifth-semitone opposition of the harmonic sequence which opened 'Venezia notturna', but here rehabilitated within a diatonic context; likewise, the falling figures of bars 4–6 are diatonic abstractions of the 'expanding interval' figure of 'Auf dem Wasser' and 'L'embarquement'. Texturally, too, the complexity of earlier movements is placed in a more conventional context: there is a clear melody-accompaniment division throughout, but the melody is passed freely between parts (and connects constantly with the underlying harmonies) just as 'Auf dem Wasser' did, without any resultant process of cumulative 'branching'.

The two significant metrical disruptions within 'O Albion' also serve to reinforce, rather than disrupt, the underlying trajectory: the first (a compression into 7/8 in bar 4) coincides with a reversal in the direction of the melodic line, increasing tension by slight diminution, and the second (at bar 12) allows the melody to 'linger' on the most surprising sonority in the movement, before it begins to fall again.

a)

ppp sub.

ppp sub.

ppp sub. > *ppp*

ppp sub.

b)

**Ex. 3.21: ‘O Albion’: a) sudden ‘lingering’, bar 12;
b) underlying hexatonic sequence (re-spelt to connect to opening)**

This sonority itself (Ex. 3.21) is a whispered recollection of the hexatonic progression which opened the work, but here it is integrated within a tonal frame which retains a clear sense of direction – it remains moving and unexpected, but it does not dictate the ‘flow’ of the music anymore. Similarly, the A^b in the bass at bar 14 allows the tritonal shape which governs every movement to become part of a tonal trajectory, here being interpreted as a final, brief F major twist before the closing cadence. The use of overt but not parodistic tonality is crucial to this effect: it allows integration to be achieved, but within a language which remains partly distinct from the rest of the quartet – so it cannot be heard in overtly conclusive terms. The alien quality of this momentary ‘resolution’ – the projection of a brief, illusory ‘Arcadia’ – is displayed in the final bars, which seek in vain to find lasting triadic closure (Ex. 3.22).

A tempo

attacca

Ex. 3.22: ‘O Albion’, bars 16–17

Solace in amnesia: 'Lethe'

The 'resolution' which 'O Albion' offers may be transitory and ultimately incomplete, but it still plays a crucial role in the form of *Arcadiana*. Its effectiveness within the energy levels of the quartet as a whole is seen by a brief examination of the movement which follows. The title of 'Lethe' is a reference to one of the rivers of Hades in Greek mythology, which brought amnesia to those who drank from it (Weinrich, 2004: 7); this coda is an evocation of forgetfulness as a source of comfort – an unusual approach to closure within a funereal work, but one which fits well with the ephemeral concerns of this quartet. The way in which this allusion is communicated is quite straightforwardly mimetic: a cello melody loops repeatedly, gradually compressing rhythmically and losing its audible identity in the process, until it is taken up in overlapping, fading unison double-stops by the whole ensemble (Roeder, 2006: 145). Even at the surface level, however, the tranquillity of the overall atmosphere (in terms of both dynamic and tempo) is unique. Here, simple, gradually eroding repetition, rather than variation, has become the mechanism of change and of closure.

Closer examination, however, reveals very strong connections of material and gesture between 'Lethe' and 'Das klinget' at almost every level (Ex. 3.23). Although the wide separation between these fragments renders any direct sense of variation questionable at best, this is certainly a place where the role of memory (ironically) becomes very important as a way of 'piecing together the mosaic': any awareness of the textural and gestural affinities between the two, however vague, will serve to highlight the drastic change in their respective contexts. As the first disruptive moment of *Arcadiana*, 'Das klinget...' was an exercise in disconnection and *bizarrierie*; in a final, bravado gesture of integration, this startling intrusion is transformed, in the coda, into a '*calmissimo*' statement of closure.

Feature	'Das klinget...'	'Lethe'
Texture	High, lyrical cello line against open-string/harmonic material	
Form	Repeating melodic and harmonic cycles (which don't coincide)	
Metrical structure	Free and complex interactions (no sense of metre)	
Basic melodic materials	Interlocking fifths moving by step (see Ex. 3.2)	
Main 'character'	<i>Nobilmente</i>	<i>Calmissimo</i>
Basic harmonic materials	Clearly-directed tonal sequence	Layered fifths (consonant, but no tonal direction)
Overall shape/direction	No shape	Rising texture followed by 'forgetting' of melody

Ex. 3.23: Connections and contrasts between 'Das klinget...' and 'Lethe'

It is fitting that Adès's quartet should end with a movement which combines close connections of material with a startling reversal of mood; the tension between these two underpins the effectiveness of the work. *Arcadiana* is a striking and original example of coherence achieved and sustained 'against the odds'; this piece holds together because distinct individual characters are combined with a wealth of shared material and a concern for continuity of formal energy, even where consecutive moments are strikingly discontinuous. The listening experience this form provokes is one which combines a very close focus on individual moments, with a growing sense of the wider trajectory which is beginning to emerge; memory plays an ever-increasing role across the whole piece, but it never overrides the experience of the individual moment. This experience is very closely connected with the basic expressive impetus of the quartet. This is a very unusual memorial work: Adès's concern here is not to present a ritualised lament, or even an outpouring of anguish. Instead, he creates a world of tiny, remembered moments which are recreated and lived again. The fractured but ultimately coherent approach he takes here presents an ideal format for such a delicate exploration of transience.

Connections 2: Interaction, analysis, energy

The preceding discussion of Adès's *Arcadiana* focussed primarily upon issues of large-scale formal cohesion, exploring the ways in which a listener might assemble a 'mosaic-like' unity out of the various disparate shards from which the quartet is built. The composer's own notes about the 'thread' of the piece and about its unifying referential associations (with the 'idyll, vanishing, vanished or imaginary') offer some support for this reading; however, the chapter argued that much of the expressive effect of the work and its changing sense of energy and drama also arise from moment-to-moment interactions which *resist* this broader integration. Individual musical 'units' – phrases, motifs, gestures – interrelate in highly varied ways within the different movements, from the blurred, overlapping strands of 'Venezia notturna' to the cumulative textural disintegration of 'Auf dem Wasser'.

Adès's quartet points to issues which recur throughout the case-studies underpinning this thesis. This is music which is founded upon *multiplicity* in the handling of interaction and process: rather than any single underlying structural premise or functional syntax, what is presented here is a series of different 'layers' of material, development and reference whose relationships shift constantly over the course of the work. These layered interactions cannot easily be understood simply in terms of the extension or distortion of a single, overriding model (as a neo-Classical composition might, for example); but nor does simply labelling them as 'pluralist' or 'polystylist' solve the problem. *Arcadiana* has a net effect which is more than the sum of its parts; the same is true of all the various pieces studied here, and each one is notably different from the others. Clearly a more fine-grained approach is needed than simple 'pluralist' pigeonholing if an account of the particular effects of each is to be offered.

Layered ‘consonance’?

In one sense, these layered interactions might be understood as a broadening out of the harmonic concept of consonance and dissonance. From this perspective, the specific sense of tension and release found within particular harmonic relationships can be generalised to a vaguer but more broadly felt interplay of ‘dissonance’ and ‘consonance’ between different perceptual layers of a piece. There are certainly some similarities which give weight to this analogy. Firstly, both have direct psychological consequences as far as musical tension or ‘energy’ is concerned – the sense of cohesion felt in ‘O Albion’, for example, is highly dependent on the clarity of its underlying relationships. Secondly, both present not a simple binary polarity but a continuum: just as a semitone suspension demands more immediate resolution than a dominant seventh, for example, so layers can ‘mesh’ or ‘grate’ with one another to different degrees.

This points the way to some important differences between the two, however. The continuum of harmonic dissonance is linear and ordered: it depends for its validity on a set of expectations and relationships which are established and relatively stable, and it is a fairly straightforward matter to classify pitches in terms of their consonance or dissonance relative to a given centre. By contrast, the interaction of different perceptual layers within a composition is multi-dimensional and non-centred: if tension arises from differences between multiple layers, and none is seen as the ‘primary’ reference point, then there is no means by which their relationships can be fitted into any clear order. Consequently, the variations in musical energy which result from these interactions will not necessarily link with a sense of expectation or a ‘gradient’ towards resolution. As a result, the kind of ‘coalescence’ seen within ‘O Albion’ becomes a common feature of these works: rather than a ‘gradient’ being created from tension to resolution, we find ourselves *suddenly*, with no preparatory expectation, confronted with a moment of clarity – because the different strands of process and material have briefly shifted into alignment.

‘Breaking up is hard to do’: the challenge for analysis

In Chapter 1, the term ‘analysis’ was justified for the methodology of this thesis on the basis that it concerns the ‘breaking up of a complex whole into its basic elements’; in Ian Bent’s more specifically musicological definition, it might be considered as

the interpretation of structures in music, together with their resolution into relatively simpler constituent elements, and the investigation of the relevant functions of those elements. (Bent and Pople, 2001: online)

Bent’s definition places the emphasis on a conjunction of ‘breaking up’ and ‘fitting back together’; once the ‘constituent elements’ of a musical structure have been found, the function each plays within the structure can be identified, and the effect of the whole can then be pieced back together as something more comprehensible. The interconnected plurality of these works throws the status of this task into question, however. The issue, of course, is that different methodologies – and different musics – offer widely variant understandings of what constitutes ‘constituent elements’, where the ‘cracks’ are that allow us to break these apart, and what ‘relevant functions’ each performs: this is why Schenkerian theory seems to overlook elements of rhythmic structure which topic theory might consider as basic, for example, or why an approach to serial music which focusses upon the tracking of series and combinatorial relationships may well end up at odds with an approach which focusses upon recurrent gestures and sonorities. There is a real danger of damaging value-judgements arising from these different conceptions, too: ‘analytic practice devalues the music it cannot address’ (Lochhead, 2006: 234).

A syntactically defined system such as Western tonality demonstrates a reassuring degree of information-theoretic redundancy: different parameters are integrated cleanly enough that there are plenty of places where analysis can ‘hook in’, so to speak, and begin to divide things up. This is why it is so common to find analytical approaches to these kinds of music which deal in clearly ordered hierarchies – of chordal relationships, of rhythmic levels, of motivic development. Of course, this is not to suggest that these ‘clean’ divisions always represent the best way of approaching the music: indeed, much of the distinctive effect of individual pieces lies in the manner in which they *subvert* aspects of these organisational structures, and recent analytical writing on music of the ‘common-practice’ period has tended to place increasing

emphasis on the expressive function of these subversions.¹ Nonetheless, these deformations – and the analytical descriptions of them – are effective *because* they are interesting ‘figures’ against the ‘ground’ of the underlying organisational system: it is monolithic and defined enough that these isolated, expressive deviations pose little threat to it. Indeed, their presence can only be registered *as* subversive because the system forms such a regular and cohesive background. Analytical approaches towards music of this type can thus proceed by ‘breaking it up’ according to the expectations of convention, in the process discovering the points where these conventions are undermined, and ensuring that their account incorporates these moments of rupture in a satisfying way.

Here, however, the situation is rather different. The broader context of these works offers a number of hints at this: none of the composers discussed here could easily be described as composer-theorists, and in fact the majority of them have displayed a marked discomfort with the kinds of systematic analysis described above – tending instead to focus in interviews, and in their own commentaries and programme notes, upon sources of inspiration or imaginative metaphors for their music, or indeed direct challenges to overenthusiastic theorising.² Moreover, these composers are notable for the breadth of their musical (and extra-musical) influences; the abundance of ‘post-’ labels testify, in several cases, to a willingness to combine the legacy of a relatively systematic compositional apprenticeship with elements taken from a variety of other sources in a strikingly undogmatic manner. In some cases (such as Adès, Kurtág, or the ‘trickster’ pieces of John Adams) this eclecticism is very evident on the surface, through titles or overt musical references; even when there are no such specific allusions,

¹ The literature surrounding Beethoven’s late quartets, with its emphasis on the conflict between convention and subjectivity, offers the most obvious demonstration of this: see, for example, Subotnik, 1976, Chua, 1995, and Spitzer, 2006. All of these take their cue from Adorno’s own ‘diagnosis’: see Adorno, 1998. More generally, James Hepokoski and Warren Darcy’s concept of ‘deformation’ applies this principle to the discussion of sonata form, and Lawrence Kramer’s discussion of ‘hermeneutic windows’ applies it more generally to the practice of musical interpretation: see Hepokoski and Darcy, 2006: 617–21, and Kramer, 1990: 9–12. The expressive role of extraordinary ‘moments’ such as these is discussed further in Chapter 8.

² Dutilleux, in particular, is notoriously evasive in interview with respect to the details of musical structure or compositional technique: see Thurlow, 1998: 8–9, and Potter, 1997: 61, 71. The general tenor of these composers’ commentaries on their own music can be seen from the extracts from interviews and programme notes which are reproduced throughout this thesis. Kaija Saariaho’s early article on her own techniques (Saariaho, 1987), discussed in Chapter 5, does admittedly represent one foray into the arena of compositional theory; it is an isolated example, however, and she has not returned to this subject again.

however, there can still be an equally fertile interplay within the details of material and technique.

This is particularly clear with the music of Kaija Saariaho, the focus of the next chapter. Her compositional career developed through a rigorous education in structured atonality, followed by an immersion in the principles of spectralism and with it a rediscovery of some of the resources of more historically distant musical traditions, such as tonality, modality and regular phrase-structure; she now draws on aspects of all these approaches within her music, often setting up different ‘languages’ in tension with each other in particular ways (this is something which will become increasingly apparent in the study of *Solar* which forms Chapter 5). The difficulty which this poses for analysis is clear, of course: breaking up these different interlocking strands is very hard to do – and not only hard, but potentially damaging. The problem is not an absence of connections between different elements of a work, but rather a *surfeit* of connections; different ‘layers’ interact in such a complex manner that they cannot be forced into a single, ordered hierarchy.

Tangled strands: John Adams’s Violin Concerto, first movement

John Adams’s 1993 Violin Concerto, and its first movement in particular, illustrate the challenges which this complexity presents to analysis. These arise first of all out of the continuous nature of the movement. Texturally speaking, there are a number of distinct layers here, each of which follows its own independent structural trajectory – so that phrase-divisions rarely coincide between them. These layers fall primarily into three categories: the accompanimental, quaver-based chordal ‘staircase’ (Adams, 2008: 174) that opens the movement and continues (in various forms) throughout (Ex. 4.1a)); the solo violin line (Ex. 4.1b)); and passages of decorative semiquaver figuration which appear from time to time, usually in the wind parts (Ex. 4.1c)). At times each of these layers ‘branches’ into multiple sub-strands, however: the violin’s line is joined occasionally by countermelodies in other instruments; the accompanimental figures gain an independent bass-line at several points (such as bars 27–55); and as the movement progresses, the semiquaver figuration multiplies into a variety of interacting polyrhythmic streams. For a composer who is frequently pigeonholed as ‘post-minimalist’, then, the emphasis here is most definitely on the ‘post’; there is little

minimal about the textural interactions of this music, for all the simplicity of its basic materials.

a)

b) *dolce, cantabile*
mp *mp* *mf* *détaché dolce* etc.

c)

Ex. 4.1: Adams, Violin Concerto, first movement: a) accompaniment, bars 1–3; b) violin solo, bars 2–6; c) clarinet countermelody, bars 24–26

A number of features contribute to the sense of unbroken continuity which is felt throughout this movement. The first is rather obvious: once set up, the three textural layers described above remain relatively constant, with the violin line, in particular, presenting a stream of nearly unbroken melody which Adams refers to as ‘hypermelody’ (Adams, 2008: 174). Moreover, unusually for the works examined in this thesis, the underlying metre remains constant for most of the movement, with the exception of one metric modulation at a crucial structural point and a number of smaller tempo changes elsewhere. Rhythmically, then, this movement is notably continuous. This in itself offers little challenge to conventional analytical notions of ‘breaking up’, however: a passage of *moto perpetuo* can be divided into structural units just as easily as any other passage, if this continuity is integrated with other features, such as harmony or melodic structure, to form a more clearly articulated larger framework. The issue is not so much the ability to differentiate at the level of individual elements, but

the extent to which these elements ‘mesh’ to form a larger organisational hierarchy which permits such grouping and differentiation.³

It is the absence of this clear structural ‘mesh’ which underpins the particular kind of continuity found here – a continuity which is not only superficial, but which resists attempts to find structural divisions at a ‘deeper’ level.⁴ Each strand of the texture follows its own independent process: the opening accompanimental material traces a series of rising and falling ‘arcs’, whilst the violin line can be divided into a number of different melodic gestures; likewise, when they enter later on, the semiquaver figures are based around particular repeating pitch-sequences. However, changes in each of these layers are ‘staggered’ so that no clear structural boundaries emerge: when the accompanimental material shifts from ascent to descent in bar 10, for example, the violin is still in the middle of its phrase; and whilst the violin begins a new melodic gesture at bar 12, the next accompanimental ‘arc’ begins two bars later (with a new countermelody inserted between these two divisions serving to blur things further). The same is true in bars 18–25: as the overall tessitura of the accompaniment is falling, the violin line is rising; meanwhile, the clarinet countermelody is following its own independent pattern of ascent and descent. In spite of the regular 4/4 barring and consistent pulse, there is no single sense of metre here: because the different textural layers develop and ‘breathe’ at their own paces, the result is that no clear structural ‘downbeat’ is audible – just as there is no *literal* ‘downbeat’ at the beginning of the piece.

There is a connection here with Adams’s aesthetic heritage. The generation of perceptual complexity out of layers of interlocking processes was a recurrent concern of early minimalist music, particularly within the works of Steve Reich and Philip Glass; and, indeed, Adams’s early breakthrough compositions such as *Phrygian Gates* and *Shaker Loops* (both from 1978) make use of additive and reductive processes and

³ The final movement of the Violin Concerto demonstrates this: although not a genuine *moto perpetuo*, it is full of passages of continuous semiquavers for the soloist, and as a whole presents the same level of rhythmic continuity as the first movement. Yet the prevailing unity of phrase-structure between the different layers of the texture means that larger structural ‘blocks’ are much more clearly articulated – and hence a more conventional formal ‘analysis’ of the movement becomes possible. The repeating structure of the second movement means that this is partly true of that too, although the continuity of the violin (and, later, woodwind) parts prevent such clear textural divisions. Adams notes that the expressive world of the first movement is quite distinct from that of the latter two (Adams, 2008: 175).

⁴ The risky nature of the metaphors of surface and depth in this music is a subject to which Chapter 6 returns.

shifting ‘loops’ of material in a way which recalls those composers. In the earliest of those pieces, and in the music of Reich in particular, enforced simplicity in other elements (the use of very limited pitch-sets, for example, or the restriction of rhythms or timbres to a single type) allows the ambiguity of specific interactions to become the primary focus of attention. Musical experience thus becomes a question of attending to a specific ‘gradual process’ (see Reich, 1968); the challenge of analysis in that repertoire is not so much ‘breaking up’ these processes, but finding a way to match their simplicity to the complexity of individual listening experiences.⁵

In the Violin Concerto, however, complexity and ambiguity are as evident in the score as they are in the sounding result.⁶ Far from acting as simple repeating ‘loops’, each textural strand here is itself a composite of a number of different processes, so that it does not audibly repeat but rather ‘unspools’ unpredictably. The accompanimental ‘staircase’ of the strings, for example, consists of a series of second-inversion major triads taken from a six-triad collection (at the beginning, C-D-F-F#-G#-B); the order in which these are presented is fixed at first, but it is obscured in performance by the grouping of the chords into *eight*-quaver rising phrases, marked by octave displacements (as Ex. 4.1a) shows). Moreover, the sequence of chords itself proves increasingly unstable, with chords being doubled or omitted from the second bar onwards without any discernable underlying pattern. Even taken by itself, then, this accompanimental ‘strand’ arises from interacting sub-threads which cannot be easily ‘broken up’ without isolating them from the effect which they create.

Moving beyond the details of material interactions, there are two wider background tensions at play here. The first is found in Adams’s approach towards tonality. The opening marks a clear statement of intent: the bare triads of the accompaniment nonetheless cover the chromatic gamut within the first bar, and whilst the violin’s opening gestures might place it loosely around a C tonality (one which is poised ambiguously between major and minor, given the dissonance between melody and accompaniment), it quickly moves off into other areas, lingering on E♭ major in bar

⁵ For a discussion of the issues of notated simplicity and heard complexity within music of a slightly earlier period, see March, 1997.

⁶ K. Robert Schwarz has traced the gradual replacement of strict audible ‘processes’ by more ‘intuitive’ compositional methods in the output of Reich and Adams up to 1985; see Schwarz, 1990. This movement thus represents perhaps a continuation of that trajectory.

8 and moving onto G major in bar 13. Underneath all this, of course, the absence of larger structural ‘downbeats’ upon which all the layers align mean that no sense of ‘tonality’ in the traditional sense ever *could* be established, since without any broader phrase-structural hierarchy there can be no ‘cadences’. What results, then, is a kind of generalised ‘pantonality’: surface gestures are often triadic, but they add up to complete saturation. Particularly important to the harmonic character of the movement is the interaction of tonal harmonies with a variety of melodic sequences drawn from Nicolas Slonimsky’s 1947 *Thesaurus of Scales and Melodic Patterns* (McCutchan, 1999: 67),⁷ whose repetitive circularity undermines any potential sense of functional tonal expectation.

The second tension is in Adams’s approach towards rhythm and metre. The overlapping of phrase-structures already discussed means that regular pulsation here does not produce any larger sense of hypermetre – there is constant and relatively stable rhythmic activity, but beyond that it resists clear structural articulation. What we arrive at, then, is something poised at the centre of Boulez’s famous polarity of ‘smooth’ and ‘striated’ time perception (see Boulez, 1971: 88–9): at the pulse level this music is very audibly ‘striated’, but as far as larger groupings or analytical divisions are concerned, it is disconcertingly ‘smooth’. Another perspective on this is provided by Roger Scruton: in his own work on the experience of rhythm, he makes a distinction between rhythmic activity which is imposed by a regularity of metre, which he calls ‘grid’, and that which arises from tensions within the material itself, which he calls ‘beat’ (Scruton, 2007: 229–30). He criticises Adams for relying on regular ‘grid’ to supply rhythmic activity to materials which have little or no inner ‘beat’, since they are generated from melodic patterns without associated harmonic motion (2007: 241); in his argument, a beat-less grid like this will inevitably amount to rhythmic stasis.

In one sense, Scruton is right about the ‘grid’-like quality of the metre here: the melodic material of the Violin Concerto does not connect straightforwardly to any particular harmonic sequence – hardly surprising, since the underlying harmonies are themselves non-functional and constantly shifting – and thus regular pulsation is the

⁷ For example, the rising bass-line of the opening ‘staircase’ stems from the *Thesaurus*, although it is soon altered as described above. For more detail on the use of material from Slonimsky, see Sanchez-Behar, 2007: 22–37.

primary basis for rhythmic organisation. However, the complexity of the relationships between materials and layers in the Violin Concerto undercuts his rather polarised distinction. Here, ‘grid’ at the level of pulse is not supported by any higher-level ‘grid’; on the broader scale, the interaction of the phrase-structures of each layer (particularly audible in their independent rise-fall gestural shapes) produces a series of ‘beats’ which is complex and constantly shifting, likely to be heard differently by any given listener, but certainly not absent altogether. In his defence, Scruton does admit a possibility which is rather like this: he argues that a series of *ostinati* will only produce rhythmic energy if accent and grouping are left ambiguous – something which is clearly the case here (2007: 237). He himself does not acknowledge such a feature in Adams’s work, however, nor does he discuss the way in which such a possibility might affect the roles of ‘grid’ and ‘beat’ at different structural levels.

Finally, the discussion of complex continuity here – and the challenge this poses to conventional analytical segmentation – should not be read as an argument that the movement is entirely *homogenous* in content or effect. Whilst this piece is certainly far from *Arcadiana* in its handling of material and expressive variation, there are a number of points within it which are striking enough to stand out as distinctive within the span of the whole. One such point arises at bars 168–177, for example, when a solo cello joins the soloist in a sudden burst of lyricism, with clear F minor resonances, amid a transparent but particularly polyrhythmic *ostinato* texture (Ex. 4.2a)); another comes with the sudden reduction of texture at bars 253–259, when the harmonies crystallise onto an alternation between Ab and D major arpeggios, and the soloist joins the first violins for a passage of pure figuration, a moment where both harmonic and rhythmic change are briefly suspended (Ex. 4.2b)). Likewise, the movement is brought to a close by a stepwise descending bassline which gradually comes to prominence as other elements of the texture fade away, and which leads directly into the much more clearly unified, repeating *passacaglia* structure of the next movement (Ex. 4.2c)).

Connections 2: Interaction, analysis, energy

a)

b)

c)

Ex. 4.2: Adams, Violin Concerto, first movement, focal structural moments:
 a) reduction of bars 168–172; b) reduction of bars 253–258;
 c) bassline, bars 322–end

It is significant that each of these moments generally involves a point of textural and harmonic clarity: where interactions are this multi-stranded and difficult to break up, passages memorable enough to affect the perception of structure here arise from the ‘coalescence’ of the different layers which make up a composition. Coalescence as a phenomenon is distinctive for its creation of a sense of structural arrival without any process of conventional expectation: because it involves multiple layers, none of which takes priority over any of the others, there is no single process to follow, so the point of clarity appears suddenly and without warning; nonetheless this point is striking enough that it comes to serve in the memory as a structural landmark for the music which surrounds it. Adams’s description of this first movement of the concerto as ‘contrapuntally complex’ (Adams, 2008: 175) emerges therefore as a characterisation of the broader effect of the music – and its complexities for analysis – as much as it is a commentary on the processes which are at work in it.

Beyond pluralism

The challenge for analysis, then, is to find ways of breaking up this music which allow for the possibility of multiple, equally valid ‘breakings-up’, and which, moreover, allow the relationships *between* them to come under examination – since the particular effect of these pieces often depends on this kind of perceptual ambiguity as much as it does on any individual analytical reading. Rather than seeing the music as a hierarchical assembly of different interacting units, which analysis then cleanly disassembles, it is perhaps more helpful here to see it as something rather more tangled and fluid, offering different analytical possibilities but no single definitive ‘schema’. This shift of perspective connects with two important recent strands in musicological thought, rooted in rather opposite ends of the conceptual spectrum (the first arising from continental philosophy, the second from perceptual psychology); the remainder of this chapter outlines these connections, before combining them with an analytical ‘tool’ drawn from semiotics to offer a particular approach to analysing the structure and effect of this kind of methodological pluralism.

Strand 1: Rhizomes

The first connection is with the image of the ‘rhizome’ found within the writings of the French theorists Gilles Deleuze and Félix Guattari. In the introduction to *A Thousand Plateaus*, the centrepiece of their philosophical output, they identify the ‘arborescent’ manner in which structures of knowledge have generally been organised in Western thought with a tree-like process of hierarchical branching and specialisation, which segments all elements clearly, and places them in relation to a clearly-defined centre; by contrast, the approach which they advocate is based upon the ‘rhizome labyrinths’ found in plants such as ginger or bamboo, which connect in all directions and have no larger hierarchy (Deleuze and Guattari, 1988: 5–23). Their philosophy is thus based on the principle of free ‘amalgamation’ rather than that of deductive reasoning, with particular emphasis on the bringing together of seemingly-unconnected areas of thought (different ‘branches’ of the ‘tree of knowledge’, in the arborescent metaphor) by a process of multi-referential free-association – a ‘nomadology’ to contrast with conventional narrative ‘history’ (1988: 25).

Deleuze and Guattari’s philosophical position is complex and provocative, and it has generated a lot of discussion since its publication in 1980; the rise of the Internet in the 1990s made its embrace of decentred, non-hierarchical interconnection appear especially prophetic. At its root (so to speak) their thought is concerned with the manner in which systems of power can serve to define the shape and organisation of knowledge, and the ways in which this kind of control can be performatively resisted; however, because of its breadth of reference and the free-wheeling, almost improvisatory way in which it introduces a wealth of new concepts and approaches (in this sense the book is a ‘performance’ of its ideas), it has been influential in areas far beyond this basic remit. Within the field of musicology, Deleuze and Guattari’s ideas have generated particular interest in the study of music which falls ‘outside’ of particular disciplinary or methodological norms, with the mapping of the arborescent-rhizomic opposition to that of musical tradition and innovation well-nigh ‘ubiquitous’ in some areas, as Martin Scherzinger notes (2010: 110). A full overview of this literature would be far beyond the scope of this thesis;⁸ here, the focus is less on identifying particular music as ‘rhizomic’

⁸ For a representative sample, see Jeremy Gilbert’s survey of Deleuzian writings on rave music and free improvisation (Gilbert, 2004: 118–24).

– given the right argument, perhaps any music could be portrayed as such – but on exploring the possible implications (both positive and negative) of this shift of focus for the task of analysis, in particular as it responds to the challenge of music such as the Adams concerto.

The primary consequence of a rhizomic approach in this regard is a radical revision of the tendency to see analysis as a means of ‘explaining’ (in the sense of ‘explaining away’) the complexities of a composition, or allowing them to be seen primarily as deviations from a particular norm. In Deleuze and Guattari’s presentation, complexity is something to be celebrated, not controlled, and indeed their own writing often proceeds by *multiplying* the complexity of the idea they are discussing, layering upon it connections and parallels from other art-forms or areas of thought. This attitude has several strengths for the analysis of non-systematic music. Firstly, its freedom of association and avoidance of hierarchy allows potentially enlightening connections to be made without the burden of continual logical relation or justification, allowing accounts of musical experience to be built up which as totalities provide insights that might be missed by more straightforward segmentation techniques. One image used for this within *A Thousand Plateaus* is that of a patchwork, which (unlike the linear threads and rows found in knitting, for example, or the central motif of embroidery) forms an ‘amorphous collection of juxtaposed pieces that can be joined together in an infinite number of ways’ (1988: 526). Within musical analysis, this paves the way for the eclecticism described in the introduction to this thesis.

Secondly, a rhizomic approach offers a helpful model for approaching music whose complexity defies straightforward segmentation (the task of ‘breaking up’ discussed throughout this chapter). The processes of ‘stratification’ which the book critiques have a parallel in the analytical division of musical works into their ‘constituent elements’ (whether these be chronological blocks or specific processes or materials); Deleuze and Guattari, by contrast, describe the existence of multiple ‘lines of flight’ which cut across any given set of divisions and which can fruitfully be traced and explored (1988: 9–10). The ‘overlap’ of processes and materials (and the resultant structural fluidity and instability) which was noted in the Adams is indeed a recurrent feature of the music studied here; by combining attempts at segmentation with discussions of the processes which cut across and undermine them (the ‘lines of flight’),

aspects of this complexity can be discussed without ‘explaining it away’ into a single unified perspective.

Refreshing as Deleuze and Guattari’s approach may be, in the freedom which it provides from the tyranny of hierarchical categorisation, it nonetheless has a number of problems if adopted wholesale for musical discussion. These stem above all from the quite extreme ideological stance which underpins their work, one which has its basis in the anti-dogmatic euphoria of post-1968 French intellectualism but which nonetheless carries its own substantial dogmatic baggage. The larger thesis of *A Thousand Plateaus* is shaped by a particular, de-centred, anarchic political philosophy which manifests itself in a distrust of many of the principles which underpin structured ‘analysis’ of any kind (including that of music), yet the critique of these principles often proceeds by means of diametric oppositions (such as ‘arborescent’ and ‘rhizomic’) which are themselves often strikingly ‘structuralist’ – notably *unrhizomic*, as John Rahn notes (Rahn, 2008: 82). Although in the text Deleuze and Guattari take pains to disclaim any such binary polarities as they arise (something which Rahn does not acknowledge), noting for example that ‘there are knots of arborescence in rhizomes, and rhizomic offshoots in roots’, and that ‘We invoke one dualism only in order to challenge another’ (1988: 22), the structure of their work as a whole nonetheless performatively privileges one pole – the rhizomic – over the other, with rhetoric as manipulative as the ‘State philosophy’ which they attack.

The musical examples which the writers choose to incorporate into their multi-referential ‘amalgamation’ reflect this problem: dismissing Wagner, and remaining sceptical of popular music, they latch onto mid-century modernism – and Boulez in particular – with gusto (Scherzinger, 2010: 103). Their discussion of music is focussed from beginning to end on issues of construction rather than of perception; as so often in philosophy, it is drawn on not as a meaningful artistic experience in itself (the ‘sensory’ approach which is being emphasised throughout this thesis), but primarily a fruitful source of philosophical concepts – the kind of ‘interpretation’ against which Sontag, among others, railed. In this context, it is perhaps unsurprising that they choose Boulez, since his own writings are often similarly preoccupied with the mechanics of composition, and their attendant philosophical ramifications, rather than the experiential result. Deleuze and Guattari’s own treatment of musical issues need not dictate the way

in which their concept of the rhizome is used within musical analysis, of course; but an attempt to adapt it to a more experiential perspective exposes its underlying difficulties. The ‘principles of connection and heterogeneity’ that underpin the rhizome demand that every given point be connected to all others, with no hierarchy or prior order, for example;⁹ yet the chronological presentation of a musical work means that in practice some temporal ‘prior order’ is inevitable – and in the music under examination here, there *are* still clear distinctions to be made between materials that are closely related and those which are more fragmentary (distinctions which are crucial to the overall effect of *Arcadiana*, for example).

The discussion of coherence throughout this thesis presumes that there remains a distinction between a coherent and an incoherent musical experience, even if such a distinction is as dependent on the particular perspective of a given listener as it is intrinsic to a piece. Yet rhizomic thinking, in its total multiplicity, rejects this concept altogether: nothing is incoherent, or everything is.¹⁰ In the final reckoning, the strength of the rhizome – its interconnectedness and avoidance of singular hierarchy – is also its undoing; if all points are made to be equally interconnected, relationships become meaningless, and we are left with a simple and inexpressive grid, or (in Deleuze and Guattari’s terms) a ‘smooth space’, not the complex but coherent labyrinth which the experience of these works presents. What is needed (again) is a mid-point between these polar extremes, an approach grounded in perceptual experience which incorporates the pluralism of the rhizome but retains the critical and organisational strengths of more traditional analytical thinking.

⁹ In this context Boulez’s own experiments into open form from the late 1950s onwards are notable (see Boulez, 1963); his interest in moving away from the linearity of pre-determined temporal ordering shows another connection between his thinking and that of Deleuze and Guattari, and points ahead to the issues of ‘moment form’ which will be considered in Chapter 6.

¹⁰ *A Thousand Plateaus* itself reflects this dilemma: its breadth of philosophical and interdisciplinary reference, its open structure (chapters can be read in any order), and its wilful refusal to lock down terms or arguments by means of restrictive definitions, add up to a verbal and structural complexity which often seems almost like deliberate obfuscation.

Strand 2: Affordances

One possible way to unify these different concerns is found in the theory of ‘affordances’, developed initially by the psychologist James J. Gibson in the 1970s, and adapted for the field of musicology by Eric Clarke in his 2005 book *Ways of Listening*.¹¹ Clarke’s approach is wide-ranging, expanding to encompass questions of musical meaning and social function, but it has its basis in perceptual psychology: his primary concern is the development of an ‘ecological’ perspective towards the study of music perception, and an exploration of the ramifications of this approach for a variety of other questions of musical experience. The long-predominant cognitive model of music psychology sees the job of perception as that of *imposing* order upon a sensory ‘chaos’ by means of a structured internal representation; in contrast, Gibson’s ecological perspective takes order as a feature of the environment itself, in the form of various constant properties and ‘invariant’ relationships which are present within individual stimuli, with our perception of this environment arising as an *interaction* between its own intrinsic order and our particular interests and needs. The model thus provides a third way between a rigid structuralism that insists upon fixed and unchangeable internal representations for understanding phenomena, and the excesses of Deleuze and Guattari’s ‘rhizome’ concept, which suggests a return to sensory chaos.

Affordances provide a means of articulating this sense of multifaceted perceptual potential. Within Gibson’s account, the affordances of an environment are the possibilities for action that it provides to a given subject, rendered available by perceptual information (1977: 67–8). For example, to a hungry person an apple affords eating, whilst in other circumstances it might afford use as a (fairly ineffectual) weapon, a juggling ball, or indeed the subject of a still-life painting. Importantly, however, the process does have some limits: because of its own properties, an apple will never afford writing, for example, unlike a pen; likewise, because of the constraints of humans, to them an apple will never afford accommodation (although to a maggot it may well do). The affordances of an object are thus produced by the interrelations of a subject, an object, and their surrounding environment. For Clarke, the idea of affordances fits

¹¹ Clarke is not the first to apply these ideas to music, although the generality and clarity of his account render it especially attractive. Aspects of the theory of affordances are also drawn upon in Cook, 1998 and 2001, and in DeNora, 2000: 38–40, as part of a discussion of the social function of music.

particularly easily with the varied social uses to which music is put – as dance, relaxation, co-ordinated activity, and so on (Clarke, 2005: 38).

Clarke explores the ramifications of this ‘ecological’ approach primarily within the interstices of music theory, perceptual psychology and sociology: his study is rich with insights into the connections which can thereby be made between our experiences of individual pieces and the network of associations provided by the contexts which surround them. His attitude towards the kind of aesthetically-focussed, ‘concert-hall’ listening which is the main focus here (and which I would argue represents the composers’ own expectations for the reception of this particular repertoire) is more problematic. He does acknowledge that this kind of listening can be seen from an ecological perspective as one particular stance which is afforded by certain music and appropriately trained listeners in a specific environment (2005: 134–9), but his depiction of it is couched in terms of negation and exclusion, and preoccupied above all with an absolutist, autonomous notion of musical ‘structure’ which is far from representative of the range of possibilities which this environment can afford. The invocation of structure as a vaguely derogatory term here shows how closely Clarke’s conception of an aesthetically-focussed listening stance is indebted to the stereotype of passive, reverential ‘structural listening’ which is often associated with the culture of the nineteenth-century masterwork, and which has been widely attacked in the last 25 years – both in the primarily tonal repertoire with which he is dealing, and in the arena of contemporary art music.¹²

Perhaps unsurprisingly, when it is defined like this, aesthetic listening is shown to be reliant on concepts of unity and structural integration, and upon particular cognitive constraints related to this sense of unity, which are themselves nothing more than a restatement of traditional, systematic musical grammars – so we are back where we started (Clarke, 2005: 139). There is a false dichotomy here, however: it betrays itself when Clarke describes the natural environment for this kind of listening as ‘silent, stationary, uninterrupted, ears glued to the musical structure and eyes closed’ (2005: 136) – as if listening for intra-musical details were somehow physically incompatible with nodding one’s head or watching the pianist’s hands (when in fact both of these

¹² The classic critique of structural listening is found in Subotnik, 1988; see also Dubiel, 1997, and the various contributors to dell’Antonio, ed., 2004.

actions can often complement, or arise naturally out of, more autonomous musical interests). Clearly two very different concepts are being conflated here: one is ideological, linked to the belief that certain actions or postures are improper for the reception of a ‘masterpiece’; the other is primarily rooted in the realisation that there is much of value to be obtained, in many performances, by the decision to privilege musical details above contextual observations as the site for active attention – and that neither need exclude the other, nor impose any rigid passivity upon this attention.¹³

Even when the primary focus of concentration is upon a musical performance as intentional object, as aesthetic experience, it is surely possible to listen actively to music in such a way that the sound itself becomes an environment for exploration, not simply a passive structure to be absorbed – associations, expectations and personal responses shifting and developing as the sounds (and our own attention) change. The result is a kind of listening which Lawrence Kramer describes evocatively as ‘done not with the ear but with the whole person’, and which might even be considered a kind of mental analogue to the physical processes of performance (Kramer, 2007: 10).¹⁴ Clarke hints at this possibility at times within his discussion – he writes of ‘a kind of sublimated and internalized exploration’ which arises out of the ‘enforced passivity’ of the concert environment (Clarke, 2005: 138), for example; however, this appears in context more as a concession to analytical tradition – a last resort, when one finds oneself trapped in such an environment – than as an approach with equal potential for insight and enjoyment as any other.

When the concept of ‘structural listening’ – which emerges as something of a straw man – is replaced by the broader, reflective approach outlined in Chapter 1,

¹³ Clarke’s argument relies on the assumption that all acts of ‘aesthetic’ attention are necessarily passive, requiring ‘disengaged, contemplative perception’ (Clarke, 2005: 137); I do not accept this. When he writes that ‘paintings may show scenes and objects, but without the third spatial dimension that would afford active exploration’, for example, he ignores the basic fact that *all* visual perception is necessarily active, involving constant eye movements and changes of focus, and that most paintings exploit this by ‘drawing’ the viewer’s attention in different ways. At times here Clarke seems almost to be disparaging art for being artificial, for not being ‘real enough’, when in fact this is a central element in its value – and its artificiality surely carries rich attentional affordances of its own (in the case of painting, not least the varied concerns of brushstrokes, colour blends and different media which can be seen in any given canvas).

¹⁴ There is a link here with the growing interest in musical listening as an example of ‘embodied cognition’; research into the role played by ‘mirror neurons’ and metaphorical image schemata in the perception of music suggests that all engaged listening involves an imitative ‘performance’ element to some extent. Further discussion of this dimension is beyond the scope of this thesis, but for a lucid summary of current perspectives, see Acitores, 2011.

however, the way opens for a deeper integration of the concept of affordances (which actually feature very little in Clarke's discussion of autonomy) into the experience of these pieces. Perhaps it makes more analytical sense to understand the interactions of material here not as elaborations of a single underlying 'compositional grammar', to which the 'listening grammar' must be made to fit (as Clarke, following Lerdahl, formulates it; see Lerdahl, 1988), but rather as a rhizomic complex which 'affords' a variety of different attentional foci. This allows the multi-layered ambiguity of the music under discussion to be re-appropriated as a valuable part of its effect, rather than simply functioning as a frustration to particular theoretical conceptions of 'structure' or 'grammar'. The particularly rich experience which this music offers to a thoughtful listener stems perhaps from the breadth of its interpretative affordances: in the Adams, for example, each different textural strand, and each of the processes underpinning these strands, coexists with the others in the auditory experience, and the listener is free to flit between them as their own interest and attention dictates.

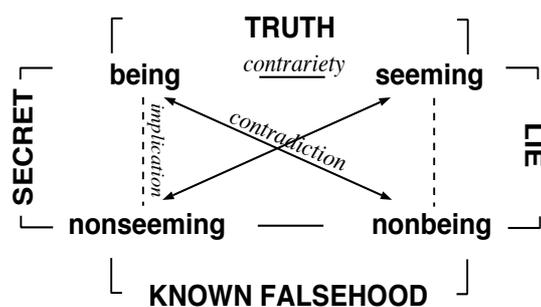
Returning to the analogy of consonance and dissonance explored earlier, the result here is a broadening and expansion of the kinds of tension and energy which an acculturated listener can experience within the music: the arcs of prolongation and release found within tonal structures give way to a spaghetti of overlapping processes, and our experience of the piece as a whole emerges as a composite of all these (which will, of course, vary from one listening experience to the next as well). To an extent this is true of all music, of course; the plurality of possible experiences is an intrinsic element in the theory of affordance. When even the *possibility* of a unified structuralist account is taken away by stylistic and technical plurality, however, the value of this perspective for the discussion of musical effect becomes particularly evident.

The challenge for analytical writing is thus one of balance: holding in tension the desire to offer a coherent account of a musical 'whole' which will enrich others' experiences of it, and the need for a fair representation of the complex and competing interactions of material and context which underpin any given listening experience, as well as of the active role played by listeners in shaping this experience. The emphasis placed on the effect of musical 'wholes' here also raises its own difficulty: 'affordances' offer a means of conceptualizing the complexity of musical materials from moment to moment, but they do not provide a means of exploring the way in which

particular effects arise from the relationships *between* them. In the Adams Violin Concerto, for example, the shifting interactions between different textural or material ‘layers’ can be conceptualised by multiple perceptual ‘affordances’, but the shadings of effect which this creates – with listeners sometimes caught up in the shape of one process or another, and at other times aware of their conflicts or points of coalescence – are beyond the reach of this model, even though these larger relationships are crucial to the experience of the work.

Semiotic squares and ‘relational’ analysis

An analytical technique taken from semiotics offers one way in which an affordance-based model of moment-to-moment perception could be broadened to take in questions of wider relationship. A. J. Greimas’s concept of the ‘semiotic square’, introduced as part of his wider theory of narrative, is designed as a means of ‘opening up’ a simple binary opposition by exploring the different logical combinations of its constituent terms (Greimas and Rastier, 1968: 87–88). It begins with a polarity – in one famous example (Ex. 4.3), it is the contrast between ‘being’ and ‘seeming’ – and then turns it into a square of oppositions by opposing each of these two terms with their negations (here, ‘nonbeing’ and ‘nonseeming’). These terms can then be combined in certain ways to create different kinds of composites: here, the combination of being and seeming produces a truth, and of nonbeing and nonseeming produces a falsehood; more strikingly, being and nonseeming is a secret and seeming and nonbeing is a lie. Moreover, in the study of a given text (this example being primarily textual in application), gradual shifts between these different terms can be traced as part of the larger arc of the narrative. A straightforward polarity thus yields a field of concepts whose interrelationships and transformations are open to greater scrutiny.



Ex. 4.3: Semiotic square of ‘being’ and ‘seeming’ (Monelle, 1992: 246)

Eero Tarasti's work represents perhaps the most extensive development of the semiotic square in the analysis of music. He incorporates the concept into a more general theory of musical semiotics based upon Greimas's concept of 'modalities' (Tarasti, 1994: 8). In connecting the use of this concept with the larger constellation of Greimas's thought, however, Tarasti also buys into the broader epistemology of Greimas's 'narrative grammar', whose overarching structuralism renders it somewhat alien to the multiplicity of the current approach.¹⁵ However, when taken out of this original context, the semiotic square becomes a useful conceptual tool. It offers a means of opening up oppositions which seem at first to be simple binary polarities, and exploring the complexity of their interactions in a structured way – a kind of analysis of relationships which fits well with the constrained plurality created by the theory of affordances.

The square becomes particularly effective for the discussion of interactions in music when two small modifications are made. Firstly, the different terms within the square are to be seen not as discrete entities, but as extreme points within a continuum – something that is quite difficult with the relatively clear-cut example given above, but which makes much more sense within the complexity of particular musical processes. Secondly, in order to adapt the square to the non-linguistic frame of musical experience, the specifically *logical* connections between different terms within the square need to be loosened: whilst the example above enforces a literal, logical negation between its 'contradictory' terms (being opposed to nonbeing, for example), the squares introduced within this chapter allow a greater flexibility in the handling of polarities. These alterations to the underlying model are hinted at in the diagrams below by the addition of 'cyclic' lines to the square structure ('circling the square', so to speak).

These changes are important in the context of specifically music-analytical discussions because they allow the arrangement of elements in a square to arise as much from their interactions within a particular piece, as from logical concepts of opposition or negation which at times would impose a falsely linguistic frame of reference upon the discussion. Instead of serving primarily to position particular structural polarities within a broader field of tightly-defined logical relationships, as with Greimas's

¹⁵ Littlefield and Neumeyer describe the ideological basis of Greimas's project as the attempt to create 'an ideal self-governing structure that imposes order on an otherwise chaotic universe' (1992: 49–50). For a more detailed discussion of Tarasti's approach, particularly the manner in which he uses Greimas's terminology and his reliance on notation rather than performance, see Cook, 1996: 113–120.

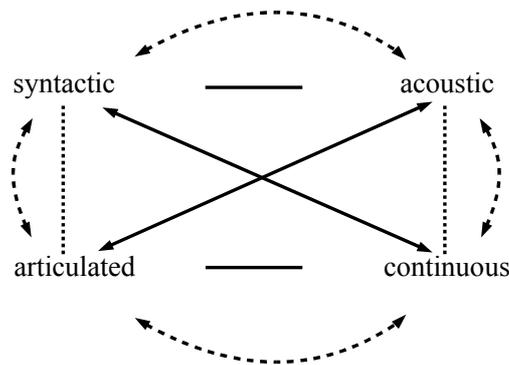
‘narrative grammar’, here the intention is to provide a snapshot of relational affordances against which the changing priorities and interactions of particular listening experiences can be traced. Indeed, it is entirely possible that the arrangement of terms within a square might actually *shift* over the course of an analysis, if the nature of their relationships changed sufficiently; this fluidity is a particular feature of music without any singular structural basis, and a sensitive analysis needs to be responsive to it whilst still remaining focussed on the coherence of the resultant experience. Above all, the intention here is certainly not to ‘pin down’ the interactions between individual elements of a piece; rather, it is simply to allow these elements to remain ‘present’ in some way (through the network of relationships which the diagram charts) throughout the complexities of specific musical analysis, and to provide some kind of non-linear resistance to the necessarily far more linear demands of text-based discussion.

As the earlier discussion of the Adams concerto demonstrated, much of the particular effect of the music under examination here stems from the combination of a variety of overlapping (and sometimes seemingly-contradictory) organisational systems. These produce a shifting sense of musical energy which is immediately perceptible but difficult to conceptualise, because the conceptual mechanisms provided by each of the underlying systems are distorted and weakened by their interactions with the others. However, by taking particular features of the music in turn, and using the squares to explore the ways in which these interlock or overlap, a kind of ‘relational’ analysis can be effected: the shifting interactions of different systems over a piece can be conceptualised, and related to a given musical experience, creating a particular account of the relationship between structure and effect. The rest of this chapter presents three squares arising from interactions which feature in a number of the works studied, in particular the Adams discussed in this chapter and Saariaho’s *Solar*, which forms the basis of the next.

Square 1: ways of listening

The first square (Ex. 4.4) arises from the brief discussion of approaches to listening outlined above. Clarke’s ecological account raises the possibility of a vast and fluid array of different ways in which listeners might actively engage with the experience of music, but the relationship between moment-based, ‘sensory’ attention and larger

structural apprehension is a particularly important one within this study. In the terms of this relationship, any musical passage or gesture simultaneously affords both hearing as pure sonority ('acoustic' listening), and hearing as part of a wider context which is governed by a 'grammar of expectation' ('syntactic' listening); equally, it affords hearing as a series of undifferentiated (continuous although not necessarily linear) transformations or as something more clearly and stably articulated. The balance between these different ways of listening will shift depending on the listener and over the course of a performance, but particular types of material clearly also 'invite' particular approaches – for a listener familiar with Western harmony, a passage of white noise is more difficult to hear in a contextual or articulated manner than a perfect cadence, because there is no established 'syntax' within which it can be easily contextualised, or by which smaller internal divisions can be articulated.



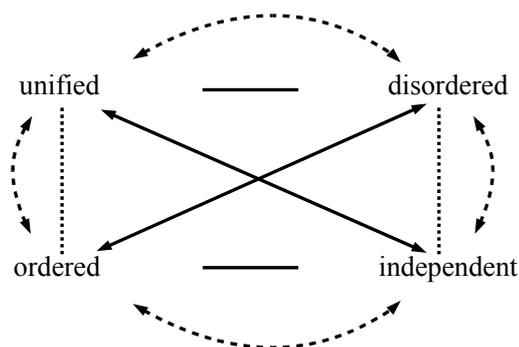
Ex. 4.4: Semiotic square of ways of listening

As the relationships of implication show, 'syntactic' listening relies on an ability to differentiate immediate 'content' from its surrounding 'context' (and thus imply a degree of temporal articulation), whereas more 'acoustic' attitudes emphasise the continuity and complexity of the experience. From this viewpoint, the harmonic language of the Adams stands poised between different ways of listening: because it is rich in triadic references, it invites a 'syntactic' approach at first, but as it progresses it becomes clear that no larger syntax will emerge, so the focus shifts to a more moment-based, 'acoustic' perspective. Because of the variety of different developmental processes which emerge over the course of the movement, however – some with clear gestural or textural 'shapes' – new expectations are constantly being raised, so there is the opportunity to fluctuate unstably between 'syntactic' and 'acoustic' stances. Likewise, the regularity of underlying pulse helps to articulate the form at one level, but

the absence of larger metrical divisions or unambiguous phrase-structural groupings means that continuous ways of hearing the music are equally inviting.

Square 2: layer relationships

The second square (Ex. 4.5) addresses the relationships between the different compositional and perceptual ‘layers’ which interact in a musical performance.



Ex. 4.5: Semiotic square of layer relationships

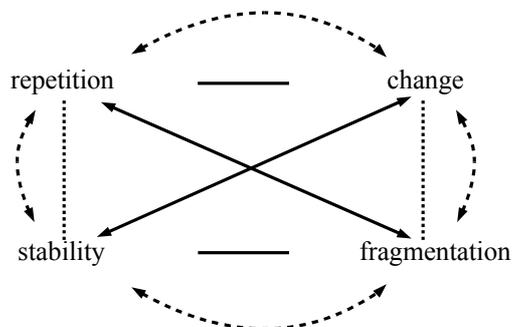
The terminology here is left deliberately vague, because the processes which underpin different works within this study (and the effects which result) are quite varied. Whilst at certain points the ‘layers’ described might refer literally (as in portions of the *Adès*) to layers of material, and the relationships therefore be primarily textural, at others (indeed, throughout most of the music under consideration here) the situation is more complex – with particular techniques or even referential associations forming their own ‘layer’ contrasts in the experience of the piece. Nonetheless, the presence of such layer interactions, and their non-hierarchical nature, form an important common thread throughout this study. This square represents a simple attempt to isolate some aspects of these relationships which play a particularly significant role in the music under discussion (and in *Solar* especially). Because of its close but challenging relationship with the broader Western tonal tradition, which shows a particular prevalence of hierarchical relationships between different musical elements and processes, in this music layers often relate in ways which exploit these hierarchical expectations for particular expressive ends; the four terms chosen here reflect this. Particularly noteworthy is the way order and unity, often seen as almost synonymous, are teased apart here in a way which connects fruitfully with the first semiotic square: the axis ‘ordered–disordered’ describes relationships between levels at a ‘syntactic’ level, whilst

the axis ‘unified–independent’ (which might equally be mapped as ‘homogenous–heterogenous’) deals with varying degrees of complexity in the sounding result.

An ‘ideally’ hierarchic tonal structure (such as might be found in a perfect example from Lerdahl and Jackendoff, 1983) produces a music which is both unified and clearly ordered: all the layers reflect audibly the same larger processes, albeit at different levels (so they are ‘unified’), and the relationship of each to those around it is clear (so they are ‘ordered’). By contrast, where different layers are following independent processes, larger arcs of tension and release, and the overall sense of unfolding structure, will become unclear; furthermore, if the relationships between layers cannot be subsumed in any overall ordering, then higher-level formal divisions will become less articulated and a sense of chaotic tension introduced. In the Adams, the relative independence of the different textural layers is clear, as is the independence of the processes which form each of these layers, and which thus create subsidiary ‘layers’ of their own; this helps to explain the ‘meandering’ nature of the overall ‘journey’ of the piece. However, layers *are* ‘ordered’ to an extent by their adherence to the degree of rhythmic momentum provided by a common pulse. Digging deeper, similar observations could be made about the shared, triadic reference in different textural layers, or the occasional points of ‘coalescence’ which unite them briefly; these ensure that here, too, the features which the square describes are constantly in flux.

Square 3: material and memory

The third square (Ex. 4.6) concerns the way in which material is handled over the course of a composition, particularly in conjunction with listeners’ memories and expectations.



Ex. 4.6: Semiotic square of material and memory

Again, the terms used are deliberately kept fairly general; ‘change’ was chosen because it need not imply linearity, for example, whilst ‘stability’ likewise avoids overt connotations of fixity or stagnation. The contrast between repetition and change is a basic one within a temporal art such as music, of course, but it is more complex than a simple polarity, especially when psychological processes of expectation and release are taken into account. Some degree of repetition is crucial to the perception of large-scale temporal form, and to the establishment of the familiarity necessary to the generation of longer-range tensions based on patterns and their denial (especially within a work which departs from a cultural ‘common language’ such as tonality). At the same time, however, sustained literal repetition over a longer period renders the underlying ‘pattern’ self-evident, and thus can easily create a sense of timeless stasis. On the other hand, changes in texture or material can act as powerful generators of musical momentum and development – yet when this development results in something totally unfamiliar, with no clear connections to what has gone before, the result is often a sense of fragmentation and a timelessness of a different kind.

The handling of this aspect of the musical experience within the Adams concerto is perhaps less complex and ambiguous than was the case with the other two squares.¹⁶ Throughout the movement, there is an even balance between repetition and change: small motivic cells are constantly recurring, and the processes underlying the string layer and the decorative wind lines stay recognisably consistent, but literal repetitions of larger portions of material are much less obvious, in part because of the unbroken continuity of the texture. Instead, different layers simply ‘unspool’ as long threads of always partly recognisable, but always subtly transforming, materials and gestures. The consistency of the material means that there is little sense of long-range development, but repetition is never literal enough either to articulate larger-scale formal boundaries or to generate the sense of timelessness felt in other, more straightforwardly ‘minimalist’ music.

¹⁶ These issues actually become more prominent in the second movement of the concerto, a chaconne, which opposes the repetitive structure of the ground-bass with the continuous flow of the violin line, passing through a number of different configurations of this square in the process. There are a number of parallels between this movement and the more extended Saariaho case study which follows.

Pulling inwards, pushing onwards: Saariaho's *Solar*

The music of the Finnish composer Kaija Saariaho (b. 1952) offers an ideal way into a more concrete discussion of musical interactions. Her own language is full of productive tensions: remarkable for its richness and beauty of atmosphere, its subtle yet effective approach to multi-sectional form, and its overt sense of mystery, it is at the same time full of striking rhythmic energy, at times verging on the brutal, and tightly bound up with the physical qualities of sound. Tim Howell notes an implicit spiritual/physical duality in many of these broader associations (2006: 227), and this extends to the process of composition too: her initial stimuli are often rarefied, even cosmic, yet its realisation is always strikingly concrete – broader ideas making their presence felt only as the outcome of processes of sonic interaction and manipulation which are direct, forceful and controlled.

The comparison with Adès is illuminating. *Arcadiana* alludes in its titles to a number of paintings by Poussin and Watteau, using them to construct a network of intertextual references which can colour the expressive subtext of the quartet. Saariaho, too, often draws on visual sources as inspiration for her music, something which stems in part, perhaps, from her own early experience as an artist, yet her own use of such stimuli, especially in the works of the 1980s and early 1990s, is geared not towards external allusion but towards concrete realisation – and thus inextricably linked with the handling of musical material. For example, *Verblendungen* (1984) was inspired by a single brushstroke; yet in the resultant composition the composer evoked less the ‘look’ of her source than the *act* of painting it, tracing in strikingly physical grit and grain the gradual and chaotic path of dwindling paint on canvas – an arc which itself arose out of the interaction of a number of different processes of musical transformation, as Saariaho’s article on the work describes (1987: 107–124).

The high-level duality of spiritual and physical thus gives way, at the level of technique, to a network of interlocking musical processes which varies from piece to piece, but which is consistent in its blurring of the boundaries between abstract

compositional theory and audible sonic transformation. Saariaho's interest in subtle and non-linear natural phenomena such as smoke, clouds and the *aurora borealis* extends to her compositional language. Rather than working with defined and independent motivic figures, formal blocks or structures of expectation, in this period her approach is often to define certain large-scale processes or trajectories (such as the brushstroke of *Verblendungen*, or the long-range formal arch which underpins *Lichtbogen*), but allow the musical surface to emerge out of a network of different generative procedures. These range from highly continuous, acoustically-driven processes arising from her experience with spectral and computer-aided composition, often based around materials that are themselves notably fluid and continuous (Hargreaves, 2011: 178), to techniques which engage more directly with the broader Western tradition through their handling of metre, motivic recurrence and intervallic conflict. What is crucial here, especially as far as this study is concerned, is the focus on fluid, multi-layered interactions rather than on the specifics of material or technique: as Jon Hargreaves puts it in a discussion of *Du cristal* (1990), 'this music is made up of *relationships*, rather than objects. [...] connection is [its] very genesis' (2011: 177–8; his emphasis).

Approaching Solar

The 1993 chamber work *Solar* stands at a pivotal point in Saariaho's output. The works of the 1980s (such as *Verblendungen* and *Nymphéa*) are notable for their powerful visceral impact and highly continuous form; they draw directly on the processes of acoustic analysis, synthesis and 'interpolation' which Saariaho developed at IRCAM, but combine these with a highly charged, albeit relatively abstract, poetic dimension. However, the 1990s saw a gradual shift in her style: works such as *Château de l'âme* (1995) and *Oltra mar* (1999) show the increasing presence of regular metre and tonal allusions, as well as a more clearly sectional handling of form and a somewhat distanced but more textually specific approach to expression. This stylistic evolution is perhaps best seen as a process of clarification and simplification leading to the composition of her first opera, *L'amour de loin* (2000) – a work which is striking for its use of minimal materials over an extended duration, and for its particularly rarefied approach to the evocation of a particular era (and to a set of broader concerns which are

themselves timeless).¹ Elements of both of these approaches are clearly present in *Solar*. The astronomical resonances of its title place it in the same expressive world as pieces such as *Lichtbogen* (1986) and *Io* (1987), and it shows the same interest in continuous transformations of musical materials.² At the same time, however, there is a new awareness here of the effectiveness of moments of consonance and metrical regularity as a means of clarifying and shaping form, and an increasing openness to the use of repetition and return as a structural device, rather than relying on a constant thread of development to sustain the 'inner life' of a composition – a change in emphasis which prepares the way for music based more explicitly around defined, repeating blocks.

The source for this exploration of structural repetition lies perhaps in the broader conceptual impetus which lies behind *Solar*. As with much of her music of the 1980s and early 1990s, it takes its inspiration from a particular physical process: here, the focus of Saariaho's interest is the force of gravity.³ Her programme note gives a clue to the ideas which lay behind its composition: as she puts it,

Solar is based on the idea of an ever present harmonic structure, which radiates an image around it and forces the harmony over and over again back to its original form, as if following the laws of gravity. The piece is named after this idea. This 'solar' harmony is then contrasted with a very different kind of harmonic principle, based more on polarities. (Saariaho, [n.d.]: online)

This principle of 'harmonic gravity' is quite straightforwardly audible here: *Solar* is built around a single distinctive chord, based on an overtone series on D (Ex. 5.1a)), and the music proceeds as a series of short-range motions away from this chord and back to it again – harmonic 'cycles', in other words. A single underlying chord thus becomes both the generator of change, and the stable point around which other events circulate and towards which they continually return. This structural impetus represents a new departure in the composer's output, in that it shifts the focus from gradual

¹ Saariaho herself has stated that all the works of the preceding decade were linked to varying degrees with the opera (Beyer, 2000: 7); Spencer Lambright traces this process of development through the vocal works in particular (Lambright, 2008: 36–52).

² It is notable that the theme of stars and astronomical bodies, although suspended throughout the 1990s, is resumed after *L'amour de loin* in the shape of works such as *Orion* (2002) and *Asteroid 4179: Toutatis* (2005) – and, indeed, in the flute concerto *Aile du songe* (2001), with its 'aérienne' movement and its poetic references to the bird as a 'satellite / de notre abîme'.

³ Examples of her preoccupation with natural phenomena over this period include *Lichtbogen*, *Nymphéa* (1987), *Du cristal* (1989) and *...à la fumée* (1990), *Cendres* (1997) and *Couleurs du vent* (1998).

transformation on to a form of repetition;⁴ as such, it paves the way, however abstractly, for the soundworld of *Château de l'âme* and (eventually) *L'amour de loin*, both of which make much use of recurrent chords as structural devices (see Lambright, 2008: 48–50, 63–79).

The image shows two musical examples. The top example is a single chord in G major, with notes G4, B4, and D5 in the treble clef and G2, B1, and D2 in the bass clef. Below it is a diagram of a chord structure with notes G, B, and D. The bottom example is a sequence of five chords in G major, showing a gradual distortion and descent of the notes. The notes in the treble clef are G4, B4, and D5, and in the bass clef are G2, B1, and D2. The chords are labeled as 'solar chord', 'distorting', 'and', 'descending', 'towards', and 'G#'. An arrow points from the 'G#' label to the text 'then returning abruptly to opening sonority'.

**Ex. 5.1: *Solar*: a) recurrent 'solar chord'
(every note approximates an overtone of D);
b) sketch of recurring chordal descent**

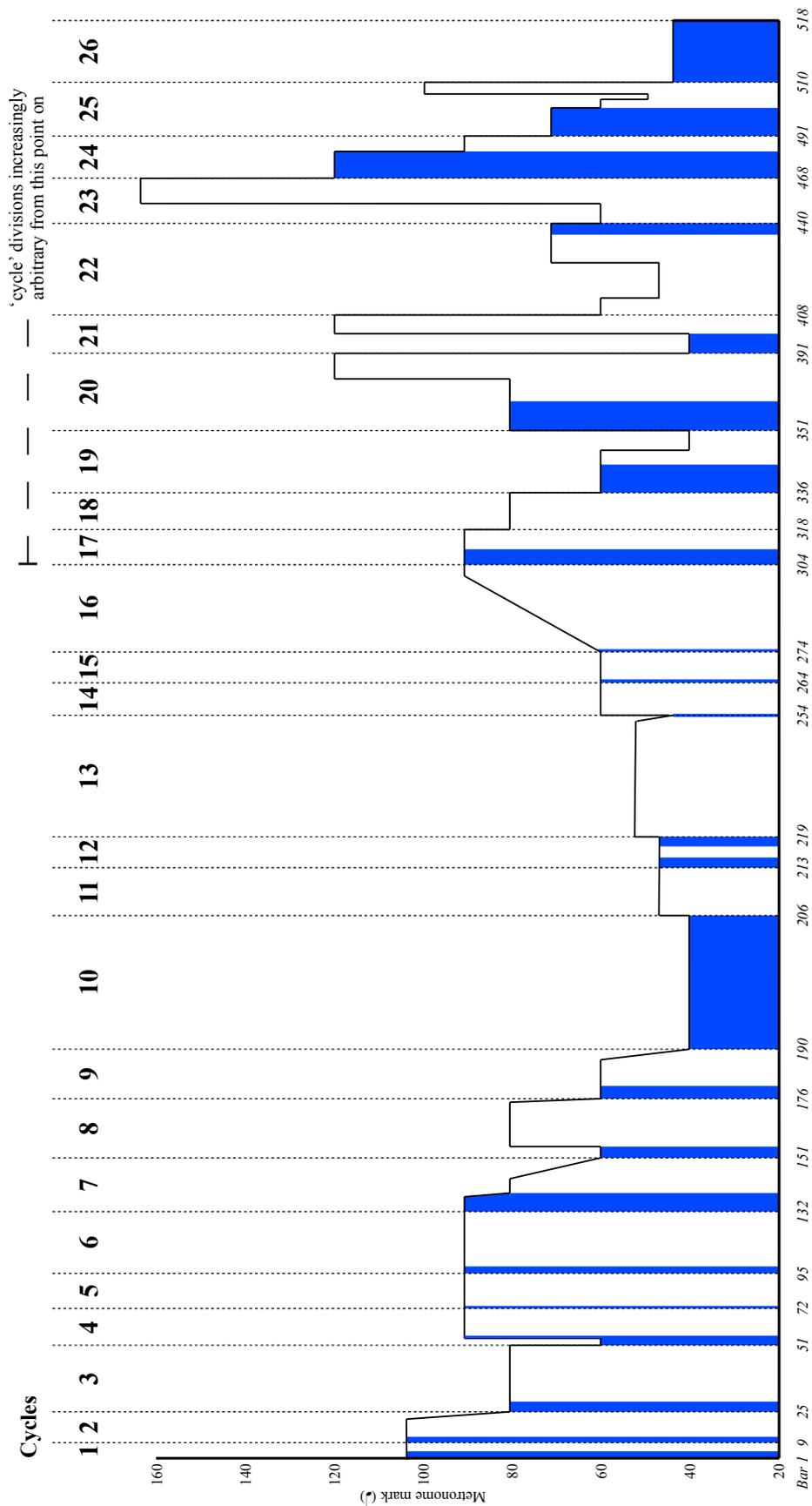
This cyclic scheme might imply a kind of straightforward variation form for the piece as a whole, but in fact in the case of *Solar* the result is far more complex than the basic formal procedure suggests. Although the principle of return is established from the outset, and continues to exert an influence throughout, the nature and shape of these returns varies widely, as does their character; although there is some consistency to the underlying harmonic progression (one attempt at reducing it to a 'basic sequence' is shown in Ex. 5.1b)), at every appearance it differs to some degree in rhythmic proportions, relative consonance or timbral clarity and harmonic emphasis; indeed, the 'cycles' fluctuate in duration throughout. Moreover, even the 'solar chord' itself, whilst retaining its distinctive aural identity, is subject to gradual distortions in its cyclic

⁴ Perhaps the clearest example of this interest in gradual transformation is the early electronic work *Vers le blanc* (1982), which traces a continuum over 15 minutes from one three-note chord to another, more diatonic one (Saariaho, 1987: 104).

recurrences over time (the result of which is the 'intensified' version shown in Ex. 5.10, on page 145). Above all, this instability is gestural: *Solar* is striking for its sudden, mercurial changes of mood and its forceful manipulation of musical energy. This can be seen from a tabular overview of the main dramatic events of each cycle (Ex. 5.2), and a diagram tracing the recurrences of the 'solar chord' and the shifts of tempi across the piece (Ex. 5.3). The first of these also serves to demonstrate the way in which broader transformational processes cut *across* individual cyclic boundaries; the challenge which this presents to any simplistic attempt to 'break up' the work analytically is one which will recur throughout the study.

Cycle	Bars	Notes	Duration
1	1–8	Introduction of 'solar chord' and cyclic process	8 bars
2	9–24	Gradual 'zooming into' process over these cycles...	16
3	25–50	...leading to brief <i>furioso</i> climax	26
4	51–71	New focus on metrical interplay and antiphony	21
5	72–94	Alternation between calmer and more agitated passages	23
6	95–131	Rising demisemiquaver gesture increases tension	37
7	132–150	First 'chaos' texture, <i>furioso</i>	19
8	151–175	Section built on rising quarter-tones	25
9	176–189	Partial return of 'chaos' texture	14
10	190–205	Stabilisation; 'grid' rhythms, basic chord constant	16
11	206–212	Difficult to perceive these as 'cycles'...	7
12	213–216	...without the earlier activity and dissonance	4
13	217–253	Sequence of 'cadenzas' in wind and pianos	37
14	254–263	Beginning of focal convergence; rising bass...	10
15	264–273	...bass still rising, notated <i>accelerando</i> ...	10
16	274–303	...basic chord collapses into unison F#	30
17	304–317	Return of 'chaos' texture, <i>ppp</i>	14
18	318–335	Return of material from cycle 8	18
19	336–346	'Chaos' texture, again <i>ppp</i> and <i>dolce</i>	11
20+	347–518	Cyclic form breaks down; 'solar chord' and other main materials gradually separated from one another	(172)

Ex. 5.2: Cyclic form of *Solar*



Ex. 5.3: Time-tempo cyclic overview of *Solar* (to scale by recorded duration; recurrences of ‘solar chord’ marked in blue)

One intriguing tension of Saariaho's works from this period in particular is their concern for structural clarity on the largest scale, as a counterpoint to the complexity of the surface; processes whose details are highly chaotic and unpredictable are subsumed in broader shapes which are strikingly simple.⁵ In spite of the volatile way in which it is articulated, there is nonetheless a relatively straightforward formal arc to *Solar*, one which its kaleidoscopic changes of tempo make clear. As Ex. 5.3 illustrates, the dramatic shape of the piece as a whole is defined by an extended *ritardando* which leads from its first climax at bar 132 to a very slow central section (dominated by the 'solar chord'), and an equally prominent *accelerando* which leads from this section to another climax at bar 286. This is followed by an extended disintegrative coda (which lasts for more than a third of the overall duration), where materials and tempi are presented in a series of increasingly violent contrasts, something Saariaho describes in her own programme note (Saariaho, [n.d.]: online). The paradox here is thus that a very simple underlying concept, which is fleshed out with a minimum of material, can generate a large-scale structure of striking drama and internal complexity – but one whose overriding trajectory remains clearly discernible. This effect arises from a tension between Saariaho's concept of 'harmonic gravity', and a sense of momentum which arises from more continuous processes of development and transformation; the analytical challenge here is that these two concepts are tightly interdependent throughout – the tension created by the enforced structural stasis of the 'gravity' principle generating a momentum which ends up overpowering it altogether, and thus sparking off its wholesale disintegration. In order to make sense of this situation, the ramifications of Saariaho's invocation of 'gravity' need to be explored in more depth.

⁵ Examples include *Verblendungen*, which attempts the 'impossible' formal device of placing the climax at the very beginning, with all that follows simply 'a winding down after the initial burst of energy' (Saariaho, 1987: 107); *Du cristal*, whose changing textures trace a 'crystalline' rhombus (Pousset, 1994: 100–1); and *Lichtbogen*, which is constructed as a clear arch of increasing and decreasing energy – the 'bow' of its title (Howell, 2006: 211).

Establishing terms: gravity and momentum

On the surface, the terms which Saariaho uses in her note are surprisingly familiar. The analogy of gravity is often used as a way of explaining the harmonic structure of common-practice Western tonal music, at levels ranging from the individual phrase to whole compositions.⁶ It is an apt image for a linear, directed process: phrases and sections of music appear to be subject to the attractive 'pull' of a tonic region, and so harmonic progressions appear as a series of 'arcs' moving away from and back towards this region. The concept is clearly very closely linked with the experience of musical temporality and energy, too: motion away from the current tonal centre produces a rise in tension and expectation, and this generates a sense of momentum which drives the eventual return to the tonic – offering one way of understanding the idea of 'goal-directedness' or teleology within tonal music. The analogy fits well to increasing complexity, too: simple, low-level harmonic progressions might be equated to the parabolic trajectory of a ball being thrown or bounced, whilst the modulatory structure of a whole piece might appear more like a glider floating on thermals. So long as the music stays within the bounds of functional tonality, the gravitational 'pull' of the tonic will generate enough musical momentum for a final return.

With *Solar*, however, it is clear that the analogy is being used rather differently. Although the interplay of acoustic consonance and dissonance is an integral part of the harmonic language here, this work is certainly far from 'tonal' in any functional sense; as a result, here the relationship between the concept of gravity and that of musical energy is more fluid than it is within the tonal model. At some points, the return of the initial chord within *Solar* carries with it the same sense of release and 'arrival' that might be felt in the recapitulation of a sonata-form movement, but in other places it is felt purely as a continuation of other harmonic processes, or even as a generator of *increasing* tension. In a sense, 'harmonic gravity' within *Solar* is not a pre-existent feature of the language, but rather a principle which Saariaho uses to *create, proliferate* and *control* material: this is apparent from the phrasing of her programme note, which talks about the ever-present harmonic structure 'radiating an image around itself'. The

⁶ For a concise summary of the different contexts in which this metaphor has been used, see Cook, 2002: 98 (and n. 93 especially).

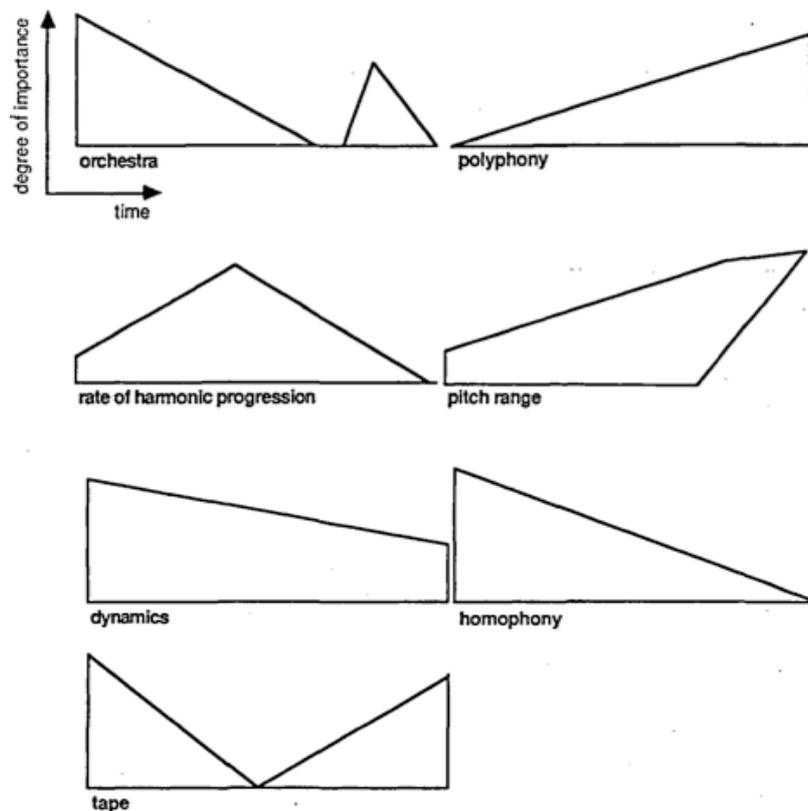
principle of gravity also functions as another kind of musical material in itself, and one which is just as subject to change, development and disintegration as any other process.

From the earth to the stars: expanding the metaphor

It is clear, then, that there is more to the 'gravity' image here than a simple pattern of departure and return. The changing effects of the cyclic structure are dependent on a variety of other processes – rhythmic, gestural, timbral, and psychological – which interact in complex and non-linear ways with this structure and with each other. The complexity of these interactions – and their non-centred, non-hierarchical nature in particular – fits with the descriptions of Deleuze and Guattari's 'rhizome' from the previous chapter; however, rather than clinging to this earthy metaphor (which is, at root, perhaps a little *too* knotty), *Solar* offers an opportunity to rethink the situation in terms more fitting to its title, by re-conceiving Saariaho's own analogy in broader, more cosmic terms. An earth-bound view of gravity sees it as linear, two-dimensional and bound up primarily with directed motion; likewise, metaphorical applications of the concept to tonal harmony generally stress its linearity, hierarchical structure and teleological force. However, when viewed from the perspective of the solar system as a whole, the perspective shifts entirely: seen as an interplanetary force, gravity is visibly multi-dimensional and dependent on a variety of interacting factors; it is also a generative principle as well as a controlling one – after all, it is gravitational attraction which causes stars and planets to form in the first place, out of clouds of debris. And from this perspective it has a much more complex interaction with momentum: an object in orbit, for example, is preserving a delicate balance between its own velocity and the attractive pull of the planet which it is orbiting, and an imbalance in these two elements could lead to it either falling into the planet or careering off into space.

This 'cosmic' view of gravity allows a broader approach to be taken towards the way in which varying materials are handled within *Solar*. In particular, throughout the piece there is a tension between its cyclical harmonic process and a variety of other, more linear developmental trajectories. Even when the harmonic dimension is remaining relatively constant, Saariaho makes extensive use of gradual shifts in timbre, metre and rhythmic density as means of generating a sense of growing momentum; different aspects of the music are thus set in tension with one another from the outset.

There is a link here with a longstanding technique of Saariaho's which has its root in her connections with spectralism. In her 1987 article, 'Timbre and Harmony', the composer describes her interest in complex interactions between different musical parameters which are handled independently, rather than as 'constituent elements' (to use Bent's phrase) in a given hierarchy (Saariaho, 1987: 97); in *Verblendungen*, for example, different elements were subjected to independent processes of continuous transformation which are illustrated in the article by graph-like sketches (Ex. 5.4).



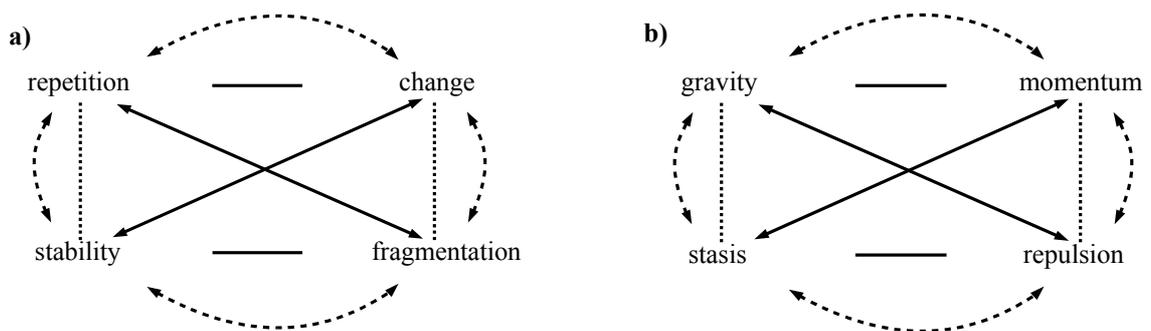
Ex. 5.4: 'Parametric graphs' in *Verblendungen*
(from Saariaho, 1987: 16)

These sketches provide an intriguing insight into Saariaho's compositional process, and the 'parametric' approach which they describe certainly remains important within *Solar*; indeed, there are points within this work where the idea of constructing similar 'graphs' seems equally feasible. The main issue with these diagrams, however, is that they focus only on the mechanics of construction: they might be very helpful as a description of how the music was put together, but they are far less informative when it comes to its audible result – because they do nothing to describe the way in which the

different processes of parametric transformation might interact and affect one another. What is needed is a way of exploring the relationships and interactions between these different elements, so that the specific effects which result from their combination can be considered.

Squaring the circle: semiotic squares in Solar

Here, as a continuation of the concepts developed in the previous chapter, Greimas's semiotic square (suitably adapted to consider each 'axis' as a continuum) will be used as a means of exploring these interactions in more depth.⁷ Rather than try to subsume all the different processes encountered within one explanatory structure, here the squares introduced in the previous chapter will each contribute to the discussion in what might be considered a 'rhizomic' configuration (or perhaps, adopting Saariaho's own metaphors, a 'Solar system'). As the analysis moves from one feature to the next, the focus of attention shifts and a different set of parameters is explored; overlaps and interactions between these sets are freely permitted, and no attempt is made to force them into a hierarchy. In order to align with Saariaho's own metaphors for the piece, the terms in the square of material development can be mapped to the tension between planetary gravity and linear momentum (Ex. 5.5).



**Ex. 5.5: a) Semiotic square of material and memory (from Chapter 4);
b) mapping of terms to 'gravity' metaphor in *Solar***

This mapping acknowledges the cohesive force which gravity exerts at a planetary level (which finds a metaphorical equivalent in the formal cohesion brought about by the structures of expectation which material repetition generates), and the disintegration that

⁷ As an aid to the reader, the semiotic squares used throughout this analysis are reproduced on a fold-out page at the end of the chapter, so that they can be consulted alongside the text. See page 157.

results if it is suspended. This aspect is particularly important within *Solar* because Saariaho's harmonic 'gravity' is such a foundational principle of the musical language; without a pre-existent syntactic structure such as tonal harmony to draw on, the expectation which it generates (once established) becomes a primary element in the coherence of the work as a whole. For this reason, the mapping is rather more specific than the original square, in musical terms as well as in the context of the physical analogy: the linear implications of 'momentum' and 'stasis' are far more explicit than those of change or stability, and this reflects the role which these relationships play within the large-scale trajectory of the piece.

The danger of a semiotic square like this, of course, is that it might give the impression that these features are fixed 'poles', binary and static. Nothing could be further from the truth: each 'axis' here is a continuum, and exploration is highly dynamic – especially so in this piece, where the shifting relationships between different elements provide much of the underlying sense of energy. Because of this, there is a particular risk here that analysis as 'breaking up' might all too easily turn into 'dissection', isolating processes whose very effect relies on the way that they interact, moment to moment. In order to avoid this, the account presented here is essentially chronological, attempting to reflect the changing balance of different underlying tensions as the work progresses. The relevance of each semiotic square to these issues is set up by a brief discussion of the opening bars – the closest this account comes to overt 'breaking up' – as a way of preparing a conceptual apparatus which then runs silently through the narrative that follows.

Rich affordances: the opening of the work

The opening bars of *Solar* set up a number of different concerns which will emerge over the course of the composition, and these form a set of material tensions which unfold throughout: acoustic versus syntactic ways of hearing sonority and rhythm; textural interlock juxtaposed with disintegration; cyclic repeating structures at different levels opposed to linear processes of change. Although the opening thus provides the source for many later developments, it could not be described as a germinal 'cell' in any organic sense; that would imply a linearity and teleological drive which does not fit well with the multiple layers of possibility described above (nor with the way in which they

are developed throughout). Instead, following the vocabulary of the previous chapter, these first bars might be said to 'afford' a number of different perceptual and developmental opportunities, each of which is explored to varied extents throughout.

At the harmonic level, the recurrent 'solar chord' which is the focus of Saariaho's 'gravity' principle – and which is stated at the outset – marks a high-point of consonance and potential tonal reference in her *œuvre* to this point. It is built entirely from partials of the harmonic series on D, with quarter-tones used to approximate the original intonation where necessary; indeed, the sonority is rendered even more 'open' by omitting a number of upper partials, so that it is almost as widely spaced in its upper reaches as it is in the bass. Yet this very openness also produces a striking number of bare 'dissonances' in the upper register, unmediated by smaller intervening intervals, but rendered consonant by retuning or the acoustic context provided by the underlying fundamental; most notable of these are the pair of 'consonant tritones' F#-C quarter sharp and B quarter flat-E, but the prominence of the high D# in the most characteristic voicing of the chord (Ex. 5.6) is also striking next to the low D fundamental.

The image shows a musical score for the 'Solar' chord. It consists of two staves: a treble clef staff and a bass clef staff. The treble staff contains notes for violin, trumpet, piano, flute, harp, and oboe. The bass staff contains notes for viola, clarinet, piano, and double bass. The notes are arranged to form a chord with a low D fundamental and a high D#, along with other partials of the harmonic series. The notes are marked with quarter tones to indicate intonation adjustments.

Ex. 5.6: *Solar*, characteristic recurrent voicing of 'solar chord'

A tension is therefore established from the outset between 'acoustic' and 'syntactic' ways of experiencing this basic sonority (see Ex. 5.19a)), page 157). Over time, this expands to encompass the polarity between gradual, continuous processes based around the transformation of physical sound, and more articulated, contextually-driven progressions of harmony or interval; thus the issues of the first semiotic square come into play.⁸

⁸ For examples of the contrast between 'acoustic' and 'syntactic' processes in another work, see March, 2011: 25–7.

A further tension is present in the handling of textural and rhythmic cohesion. The opening establishes three instrumental strata, moving at different speeds: the 'foreground' is provided by the non-sustaining instruments, the two pianos, harp and percussion; the woodwind provide more sustained but less regular interjections into the texture, adding a layer of slightly rhythmically displaced chords and timbral decoration; and the string trio act as a 'background' of gradual but continuous change, serving to define points of harmonic clarity. These different layers are co-ordinated at the outset by a clear stream of semiquavers in the piano part; audible pulsation plays a far more important role within *Solar* than it did in the majority of the composer's preceding works (which generally foregrounded more continuous, rhythmically 'blurry' textures, saving moments of articulated metre for points of particular structural importance). Even in this first cycle, however, this textural and rhythmic clarity is startlingly short-lived: by the second bar the semiquaver pulse has begun to falter, the piano shifting out by a demisemiquaver, and in the following bar the metre is disturbed by the insertion of an additional quaver. This sets up a concern for processes of disintegration and convergence between layers which becomes a central issue (see Ex. 5.19b)), page 157): throughout the piece, a wide variety of the possible textural alignments of the ensemble are explored (from chaotic independence to total unity), and the differing relationships these alignments (and the processes which transform one to the next) have with the overall sense of musical energy is a particular focus in this account.

Finally, the context of these interactions as part of a set of broader rhythmic and structural patterns also raises issues of its own. Disturbances of the basic duple metre are evident from in the first cycle, both as part of the motion *away* from the 'solar chord' (the 5/8 bar) and as a crucial element in the motion *back*: the shortening of the final bar into 3/8, shifting the 'gear' of the basic pulse from crotchets to quavers, serves to bring the ensemble forcibly back into sync, and gives added structural weight to the return. This play with rhythmic expectation continues throughout, with metre and tempo subject to constant shifts as the larger continuity dictates; moreover, and perhaps more significantly, once the underlying repetition scheme has been clearly established, it too becomes subject to manipulation as part of the overarching dramatic trajectory (see Ex. 5.19c)), page 157). This is where the earlier contrast between cyclic 'gravity' and linear 'momentum' becomes important: the psychological tension between repetition and

development is central to the control of longer-term drama within *Solar*. Over the course of the work, this opposition moves from the surface, in the control of metre and tempo, to larger-scale patterns of formal recurrence; in the final section, with the recurrence of blocks of established material, it begins to impinge on high-level processes of memory and expectation, as the forces of structural 'gravity' and 'momentum' themselves give way to increasing fragmentation and polarisation.

Moving into orbit: cycles 1–7

The first seven cycles of *Solar* are primarily expository: they serve to establish the basic repeating structure created by Saariaho's 'solar harmony', and introduce the primary materials of the piece. At the beginning, of course, the 'gravity' of the chord is purely gestural, arising from the force of its presentation; repetition is thus crucial to establishing it as the focus of longer-term expectation. More developmental processes are thus restricted to the spaces between cyclic recurrences, with each suggestion of mounting linear momentum quickly being drawn back forcefully to the 'solar' chord. In fact, the simplicity of the 'terrestrial' gravity metaphor fits rather well here: bursts of energy are followed by abrupt returns to earth, like a bouncing ball. As the principles of 'solar harmony' becomes more firmly established, however, the balance shifts, and linear processes begin to blur the boundaries of the underlying cyclical structure – as if the ball were somehow bouncing high enough to start moving into orbit.

Acoustic 'zoom'

This process is evident in the first three cycles, where the focus is decisively upon the opening gesture. Rather than developing further, or being contrasted with other material, the gesture simply 'decays' each time, before being restated. There is no attempt to smooth the join between each of these cycles; rather, each ends with a brief shift of metrical 'gear' (as the analysis of the opening described), and each recurrence of the 'solar' chord brings with it a marked change in tempo or mood – all of which reinforces the sense of each cycle as a self-contained event. The decay involves a number of different elements: the texture gradually thins as the woodwind drop out, the clarity of the opening piano semiquavers is blurred by cross-rhythms and grace-notes, and there is

a harmonic motion away from the opening chord to a number of more dissonant sonorities. Moreover, each repetition expands this decay process markedly, as if listeners were 'zooming in' on the sound: the cycles last 8, 16 and 26 bars respectively, with the complexity of the harmonic and rhythmic transformations growing each time.⁹ By the third cycle, the clarity of the attack has begun to weaken too, with the woodwind entries staggered rather than unison, and semiquaver pulses blurred from the start by sextuplet cross-rhythms. The aggressive gestures of rhythmic and acoustic dissonance which appear towards the end of this cycle in the woodwind – the aural 'beats' of semitone and quarter-tone clusters imitated at a rhythmic level (Ex. 5.7) – serve as a powerful enactment of the tension the encroaching chaos engenders.

a)

Oboe

B♭ clarinet

b)

Flute

Oboe

B♭ clarinet

Ex. 5.7: *Solar*, aural 'beats', bars a) 40–3 and b) 45–7

The musical dramatisation of acoustic processes such as attack and decay is, of course, highly characteristic of the spectral approach which has so influenced Saariaho. Gérard Grisey's *Partiels* (1975), one of the defining early works of the technique, is based on the instrumental synthesis of a recorded trombone note, which is gradually

⁹ Jon Hargreaves invokes the concept of 'perceptual zoom' to discuss a similar situation in *Du cristal* (1989): there, the issue is the overwhelming variety of material and types of texture, which invite constant shifts of perceptual position – thus 'zooming in and out' to focus at one point on a single gesture, at another on a whole process or sonority (Hargreaves, 2011: 187–191). In *Solar* this process of 'zooming' is composed-in, a feature of the presentation of the material.

'stretched out' over the course of the piece so that very subtle characteristics of its sound come to the fore.¹⁰ This approach is notable for its combination of change and stability: each presentation is noticeably different, and the directed nature of the expansion means that these differences are cumulative, but the source material stays the same. There is a clear perceptual tension here, one which the 'ways of listening' square addresses: in this section a single sonic event which a syntactic perspective would see as stable (the presentation of a single chord) is presented as an increasingly complex expanding sequence, and the acoustic process of decay becomes the basis of a syntactic structure of cyclic return.

This section thus sets up both gravity, in its repetitions and limited material, and momentum, in its directed 'zoom'. The cumulative effect of these transformations is to erode the identity of the opening sonority; once this process has started, it takes on a life of its own. In harmonic terms, for example, the repetitions of the 'solar chord' are increasingly overlaid with additional, dissonant pitches; likewise, the harmonies of the decay sequence grow more complex as the sequence expands, reaching the point of chromatic saturation by bar 24 (Ex. 5.8). Rhythmically, too, by the third cycle the semiquaver pulsation of the opening has moved from the piano to the more subdued timbre of the harp, and become blurred by sextuplet patterns in percussion and synthesiser. This erosion undermines the perception of each cycle as a single, continuous process of decay, and allows polarities to arise within the texture. Harmonically, G# begins to emerge as a kind of opposite pole to the D of the 'solar chord' – something which is visible in the gradual octave 'migration' of this pitch from the top of the register to the bass over the first 15 bars (see Ex. 5.8). Texturally, the unity of the decay process is replaced (in the third cycle especially) by the emergence of fragments of distinctive material in individual parts, such as the *glissando* figures of the woodwind in bars 34 and 36, or the quarter-tone patterns of the synthesiser in bars 26–40.

¹⁰ Saariaho's *Oltra mar* (1999) for orchestra and chorus opens with a strikingly reminiscent gesture, and enacts a similar process of gradual expansion; given that its fifth movement is dedicated to Grisey's memory, this is perhaps no coincidence.

Ex. 5.8: Harmonic reduction of *Solar*, bars 1–25; red notes mark new dissonances added to ‘solar chord’, boxes mark descent of G#, double bars mark cycle divisions

Structurally, the final bars of each cycle contrast increasingly strongly with their surroundings; bars 48–50 show just how forceful this polarity has become, combining the most extended passage yet in 3/8 (the shift of ‘gear’ which precedes each cyclic return) with a character of its own (*furioso*), highly aggressive, ‘noisy’ devices such as flutter-tonguing and heavy bow-pressure, and a harmonic field which emphasises C# and G# (in the trumpet part) but excludes D altogether. The contrast with bar 51 is the most marked yet, with tempo, character, harmony, metre and instrumentation all abruptly subdued.

Higher-level polarities

By cycles 4–7, the repeating structure of the piece has been established, and the conflict between circularity and linearity has been introduced – so the focus changes. Throughout bars 51–131, the semiquaver remains a stable unit of pulsation, with the complex cross-rhythms of the opening all but abandoned. The irregularity instead shifts to larger rhythmic groupings: there is a continual alternation here between metres based on crotchets and those based on quavers, and although fixed metrical sequences do become established for short periods, no consistent longer-term hypermetre is ever set up. The rhythmic ‘crumbling’ of the opening is thus expanded from an acoustic level, part of the representation of a process of decay, to a syntactic one, and it shifts from a directed progression into something more unpredictable: although the beginnings of cycles show a brief relaxation in the metrical shifts, there is no sense of cumulative irregularity as each progresses.

The move away from the controlling ‘acoustic’ structure of attack and decay has a clear effect on the texture, too: this section is full of antiphonal exchanges between different parts of the ensemble, and within the instrumental ‘blocks’ of woodwind and strings there are bursts of independence (such as the aggressive double-bass figures which begin in bar 107, or the solo woodwind *glissandi* in bars 111, 119 and 126). The semiotic square of layer relationships is helpful here: whilst the opening cycles presented an ensemble unified and ordered by the processes of decay and acoustic ‘zoom’, here these larger controlling structures are weakened, and instrumental and rhythmic ‘layers’ become both more independent and less clearly ordered. The result of this process is a gradual rise in long-range tension; even though the lack of order in the manipulations of metre and texture mean that there is no clear sense of linearity here, nonetheless the sense of momentum begins to override the ‘gravity’ of the cyclic structure. Cycle-lengths continue to grow, and the techniques used to delineate the transition between each repetition of the basic material (metrical ‘gear-shifts’, ‘noisy’ extended techniques, changes of tempo or character) become more frequent *within* each cycle, so that the boundaries are less clearly-defined – it is only the underlying harmonic sequence which marks the larger structural divisions.

Towards the end of the section, this tension *does* begin to translate to something more linear. The double-bass solo passages of bar 107 onwards serve to articulate a clear chromatic descent; this descent is doubled by an increasingly prominent rising demisemiquaver figure (Ex. 5.9) which introduces another level of rhythmic energy to the semiquaver-dominated texture. In bars 127–131 this descending sequence lands emphatically on a G#, the ‘opposite pole’ to D; in response, the next cycle is taken over by a ‘*furioso*’ outburst of layered polyrhythmic *ostinati* that represents the dramatic high-point so far. This seemingly chaotic texture returns as a structural marker several times throughout (at bars 176, 304 and 336);¹¹ as with the opening, the force of its impact is linked to the position it occupies with regard to the larger interactions which make up the work. It is thus worth considering the section briefly within the context of the three semiotic squares that have been discussed thus far.

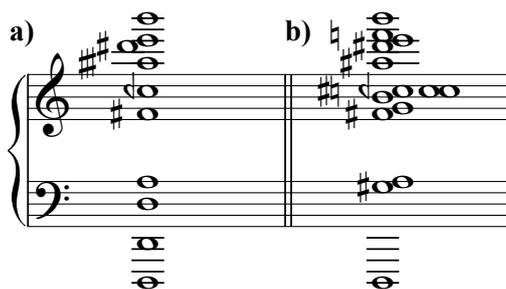


Ex. 5.9: *Solar*, demisemiquaver ‘flourish’ in piano 1, bar 102

As far as the ways of listening square is concerned, this passage is focussed on the continuous and the acoustic: it reverses the decay process of the opening by starting with a noisy texture of layered polyrhythms and complex timbres (heavy bow-pressure in the strings, and flutter-tonguing in the wind), and gradually filtering this down to a point of clarity at bar 151. The relationships between different perceptual layers are rather more complex: the effect of the whole is one of chaotic independence, because of the layering of a wealth of different polyrhythmic patterns; yet in reality each instrument is ‘locked into’ a particular ostinato pattern, and the whole ensemble is restricted to a limited pitch-set based around an intensified version of the ‘solar chord’ (Ex. 5.10) – so in fact the texture is surprisingly carefully-ordered. Finally, from

¹¹ Saariaho has shown a recurrent interest in the use of particular repeating sonorities or textures as perceptual ‘landmarks’ amid a sea of shifting processes and materials; this technique has been discussed perhaps most extensively in the context of *Amers* (1992), whose title – literally referring to buoys or navigational aids – is based around this principle (see Lorieux, 2004, and Howell, 2011). The use of ‘harmonic gravity’ here might be seen as a further development of these same concerns.

the perspective of harmonic gravity this section presents a paradox: the presentation of the 'solar chord' (which lasts a full six bars here), in principle a point of gravitational release, has become in itself a generator of striking aggression and momentum – the trajectory of this passage perhaps the most clearly linear of the piece to this point. Returning to the metaphor of an object gradually entering orbit, this passage might be seen as presenting a striking example of atmospheric 'turbulence'.



Ex. 5.10: *Solar*, comparison of a) 'solar chord' with b) harmonic reduction of bar 132 ('*furioso*' passage)

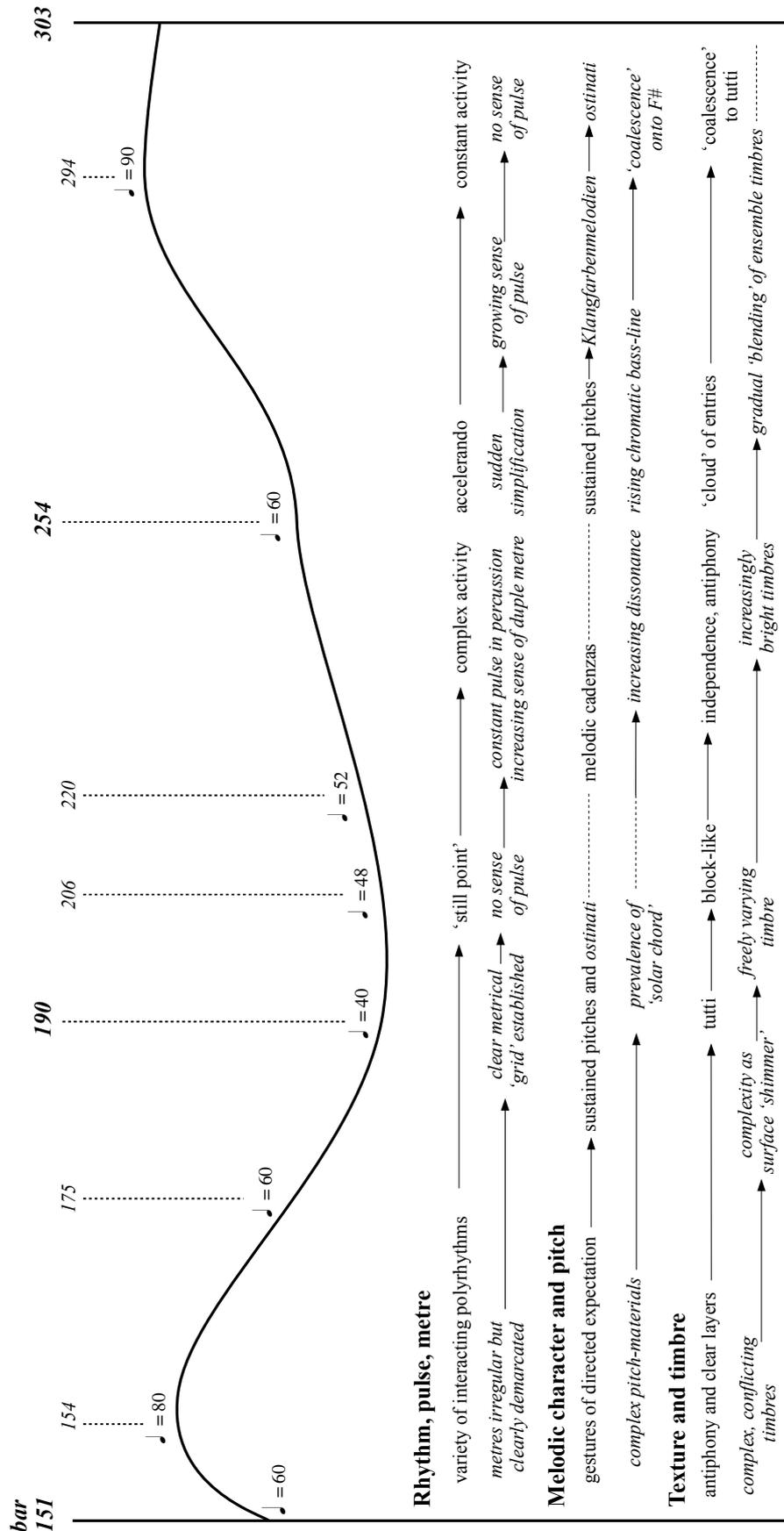
Escape velocity: cycles 8–16

After the multi-layered complexity of the opening, the central section of *Solar* is strikingly single-minded. In dramatic terms, it contains the most distinctive shape of the work: an extended structural *ritardando*, followed by a period of stasis, and then an equally extended *accelerando*. Sectional divisions are still very audible here (particularly at bars 190 and 254), but they emerge as 'turning points' in a larger process which is strikingly continuous. The creation of this larger-scale arc is heavily reliant on the manipulation of interactions between different processes: the process of calming which leads to the point of stasis involves the establishment of a 'gravitational centre' of regular metre and harmonic stability, into which other musical elements are subsumed. From this still point – the 'eye' of the *Solar* 'storm' – the *accelerando* grows through a reassertion of melodic and rhythmic independence, albeit still under the control of larger harmonic and metric ordering; the increasing energy which arises from this is then redirected into a single, continuously cumulative transformation (a rhythmic 'interpolation' that occupies bars 254–94), which reaches its climax in a total collapse of the texture onto unison F#.

The square of layer relationships provides a helpful perspective on the way different parameters move into and out of alignment here: through the section there is a progression from disordered independence, through a unity based around stasis and a kind of ordered independence, to a unity based around a continuous, cumulative process; finally, the climax of this sequence sees rhythmic order degenerate into chaos, but pitch-based unity intensifies still further. Because of its clear dramatic arc, this section offers the most obvious metaphorical parallels, too. 'Geostationary orbit' describes the phenomenon whereby an object appears stationary relative to the body which it is orbiting; this combination of total unity and felt stasis offers an intriguing perspective on the 'still centre' of this section, bars 206–20 (especially if heard dynamically, as a process of approach to this point). By contrast, the climactic *accelerando* which follows suggests the increase of velocity which allows an object to 'escape' from orbit; it is striking that after the convergence onto F#, the cyclic structure of the work begins gradually to fall apart – as if the structural 'attraction' of the 'solar chord' had somehow been overcome.

Tracing the 'lines of flight'

The details are more complex than this rough sketch, however. This section is a particularly clear example of the way in which overlapping and contrasting processes in different parameters can generate particularly subtle gradations of musical energy. A diagram which traces these shifting interactions across a number of musical dimensions can help to illuminate their relationship to the underlying dramatic shape of the section (Ex. 5.11). Rather than the clear stratifications of Saariaho's own parametric compositional diagrams for *Verblendungen*, here the focus is the effect which emerges from their combination – non-hierarchical layers connected obliquely by 'lines of flight', such that the resulting trajectory, distinctive and dramatic though it is, remains nonetheless constantly in flux. In the passage from bars 151–90, for example, a burst of renewed rhythmic and textural energy is created by the return of the metrical interplay of bars 51–132 and the introduction of antiphonal exchanges between keyboard and violin; at the same time, the simpler layered texture here, and the clear demarcation of downbeats in timpani and piano, undercut the sense of building energy which was present earlier. Instead, the rising quarter-tone gestures, *glissandi* and hyperactive violin



Ex. 5.11: *Solar*, interactions in bars 151–303 (with interpretative 'energy curve' based on tempi and density of rhythmic activity)

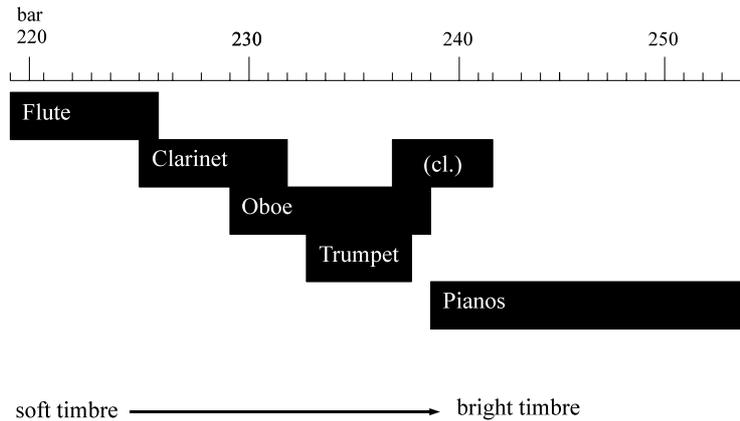
ascent take on a quality of directed expectation, which becomes more pronounced as the tempo (and the perceived tempo of underlying pulsation) gradually slows. The goal of this process comes at bar 190, where the various rhythmic layers are assembled into an entirely regular polymetric 'grid' (Ex. 5.12) which then gradually but audibly erodes over the following 16 bars (the regularity of the hypermeasure itself suggestive).

The image displays three systems of musical notation for the piece 'Solar' by Esa-Pekka Saariaho. The first system shows five staves: Crotales, Harp, Timpani, Keyboard 2, and Keyboard 1. The second system shows four staves: Crotales, Harp, Timpani, and Keyboard 1. The third system shows four staves: Crotales, Harp, Timpani, and Keyboard 1. The notation is complex, featuring many sixteenth notes and rests, with a '6' above some groups of notes, indicating a sixteenth-note pulse. The overall effect is a dense, polymetric texture that gradually erodes over time.

**Ex. 5.12: *Solar*, bars 190–6: polymetric grid
and notated *ritardando* (rhythms only)**

Similarly complex interactions can be seen in the gradual recovery of energy which follows the stillness of bar 206. With pulse all but inaudible at this point, the focus shifts to discontinuous changes of harmony and variations of timbre; small, isolated trills soon give way to more animated melodic gestures, however, and the result is a series of increasingly virtuosic solo cadenzas, culminating in a furious piano 'duel' (Ex. 5.13). Although initially they seem highly chaotic, in fact these cadenzas display a building sense of underlying metre (Ex. 5.14a)), reinforced by the return of regular pulsation in the percussion; and in spite of their wide melodic leaps and unpredictable phrasing, in pitch-structural terms they enact another variant of the

Pulling inwards, pushing onwards: Saariaho's Solar



Ex. 5.13: *Solar*, bars 219–53: layout of cadenzas

flute, bar 219 220-2 223-4 cl., 225 226 227 228
(basic chord) (multiphonic) (multiphonic)

ob., bar 229 230 231 232 trp., 233-4 ob., 235-6 cl., 237 238
(multiphonic) (multiphonic)

**Ex. 5.14: *Solar*, a) dupe metre in piano 'duel', bars 247–250;
b) harmonic reduction of wind cadenzas, bars 219–238
(new pitches in the disintegrative process marked in red)**

The result, however, stretches this process of parametric coalescence to its limits, and beyond: at bar 294, the apex of the *accelerando*, the harmonies converge on a single F# (prominent from bar 286 on the trumpet), decorated with timbral and microtonal trills and brief flourishes, and notable as the registral centre of the 'solar chord' (Ex. 5.16). It is as if the huge energy of the process has made the sonority collapse in on itself – a metaphorical parallel here being perhaps the process which forms dwarf stars from red giants, when the inward force of their own gravitational pull becomes too strong.

282 *sempre marcato*
f

285 *f sempre* *martellato*

288

291

Ex. 5.16: *Solar*, bars 282–94: pitch convergence in keyboard 2 part¹²

Reeling off into space: cycles 17–25

In terms of the analytical issues under consideration here, the most significant feature of the principle of harmonic recurrence which underpins *Solar* is its fluidity and instability. Any account which treats Saariaho's 'solar harmony' as a solid, systematic foundation upon which other processes of development and expectation can unfold – a contemporary rethinking of aspects of tonality, perhaps – will inevitably come into conflict with the details of its presentation over the course of the work. The opposition of 'gravity' and 'momentum' (or repetition and change) outlined at the opening is itself reliant on psychological processes of memory and expectation which are subject to continual shift and destabilisation, justifying the deliberately flexible, 'cyclic'

¹² The score contains an error, corrected here: in bars 290–1 the G is notated as a G \flat , an enharmonic duplication of the F# below.

presentation of the semiotic squares in this analysis. As an example of this additional level of complexity, although in the square repetition is connected by implication to stasis (as a kind of moment of arrival, or of recognisable material), when these repetitions are structured as part of a longer-term sequence the expectation which this generates can bring with it a paradoxical sense of *momentum*. This connects with the square of layer relationships, in that this momentum arises from a broader ordering in the layered processes which underpin the repetition. Conversely, a texture of continual, escalating development (in the sense of continual material transformation) can in its unpredictability result in a sense of stasis, since – in the terminology of the first square – it encourages a more ‘acoustic’, moment-focussed listening strategy, rather than one focussed on any sense of linear expectation.

Within *Solar*, the presentation of the ‘solar chord’ as a fundamental sonority by means of repetition (and particularly through cycles of attack and decay) creates its own destabilising effects. As the chord recurs through the piece, it appears in a number of increasingly distorted variations which serve to dilute its distinctive character, and in the process undermine its ‘gravity’; this is something which emerged in the discussion of bars 219–253, for example, where the ‘solar’ basis of the melodic lines is far from obvious at first. The result is that the final third of *Solar* is taken up with a gradual process of *disintegration*: as the ‘gravity’ of the harmonic sequence loses its pull, materials begin to fragment, and so do processes of linear development – because they are equally dependent upon the structure provided by the underlying cyclic form. The volatile nature of the underlying ‘gravity’ process thus has an effect on the larger dramatic shape of *Solar*. Rather than leading towards some kind of final gravitational ‘arrival’ – the equivalent of a ball falling to the ground, or a melody coming to land on its final tonal resting-place – here the two dramatic extremes of the central section (the first an extreme of stability and ‘orbit’, the second of linear process and ‘momentum’) give way to a long coda which is taken up with very gradual, but nonetheless inevitable, fragmentation and polarisation. In terms of the guiding physical metaphor, the association of gravity with cohesion is important here: once the clarity of the ‘solar’ harmonic sequence has been lost, materials, gestures and harmonies are free to ‘reel off into space’, and energy dwindles slowly to a standstill.

The coda: recurrence and polarisation

Against the gradual dilution of the 'solar chord', the focal F# onto which bars 254–94 converge is startling for its clarity and force. Although in itself it is a kind of extreme 'variation' of this sonority (since it is based upon one of its defining pitches at the correct register), it is so strongly characterised that any subsequent return to the full chord will inevitably be felt as an anti-climax, rather than a point of clear return. It thus marks a turning-point in the larger structure: instead of new material or processes, bar 304 sees the return of the chaotic *furioso* texture which is a recurrent structural marker throughout, but this time in a hushed, *ppp* dynamic and with a similar polymetric 'grid' to that seen in bar 190 – the shift from *furioso* to *dolce* marking a broader change of tension and mood. The return of familiar material (both the 'solar chord', after a long, linear process, and the texture itself) initiates a process of large-scale recall which takes in many of the main blocks of the piece in a kind of loose arch (Ex. 5.17). Although the repetition is hardly exact, and gestures are still transformed in new ways as they are presented, the mere presence of such a structure speaks of a drastic shift in the handling of material: the linear energy of new developments now turns into a far more recapitulatory momentum, with the arch leading eventually back to its opening; momentum, then, like gravity, is undermined by broader structural processes.

- 1–24 Introduction of material and force of cyclical return
- 26–50 Simplification of texture, prominent 'beating' woodwind gestures
- 51–131 Play with rhythm and metre, build-up of tension
- 132–150 First 'chaos' section, break-down of metre and cycle divisions
- 151–175 Rising quarter-tones, flexible metre
- 176–189 Partial return of 'chaos' texture
- 190–205 Coalescence of texture into rhythmic grid and 'solar chord'
- 206–216 'Still point' in cycles
- 217–253 Melodic cadenzas
- 254–303 Convergence of texture onto layered *ostinati* and F#
- 304–317 Return of 'chaos' texture, *ppp*
- 318–335 Rising quarter-tones, flexible metre, added layer of pulsation
- 336–346 Return of 'chaos' texture, *ppp*
- 347–350 Descending violin line
- 351–362 Static (but shimmering) decoration of 'solar chord'...
- 357–367 ... overlapping with more 'cadenzas'
- 368–390 Play with rhythm and metre (build-up of tension much starker)
- 391–407 Simplification of texture, prominent unison string and woodwind gestures
- 408–518 Total 'polarisation' and separation of material

Ex. 5.17: *Solar*, overall arch structure (with bar numbers)

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This cyclic return does not imply a straightforward sense of 'resolution' or even of 'closure', however. Instead, the repetition of material brings with it an increasing separation: the attack-decay patterns of the opening cycles are intensified into alternating passages of extreme tension and extreme calm, with careful control of texture, orchestration, rhythmic activity and register all contributing to the effect. Ex. 5.18 summarises this process of material 'polarisation'.

Bars	Tempo	Type of material			
		Soloistic	Chordal	Metrical/rhythmic	Unison
347–350	40	Expressive violin solo			
351–362	80		Shimmering harmonics on 'solar chord'		
362–367		Cadenzas for cl., ob., pianos (throwback to bars 220ff.)			
368–390	120			Metrical interplay around woodblock pulse and rising <i>glissandi</i> , building to <i>furioso</i> climax	
391–394	40		<i>Subito calmo</i> 'solar chord'		
395–407	120			Return of climactic rising <i>glissandi</i> and metrical interplay	
408–411	60	<i>Molto calmo</i> , cluster version of 'solar chord', expressive violin solo			
412–419	48				Descending unison melodic line in woodwind
420–439	80	Pulsation spreading from centre of texture, arriving at 'solar chord'; flute cadenza			
440–443	60				Descending unison melodic line in woodwind
444–460	160			Recasting of descending melodic lines as semiquaver pulsation	
461–467		Violin cadenza			
468–483	120		Rising quarter-tones over 'solar chord'		
484–490	90	Trumpet cadenza			
491–496	72		<i>Sostenuto, calmo</i> 'solar chord'		
497–509	60–50–100			Metrical interplay	
510–518	44		<i>Sostenuto, espressivo</i> 'solar chord'; 'waves' of pulsation dying away		

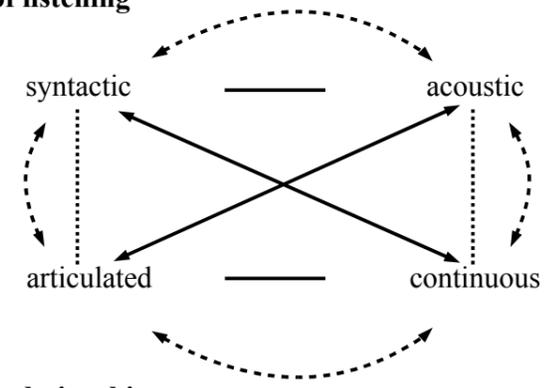
Ex. 5.18: *Solar*, material alternations in final section

By bar 391, this polarisation has become so great that presentations of the 'solar chord' are kept essentially distinct from those which surround them – gradual 'erosion' replaced by simple alternation, with drastic shifts of tempo, register and harmony serving to demarcate the boundaries. At this point in the piece, then, the audible cycles of the rest of the work have largely disintegrated: where before shifts of tempo or material were linked structurally to the return of a specific harmony, here different elements do not connect in this way. As such, although recurrences of the 'solar chord' are still identifiable, there is little sense of cyclic return about them – this kind of analytical segmentation becomes increasingly unmanageable. Instead, the focus between these recurrences is on the exploration of particular and highly focussed, but short-lived, materials and processes.

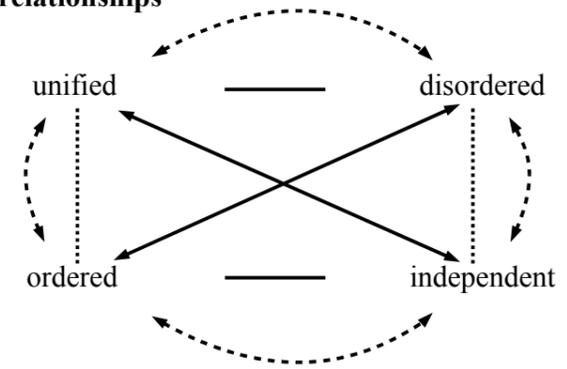
Saariaho notes that 'towards the end of the piece musical elements – registers, harmony, rhythm, tempo, orchestration – are presented in rapidly changing extremes' (Saariaho, [n.d.]: online); this is no abrupt juxtaposition, but rather an inevitable consequence of the exhaustion of 'gravity' and 'momentum' processes in bar 303, and (even further back) a natural continuation of the 'erosion' processes with which *Solar* opened. The result of such an approach is a coda which feels much longer than its real durations suggest – *Solar* could almost have ended at any of the moments of rest between bar 400 and its closing bar, but instead it is drawn out long enough that it comes to a complete halt, rather than being brought to any artificial, enforced 'conclusion'. As such, the final bars (510–18) offer an exhausted return to the static elements of the initial sonority: the chord itself, and the semiquaver patterns which were so closely bound up with it, appear and then fade – in a series of pulsing 'waves' – into nothing.

Pulling inwards, pushing onwards: Saariaho's Solar

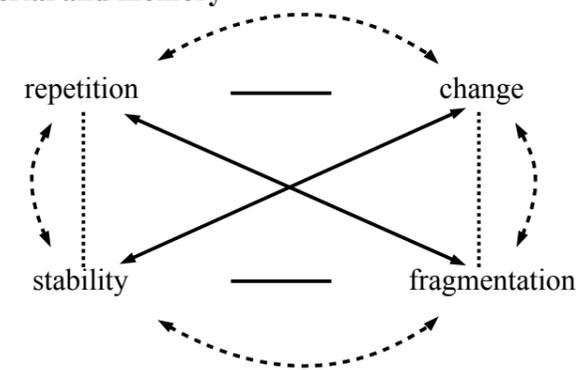
a) Ways of listening



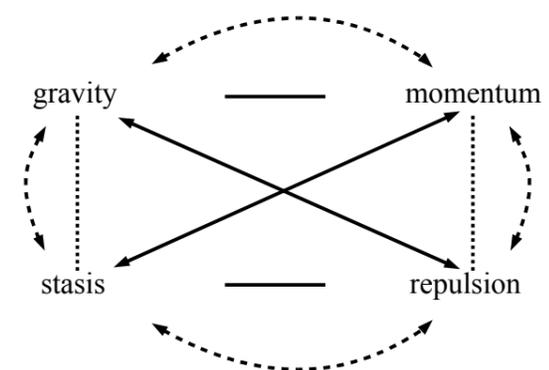
b) Layer relationships



c) i) Material and memory



c) ii) Material development as 'gravity' metaphor



Ex. 5.19: Semiotic squares used in discussion of *Solar* (reproduced from Chapter 4 and introduction to this chapter)

Pulling inwards, pushing onwards: Saariaho's Solar

6

Connections 3: Shape, continuity, development

One of the notable paradoxes of Saariaho's *Solar* is the contrast between the complexity of surface processes and the relative clarity of its larger structure. As the analysis presented in the previous chapter suggested, much of its effectiveness arises from interactions between different elements which are multi-dimensional and constantly in flux, affecting not only individual phrases and sections but also the way in which these relate structurally: for example, the various fluctuations of the underlying 'gravity' principle affect the duration of sections and the way in which they are articulated, too. However, in spite of this complexity, its larger trajectory is straightforward enough to be summarised in a few brief phrases: introduction of recurrent material; growth in energy; relaxation to 'still point'; acceleration to climax; disintegration of recurrent material. This overall arc is articulated by changes of tempo above all, which are an important feature throughout (Saariaho, [n.d.]: online), but it is far from arbitrary or incidental; as the chapter illustrated, it arises directly from the properties and handling of the basic material, and relates directly to the changing tension and 'energy' which is felt throughout.

Furthermore, the order and shaping of these different sections is far from arbitrary. It would be difficult to imagine a version of the work which retained all the existing blocks of material, but shuffled them into a new sequence, without the coherence of its larger shape being undermined. The slow central section, for example, relies for its effect on the contrast it creates with the metrical and gestural unpredictability which precedes it, appearing as a kind of 'idealised state'; if it were to open the piece, there would be nowhere left to develop, and stasis would become the primary characteristic. On the other hand, the extremity of the climactic convergence in bars 254–303 arises equally out of the space provided by this preceding 'still point'; it serves to consolidate the superficial gestural tensions of the opening section into a longer-term linear process. Most of all, the various 'affordances' of the opening, and the gradual way in which its oppositions are presented, are crucial to the overall shape. Although it might be a step

too far to describe *Solar* as ‘organic’, there is certainly a logic to the way it unfolds – and one which, I would argue, can be directly experienced without reliance on the guiding compositional metaphor of gravity (even if that metaphor provides a helpful way to orientate the experience).

The workings of this shaping process are perhaps clearest in the final section: the arch-like return of earlier material after the climax acts as an important structural turning-point, marking an end to continuous, relentless transformation and novelty; the result is that the drastic extremes of the coda emerge as gestures of disintegration rather than directed developmental processes (something which their increasing brevity and polarisation certainly supports), and there is a sense of ‘closure’ of a sort in the final bars. In spite of the substantial proportions of the coda, and the variety of material which is contained within it, it is certainly difficult to imagine any material being added after the end of the piece without totally disrupting the coherence of its form. The use of such an extended coda allows the gravity of the ‘solar’ chord to grind completely to a halt, rather than ending on a point of arbitrarily-chosen ‘resolution’; *Solar* thus stays in keeping with the guiding physical metaphors of energy – the numerous, brief bursts of activity in its final section serving to ‘dissipate’ the momentum entirely. In this way, even the sense of disintegration that is felt in the coda – and certainly it does push the limits of formal coherence at times – plays a role in the larger shape.

‘Constituent elements’ and ‘relevant functions’: rethinking form

There is thus a tension at play here: somehow the experience of particular moments, which are often bewilderingly fluid and ambiguous, needs to be rehabilitated with the experience of the whole, which can in this case be retrospectively characterised quite clearly in terms of climaxes, still points and processes of directed change. This challenge might thus be seen as a variation on the agenda of Chapter 4: here the focus shifts from the ‘breaking up’ of musical processes and parameters (and the need to retain plurality and ambiguity), to the way in which ‘constituent elements’ and ‘relevant functions’ are identified and contextualised over the course of a whole composition. The emphasis here is decisively on musical form as a *dynamic* process of constantly-shifting tensions, expectations and surprises, rather than as either static ‘blocks’, or else the linear ‘unfolding’ of a predetermined structure; both of these map all too easily onto a

falsely stable, restrictively spatial conceptualisation of the experience of listening.¹ In other words, ‘form’ should be understood here not as a noun but as a verb, a process of ‘forming’ which is constantly in flux.

Much analytical writing on common-practice tonal music relies on three fundamental assumptions about large-scale musical organisation, all of which betray to some extent the influence of ‘block’-like or ‘unfolding’ perspectives on form, and all of which are problematic when applied to an avant-garde aesthetic. The first is the principle of *hierarchy*, the idea that works are built of nested structures which listeners group perceptually into ‘chunks’; this provides a means of circumventing the necessarily time-bound nature of music and the limitations of short-term memory, so that a piece can be remembered in some sense as a whole, and not just as its final few bars. The second is that of *continuity*, the principle that sound events are heard not as isolated gestures but in their wider context, as part of these larger hierarchical ‘chunks’. The third is that of *development*, the idea that this continuity is bound up with processes which are geared towards particular goals, and which generate a sense of tension and expectation leading towards these goals; within tonal music, of course, the goals are seen above all as harmonic.

The three principles are listed here in order of increasing controversy, of course, because compositional theory, as it has developed over the course of the twentieth century, has taken issue with all of them. The principle of hierarchy, although perhaps the most durable of the three, certainly faces a number of difficulties with the perceptual ‘flatness’ of many works of post-1950s serialism, experimental music and minimalism. Emphasis upon experiential discontinuity is a central feature of musical modernism since Stravinsky’s *Symphonies of Wind Instruments* (1920), and arguably has its roots much earlier, in the Romantic fascination with the fragment.² Meanwhile, the principle of development – which finds its deepest expression in the writings of Schenker³ – falls

¹ For a further discussion of the problems with static or ‘unfolding structure’ descriptions of music, see Adlington, 1997: 121–59.

² For the classic analysis of discontinuity in *Symphonies of Wind Instruments*, see Cone, 1962; extensive further discussion can be found in Kramer, 1978: 184–188; Straus, 1982: 107–111; and Hasty, 1986: 62–72 (and see Rehding, 1998 for an analysis which synthesises and critically develops all of the above). For a striking alternative perspective, see Taruskin, 1996a, vol. 2: 1486–1499. For the broader impact of this piece on post-1950 approaches to discontinuity, see Cross, 1998: 19–28. For more on the aesthetics of the fragment in Romantic music, see Rosen, 1995: 41–115.

³ For more on the developmental emphasis of Schenker’s work, see Littlefield and Neumeier, 1992: 45–6.

foul of much atonal music (and even of some late-nineteenth-century tonality) almost by default, unless some other ‘goal’ is posited to replace that of the tonic.

Again, however, the pieces under discussion are striking for their intermediate position between these two extremes: whilst any analytical approach hoping for large-scale coherence in the sense that it is found within common-practice music would fall far short, these works do seem to bypass many of the more radical rejections of formal convention found in the more ‘canonic’ avant-garde compositions of the 1950s, 1960s and 1970s. This chapter offers an overview of the ways in which this ‘middleground’ (and perhaps the overtones of Schenker here are intentional) might be approached analytically, so that this important aspect of heard experience is neither overlooked altogether nor viewed solely as a distortion of an earlier approach, whether avant-garde or more traditional. Although they clearly overlap significantly with one another, the three principles listed above provide a useful way of dividing up the discussion; they also point ahead to the study of Takemitsu’s *How slow the Wind* which forms the following case study – a work whose seeming ‘flatness’, not-quite-discontinuous ‘eventfulness’, and striking ‘slowness’ offer a new perspective on the principles themselves.

Composer and listener: conceptual and perceptual approaches

Emphasis has been placed throughout this thesis upon the experiential focus of the approach adopted here, which uses reflective listening as a starting-point and a benchmark for any subsequent, more abstracted analytical discussion. Since this chapter is concerned with large-scale form and formal processes, however, it is worth exploring the dialectic of experience and reflection in more depth; it becomes particularly pressing when the focus of attention moves from the details of immediate experience to the larger shapes of energy, expectation and memory which connect them. At this level, concepts of musical form come all too easily into conflict with the limitations of listeners’ perceptual capabilities; attempts to reconcile these two can proceed in a number of different ways.

In the Introduction, a model was outlined for analysis to be viewed as *interpretation*, rather than necessarily as *explanation* or *prescription*: that is, analysis is useful primarily for the way in which it can offer convincing accounts which (perhaps

by dint of their imaginative function as much as their explanatory one) can affect future listening, performing, or composition, in satisfying ways. This stands in contrast to approaches which treat it in primarily scientific terms, attempting to describe exactly the experience which a listener undergoes during a performance (music as a sort of idealised perceptual psychology); to those which try to isolate an autonomous ‘music itself’, arising from the direct outworking of the composer’s underlying aesthetic and intentions as a system of interlocking generative processes which the listener is expected to absorb as directed (music as mechanics); and to those which aim to provide a ‘benchmark’ against which pieces can be judged for their conformity and thus for their ‘value’ (music as ethics). Sometimes, as with the notoriously essentialist, ethnocentric, anti-populist worldview which underpinned Schenker’s own writings, analysis has involved particularly extreme variants of all three.

Of course, in one sense analysis *should* involve all three: an effective account will most likely draw on issues of perception, compositional process and broader ideological perspectives as part of its interpretation. However, the underlying problem with the particular approaches described above is that they engender a particularly rigid stance towards the relationship of composer intention and listener perception, either attempting to make them totally equivalent, treating one as primary and the other as irrelevant, or effectively discarding both in favour of an alternative explanatory strategy. An interpretative approach, by contrast, is allowed much more flexibility: any given interpretation arises naturally out of the author’s own listening experience, and is coloured by investigations of compositional approach and aesthetic, as well as by information gathered from further reflection and from analysis of the score and of performances. Moreover, the purpose of such an interpretation is to allow a correspondingly multi-layered attitude towards the experience of a piece in others who encounter it. This arises from a recognition that ‘the fact that [music] can be in some sense grasped, appreciated, or enjoyed on both these levels is one of [its] defining attributes’ (Cook, 1990: 215), and as such is a crucial part of its effect, rather than something to be avoided or discouraged. What is striking is just how helpful this kind of approach seems to be in offering satisfactory accounts of large-scale form in the works under discussion here. When viewed purely from a compositional or a perceptual perspective, they rarely subscribe to any clear or unambiguous formal strategy, and yet

experientially they prove highly effective at generating, sustaining and shaping tension and expectation (often in surprising ways) over relatively extended periods of time. It is this gap between theory – whether notionally ‘compositional’ or ‘perceptual’ – and experience which the discussion here attempts to bridge.

Understanding form: three perspectives

In order to explore these concerns in more detail, and move from abstraction towards something more concrete, three particular perspectives upon large-scale form will be presented and critiqued. They are chosen to cover a broad spectrum of the issues discussed above: the first (Robert Fink’s attack on the metaphors of surface and depth as applied to music) is concerned with issues of hierarchy, especially as it relates to long-range development; the second (Edward Gurney and Jerrold Levinson’s theory of ‘concatenationism’) combines a discussion of this aspect, and particularly the idea of compositional ‘architecture’, with a consideration of the importance of moment-to-moment continuity; and the third (the concept of ‘moment form’ developed by Karlheinz Stockhausen and Jonathan Kramer) presents a radically different perspective on both continuity and development. Their starting-points are primarily analytical, perceptual and compositional, respectively, but in each case the blurring of boundaries between these different perspectives forms an important part of the writer’s argument – the insights of other viewpoints being brought in to develop, challenge or reinforce their own understanding. These three lines of thought provide a way of investigating further the relationship between conceptual and perceptual approaches, the particular way in which contemporary music (and contemporary analytical strategies) challenge traditional notions of form, and the interpretative role of analysis.

Hierarchy and flatness: Fink and the uses of metaphor

The first perspective examined here takes the form of a challenge to language. In an article which combines cultural study, philosophy and detailed musical analysis, Robert Fink dissects the metaphor of surface and depth which forms the basis of Schenker’s analytical methodology, arguing that it is rooted in a specific aesthetic ideology (tied to the legacy of German idealism) which is ‘increasingly irrelevant to the new, exotic

topographies' found in contemporary music (Fink, 1999: 123).⁴ In its place, he proposes a model for large-scale structural analysis which is based not on the abstraction of layers of hidden 'middleground' from the immediate details of the musical surface, but rather on the identification of particular linear trajectories which are directly present in the surface *itself* – trajectories which (he claims) arise directly from perception, unlike Schenker's *Urfinie*, and which he labels 'arrows of desire' (see Fink, 1999: 107 n. 12). Finding in this alternative approach a method which can offer insights upon a variety of recent music (such as minimalism and collage music) beyond those provided by Schenkerian thought, he sees it as a solution to the challenge which this music poses to analysis. Indeed, Fink even applies this retrospectively, seeing his 'arrows of desire' technique as superior to Schenker's in analysing Beethoven for the contemporary mind, as well as Steve Reich; although this historical aspect of his argument raises immediate questions of 'analytical anachronism',⁵ the points he makes about contemporary music in particular deserve further reflection and critique.

From the standpoint of this thesis, the basic problem with Fink's approach is the absence of any practical recognition of the distinction between different conceptual and perceptual perspectives upon music, and the varying roles that any particular metaphor can play within each. Fink's attack on Schenker's specific, essentialist conception of surface and depth – whereby varied surfaces are reduced to a single, validating 'deep structure' like a body being stripped to its skeleton (Fink, 1999: 106–7) – is certainly persuasive; the ideological underpinnings of Schenker's theory, with their elitism and implicit xenophobia, are doubtless its least attractive aspect (which is why most later appropriations of it jettison them). His suggestion, however, that his argument strikes a death-blow to the utility of surface and depth as musical metaphors is more problematic; throughout the essay, his justification for retiring them is based less on concerns as to their perceptual validity, or their relationship to aesthetic experience, and far more upon

⁴ Fink is not the first to challenge the hierarchical metaphor in this way: see Cohn and Dempster, 1992 for a critique from a music-theoretical perspective (rather than the more culturally-oriented one adopted here). However, their account falls into the trap of conflating complex structural relationships directly with perceptual experience – assuming that because a relationship can be theoretically described, it must thereby be readily audible; see Maus, 1999: 176–7.

⁵ See Cook and Everist, 1999: 4. As they note, the biggest issue is one of inconsistency: Fink dismisses Schenker's approach as 'irrelevant' to the contemporary situation, but is quite happy to apply his contemporary concept of 'flatness' in his analysis of Beethoven. In the process, he denies the possibility that the composers could 'somehow 'talk back' to us' out of their own contexts (Cook and Everist, 1999: 4).

the ‘cultural work’ which they perform – here, the notion of ‘hidden depths’ aiding in the construction of a particularly individualised conception of bourgeois subjectivity which Fink considers as restrictive and even as politically dangerous (Fink, 1999: 134–7). Fink’s own analyses are used to attack this position by showing that an alternative, ‘depthless’ metaphor can offer an equally persuasive account; in this sense they are effective, but the focus throughout is on the broader ideological thrust of his argument – analytical readings are used as ammunition for his own ‘cultural work’, and the particularity of musical experience is rather left behind.

This impression is reinforced by the way in which metaphor is related to perception within Fink’s argument. Whilst he is at pains to stress that his own theory of linear ascents, or ‘arrows of desire’, is rooted always in perceptible surface details (Fink, 1999: 113), his assumption that this therefore renders it intrinsically ‘flat’ betrays his own metaphorical restrictions. Fink’s accounts (and that of Beethoven’s *Missa Solemnis* ‘Credo’ in particular) rely on the implicit prolongation of certain gestures in the memory as a means of ‘joining up’ long-range structural ascents; since these prolongations are justified in terms of immediate drama, and are conceived as psychological constructs, rather than being given ‘a priori existence in an ideal and transcendent sense’ as Schenker’s *Urfinie* was, he argues that his approach separates out ‘prolongation’ from the creation of a hierarchy (Fink, 1999: 113). Yet the fact of prolongation in itself forces some level of detachment from the ‘surface’; the music continues between these gestural high-points, yet they themselves linger in the memory (Fink argues) as generators of desire. Certain points are thus privileged within the account, and rightly so: Fink’s analysis is a convincing one. But to suggest that this kind of differentiation can ever be done without *inevitably* undermining the theoretical or perceptual ‘flatness’ of the experience, that simply by avoiding the terms ‘surface’ and ‘depth’ one can circumnavigate the intrinsically metaphorical quality of this account, is both illogical and unnecessary.⁶

⁶ It is noteworthy that the focus of Fink’s attack throughout is Schenker’s own ideology (Fink, 1999: 107), rather than the more sanitized, pseudo-scientific variants of the method found in post-1950s American music theory, which have addressed many of the broader ideological issues that he raises. In spite of his protestations to the contrary (see 107 n. 11), Fink’s ‘arrows of desire’ concept – in essence a description of ‘a mental construct that we infer [...] as we attempt to impose pattern and direction on a work’s salient melodic climaxes’ (Fink, 1999: 113) – has much in common with the psychological, expectation-based theories of form adopted by Narmour and Meyer, among others; see Meyer, 1959 and 1973, and Narmour, 1977.

A different way to strip away some of the cultural baggage surrounding the surface-depth metaphor, without thereby turning it ‘flat’, is simply to turn the metaphor *itself* on its head. The dichotomy of surface and *height* allows events to be prioritised in terms of their relative importance, and thus allows some degree of perceptual ‘chunking’ to be maintained, without thereby implying some kind of hidden structure which can be arrived at only by leaving the surface. As such, it arguably offers a better fit with Fink’s own prolongational technique than the flat viewpoint which he advocates (one which seems to have its root in his own cultural preoccupations, rather than in perceptual or analytical details). One more imaginative expansion of this metaphor prepares the way for issues that will return in the following chapter. In a stretch of countryside, or a garden, there are landmarks whose height allows them to be visible from varying distances; in a journey around this landscape, the traveller, although only able to see a limited portion of it at any given time, is able to use these landmarks as guides for self-orientation and indicators of what has already been achieved. Whilst the analogy with music is of course only very partial – we cannot hear a musical landmark in advance, for example, unless pre-echoes of it are explicitly inserted by the composer, whilst we can see a physical one from some way off – it certainly offers resonances with the experience of listening which an all-out declaration of total ‘flatness’ cannot.

The irony is that Fink’s ‘arrows of desire’ approach, in itself, actually offers a very helpful starting-point for the analysis of the music under consideration here. His account is at heart an attempt to base a description of large-scale process upon a feature of the musical surface which is instinctively, physically obvious: contours of pitch in extreme registers. It can therefore be followed even in the absence of any recognisable harmonic structure; this is why he is able to apply it so successfully to music such as Steve Reich’s *Piano Phase* which disregards functional harmonic processes altogether. If the broader ideological argument is set aside, then, what remains is an analytical perspective which does acknowledge and reflect sensitively upon perceptual experience. It serves as a useful exemplar of the rehabilitation of a large-scale process which conventional structural approaches (Schenker’s in particular) have tended to sideline, and an attempt to bring perception and analytical reflection closer together.

What matters above all, however, is the general principle: that the creation of large-scale musical ‘landmarks’ need not depend on any particular formal process, but

rather can be created through the interaction of any number of different musical parameters – anything that is aurally striking (whether through extremes of pitch, volume or timbre, or through its variation with what has come before, or even for its extra-musical associations) carries a structural significance which can be used to shape longer-range experience. Furthermore, analysis can incorporate discussion of these features in a helpful way without resorting to the creation of overarching, structuralist hierarchies: just as with the discussion of lower-level parameters in Chapter 4, ‘landmarks’ here need not subscribe to any single broader organising principle – ambiguity of large-scale form can be just as effective in generating expressive tension as ambiguity of immediate surface.

Following a line: Levinson and ‘concatenationism’

The challenge which Fink poses to conventional analytical notions of structural hierarchy finds further treatment in Jerrold Levinson’s 1997 book *Music in the Moment*. Here, the challenge is based less upon detailed analysis and more upon philosophical reflection (and, in particular, a philosopher’s reflections on listening from an ‘untrained’ perspective – that is, one which deliberately avoids structured analytical frameworks). Following the example of the Victorian theorist Edmund Gurney, Levinson argues that an awareness of large-scale formal unity is much less significant for most listeners’ enjoyment and comprehension of a piece than the sense of cogent succession between individual moments; that is, continuity at a local level renders large-scale architecture almost irrelevant (Levinson, 1997: 2–3). In this viewpoint – which Levinson terms ‘concatenationism’ – large-scale connections and contrasts are distanced from the forefront of musical experience, and relegated to one of two positions: they can act as subconscious formal scaffolding within which moment-to-moment connections can take place, since some level of shared underlying material is crucial to the construction of continuity (1997: 44); or they can be noted at an intellectual level which goes beyond (and which is ‘parasitic on’) the intuitive awareness which constitutes Levinson’s concept of ‘basic musical understanding’ (1997: 61–2).

Although his ideas have certainly generated lively debate,⁷ Levinson's thesis should not be dismissed too lightly. He preemptively addresses many of the concerns which a more architectonic viewpoint might raise with his 'concatenationist' position; in particular, the distinction he makes between an conscious awareness of musical processes and a more instinctive appreciation of them – what he calls 'knowing that' and 'knowing how', or 'basic musical understanding' and 'intellectual satisfaction' – allows him to accept the utility of large-scale formal understanding within a rather more restricted sphere of influence (the purely intellectual), rather than rejecting it outright on ideological terms (Levinson, 1997: 30). Furthermore, he does allow some role for memory even within the instinctive level of his framework, by introducing the concept of 'quasi-hearing' – the 'vivid apprehension' of even a fairly long melody as a single 'musical unit', for example, where the level of internal continuity allows the listener to treat a longer span of time than usual as the 'present moment' (Levinson, 1997: 14–16).

The principal issue with Levinson's stance is that it still attempts to retain a clear separation between these two kinds of musical awareness, without addressing any potential intermediate position. In particular, he offers little explanation for how the sense of moment-to-moment, intuitive musical enjoyment might in some circumstances connect to the more long-term structural procedures involved in the perception of larger formal units, without simply crossing the line into abstractly 'intellectual' enjoyment. Whilst he does concede that processes of large-scale formal recall can occasionally have an impact beyond this intellectual level, he sees these occurrences as isolated cases of 'extreme subtlety', where large-scale recall augments, rather than replaces, localised continuity, and thus as no threat to his main thesis (Levinson, 1997: 106–8). The works examined here, however, provide strong evidence that some composers certainly are producing music that combines visceral impact and audible formal coherence in ways which *do* often break with the localised connections described by concatenationism; indeed, *Arcadiana* and *Solar* both rely upon abrupt ruptures in continuity at various points in order to increase tension and to shape the perception of change over time. It is notable that here Levinson carefully restricts his argument to the mainstream Western tradition of 'Bach to Schoenberg', or 'perhaps more inclusively, Byrd to Shostakovich';

⁷ Critiques of and suggested extensions to Levinson's argument include Perrett, 1999; London et al., 1999; Kivy, 2001a; and Benjamin, 2006.

although he is optimistic about the insights it could bring to ‘teleological, progressive’ music outside this genre and timeframe, he does not attempt to explore possible adaptations of his approach to these ends (Levinson, 1997: 34–5, n. 15). Nor does he address the real problems which come with this straightforward division of contemporary music into that which is ‘teleological’ and ‘progressive’, and that which is not; as much of the music in this thesis demonstrates, it is often necessary to move beyond these binary polarities in order to gain meaningful insights into contemporary repertoire.

Levinson’s theory is most helpful as a timely reminder that all analytical work needs to take immediate continuities and discontinuities very seriously, and to recognise that larger connections must be very marked if they are to have any direct effect upon perceptual experience. Moreover, it stands as another reminder that the aural experience of music often differs substantially from the clean, unified narratives which analytical writing often presents; whilst there are certainly reasons for presenting these ‘analytical fictions’⁸ in the way that we do, there is also a danger that they will overvalue elements which are at best subsidiary to many listeners’ experience, or exclude others that are absolutely central – often out of a desire to make the stranger qualities of musical hearing fit to the predominantly visual, all-at-once folk conception of knowledge (as Levinson notes in London et al., 1999: 487–8).

Adopting the concatenationist position wholesale could obscure its own necessary limitations, and the kinds of music and listening which it excludes; but it nonetheless provides a provocative alternative to more architectonic perspectives upon large-scale form. Above all, as Richard Taruskin notes, it serves as a ‘symptom of a general tendency’, increasingly prevalent from the mid-1980s to the present day, to mistrust ways of talking about music that value ‘literate’ understanding (and in particular the two pinnacles of music-theoretical ‘literacy’, the notated score and the analytical reduction) above the immediate experience of listening – a tendency which is visible in compositional activity during this period just as much as it is in more general contemporary theoretical perspectives upon music (Taruskin, 2005: 513).

⁸ See Guck, 1994b.

Frozen tableaux: Stockhausen, Kramer, and ‘moment form’

A third, and especially provocative, approach to these issues is found in the concept of ‘moment form’ developed by Stockhausen in the 1960s, and given more widespread circulation by Jonathan Kramer in the late 1970s and early 1980s. This viewpoint shares with concatenationism the rejection of the concepts of organicism and unity which are implied by architectonic approaches to form; it goes much further, however, rejecting also the local connections which were so crucial to Levinson’s thesis. ‘Moment form’ describes a kind of music where the discontinuous present is the operative mode of listening: expectations of hierarchy, continuity and development are all likewise jettisoned, and ‘events recollected order themselves by association, not by temporal sequence’ (Maconie, 1976: 174). As a result, the music radically undermines any attempts to establish linear connections – rather than hearing each moment in the context of its temporal surroundings, the listener is forced to ‘*unexpect*’ (Hargreaves, 2008: 63; his emphasis).

In Kramer’s account, a work is in moment form when it is built out of a collection of musical blocks – or ‘moments’ – which follow certain conditions (Kramer, 1978: 180–1). Firstly, they are independent: every moment must count for itself, irrespective of those which surround it; sections which function purely as transitions are therefore excluded. This means also that relationships of clear expectation and release between moments are generally avoided, since they lead to an unwanted sense of causality between consecutive passages. As a result, there is no attempt to move towards long-term structural goals in the music – it is fundamentally anti-teleological. Indeed, the order of moments within a composition may even become arbitrary: moment form is closely related to the ideas of the ‘open work’ which were also prevalent in the Darmstadt group in the 1960s. Finally, and most drastically, even the large-scale coherence of the piece is undermined; that is, it is seen more as a collection of individual moments than as a unified whole. Kramer suggests that a true moment-form composition will not ‘begin’ and ‘end’ in a traditional sense, but rather simply ‘start’ and ‘stop’: it will ‘give the impression of starting in the midst of previously unheard music, and [...] break off without reaching any structural cadence, as if the music goes on, inaudibly, in some other space or time after the close of the performance (1978: 180).

Instead of listening for larger connections, we hear each moment for itself; the music just ‘is’.

This might seem at first to be a resolutely conceptual attitude, divorced from the realities of listening. As Jon Hargreaves notes, this extreme position has its roots in the ultra-modernist aesthetic which Stockhausen espoused; in one sense it is simply a compositional manifestation of the sense of anti-historicism – the deliberate disconnection from the past – which is so closely (even notoriously) associated with that aesthetic (Hargreaves, 2008: 64). Yet the composer’s own descriptions emphasised the expressive intent of the technique, rather than its ideological implications. Stockhausen suggested that it made possible a ‘lyric’ approach to form: the aim was the instantaneous evocation of a very specific, almost ‘timeless’ expressive character, which was felt to elude the more structured rhetoric of conventional musical structures – in much the same way as a Japanese haiku strives at a pinpoint moment of clarity which is of a wholly different order from the measured logic of a sonnet (Stockhausen, 1971b: 59).

Likewise, Kramer’s use of the term proceeds from a recognition of discontinuity as a fundamental aspect of the modern condition: because our experience of time is now so charged with discontinuity, he argues, the ‘innocently linear’ quality of common-practice tonal music now has ‘something artificial’ about it; any attempt by a new composition to deal with ideas in a linear and continuous way is bound to emerge as a kind of struggle against chaos, or else appear rather archaic (Kramer, 1978: 178). Instead of seeing this fragmentation as a problem, he sees it as an opportunity to create something entirely new: ‘the musical experiences that are most memorable are the magical moments when expectation is subverted, when complacency is destroyed, and when a new world opens’ (1978: 177). The perceptual is thus as central to the approach as the conceptual– in theory, at least.⁹

Although the zenith of moment form as a compositional approach was in the 1960s, Kramer argues that there are grounds for understanding music from much further afield historically in these terms; certainly, it has left its mark on the later compositional landscape – a number of the works studied in this thesis (most notably *Arcadiana*,

⁹ In practice, the concept is certainly not without its problems, particularly in Kramer’s treatment of it: see Christopher Hasty’s reworking of his analysis of Stravinsky (Hasty, 1986: 63–72). It also carries more than a hint of the progressivist approach to historiography discussed in Chapter 2 – hardly surprising, given its roots in Stockhausen’s thought.

Officium breve, and *How slow the Wind*) adopt a fragmentary approach to large-scale form which reflects Kramer's definition in at least some respects. It is clear that the force of an individual, well-chosen gesture can communicate in a very different manner to the more sequential progression of a melodic or developmental thread; Stockhausen's emphasis on 'instantaneous' communication thus points towards the discussion of sudden coalescence (rather than gradual 'arrival') as a recurrent expressive strategy within the pieces studied here. The ramifications of this moment-based approach towards expression are discussed in more detail in Chapter 8.

What is perhaps more surprising is that a moment form perspective can also end up re-elevating longer-range architectonic issues to some degree, in spite of the challenges posed by Levinson. The clear danger of a musical experience based upon 'unexpected' is over-saturation, as Stockhausen noted; an unceasing sequence of disconnected instants tends to merge into an homogenous mass, however individually striking each moment may be, since 'trying to be different from element to element becomes something they all have in common' (Stockhausen, 1971a: 39). The solution, as Stockhausen and Kramer conceive it, is to emphasise global architecture: when localised unity or expectation has been rejected, higher-level control is needed to enforce formal coherence – and Kramer identifies this explicitly with the creation of proportional relationships based upon duration (Kramer, 1978: 182; Stockhausen, 1971a: 41–2). This idea (and the issues which it raises with long-range perception) will be revisited in the next chapter, in the discussion of a work where the immediate sense of discontinuous 'eventfulness' – an impression very akin to the 'unexpected' of moment form – belies a formal architecture which displays a striking level of proportional control.

Snapshots in sound: Dutilleux's *Mystère de l'instant*

An exploration of the influence of moment form upon a piece from the period under discussion brings new insights into the relationship between compositional aesthetic and listeners' perspectives, particularly as far as large-scale form is concerned. Examination of Dutilleux's commentary to his *Mystère de l'instant* (1989), for string orchestra, cimbalom and percussion, reveals striking (and in this context almost anachronistic) parallels of aesthetic with Stockhausen's concept; these can be used to shed new light

upon a composition which can sometimes seem like rather an anomaly within Dutilleux's output. At the same time, comparison of these ideas with the details of the music (particularly as it unfolds in performance) raises a number of contradictions with a straightforwardly 'momentary' conception; these show a continuity with Dutilleux's existing aesthetic, and with contemporary concerns about the perception of large-scale form, which could not be gathered from the commentary alone. Finally, the introduction of a creative metaphor, based on the concept of a photographic 'snapshot', allows a way for these compositional and listener perspectives to be reconciled; it also allows deeper connections with the broader conceptual landscape of Dutilleux's and Stockhausen's respective aesthetics to be explored. An account of large-scale formal 'coherence' thus arises as something much broader and more diverse than an analysis based purely on internal structure, underlying aesthetic or listener perception – it draws upon and combines elements from all of them.

'Seizing the moment': Dutilleux and moment form

The composer's introduction to *Mystère de l'instant* sets up the ideas which underpin the composition very clearly. Dutilleux writes that it

is made of 10 sections of highly varied proportions, each focussing on a particular perspective, deliberately 'stereotyped' in their material, the structure of the whole not responding to any pre-established canvas. Ideas are put forward as they present themselves, without allusions to that which precedes or which will follow. In distancing himself somewhat from the schemas of preceding works [...] the composer intended to seize the moment and to organise musical time differently. (Dutilleux, 1989: v)¹⁰

And, indeed, *Mystère de l'instant* bears out these expectations. It is around 15 minutes long, and runs without a break, but this span is divided into ten sharply-contrasting movements. Given that Dutilleux is writing only for strings and percussion, there is a wide range of different textures, registers, moods and playing techniques in evidence (Ex. 6.1 shows a structural overview). This variety of sonority serves as a demonstration of the composer's mastery of instrumental timbre, of course; but it is also suggestive of

¹⁰ Unless otherwise noted, all translations from foreign-language sources are my own. Original French: 'Il s'agit d'une dizaine de séquences de proportions très variables, fixant chacune un aspect particulier, volontairement « typé » de la matière sonore, la structure de l'ensemble ne répondant à aucun canevas préétabli. Les idées sont énoncées comme elles se présentent, sans allusion à ce qui précède ou ce qui va suivre. En s'éloignant quelque peu des schémas d'œuvres antérieures [...] l'auteur s'est proposé de saisir l'instant et d'organiser le temps musical différemment.'

a particularly discontinuous approach towards form and development in comparison with earlier compositions.

Section	Description (texture, harmony, instrumentation, mood)	Duration (s)
<i>Appels</i>	Chordal, antiphonal, based on contrasting white- and black-note clusters, moving from upper to lower register; cumulatively building intensity	133
<i>Echos</i>	Close imitation, expanding and contracting clusters in complementary whole-tone sets, punctuated by cimbalom	91
<i>Prismes</i>	Complex, layered polyphony exploring diatonic and polytonal clusters; prominent <i>pizzicati</i>	80
<i>Éspaces lointains</i>	Inverted canon in octaves in extreme registers, based upon octatonic collection; distant and static	104
<i>Litanies</i>	Unison, chant-like melody, punctuated by cimbalom; impassioned	109
<i>Choral</i>	Chorale in homophonic lower strings, <i>quasi senza vibrato</i> ; calm, based upon recurring chord with bitonal connotations	49
<i>Rumeurs</i>	Continuous whole-ensemble <i>glissandi</i> , growing in intensity; passes through a variety of different harmonic types (whole-tone, quartal, triadic)	61
<i>Soliloques</i>	A series of solo string cadenzas building to a climax; harmony based upon contrast of open strings and focal G#	58
<i>Métamorphoses</i>	Contrapuntal variations on the six-note ‘SACHER’ pitch collection, contrasting <i>legato</i> and <i>pizzicato</i> timbres; grows to a 12-note chord before subsiding to reprise of chord and passage from ‘Choral’	144
<i>Embrassement</i>	Rustling <i>spiccato</i> chromatic figuration, ascending to a black-note pentatonic <i>tutti</i> climax; ends on an Lydian E major triad	70

Ex. 6.1: Dutilleux, *Mystère de l’instant*, structural overview.
Durations are taken from the recording given in the resource list;
details of harmony are taken from Thurlow, 1998: 374–387.

What is most startling of all, however, is the relative absence of any clear thematic material to unify different sections. This represents a striking departure for Dutilleux: throughout his career, long-range processes of thematic recall and transformation have been central to his output; indeed, the ‘progressive growth’ (*croissance progressive*) of thematic material into its definite form over the course of a piece has become a

distinctive hallmark of his mature style.¹¹ Furthermore, this aspect of his work is not arbitrary, but represents a clear ideological decision based on concerns of listening experience: in a 1965 article entitled ‘Who is still faithful to symphonic music?’, the composer criticised the pointillism of much writing after Webern, suggesting that it distracts listeners and composers from what he called the ‘continuous sonorous flow’ of symphonic music, and dedicating himself to the task of revitalising the symphonic tradition (Dutilleux, 1965).¹² Moreover, in interviews dating from after the composition of *Mystère de l’instant*, Dutilleux has reiterated his belief that ‘a work comes to life not only through fleeting elements, however startling they may be, but through its incorporation into a trajectory, a trajectory which the listener cannot totally grasp at first hearing’ (Dutilleux and Glayman, 2003: 53).

In *Mystère de l’instant*, however, these principles seem indeed to have been set aside. Individual movements do make use of particular melodic and harmonic figures, but none of these ever become established to the point where they could be seen as primary thematic material on a larger scale. Indeed, more than anywhere before in his output, here Dutilleux seems at times freer to discard the idea of thematic writing altogether, and to concentrate instead on the immediate impact of sonority and gesture – ‘seizing the moment’, as he puts it. Perhaps the most extreme example of this is the seventh movement, ‘*Rumeurs*’, which is built almost entirely from layered glissandi (Ex. 6.2), but other sections of the piece are hardly less drastic in their exploitation of the colouristic potential of slowly-shifting clusters (‘*Echos*’), opposed registral extremes (‘*Espaces Lointains*’), or overlapping instrumental solos (‘*Soliloques*’).

¹¹ For a fuller description of this technique, see Potter, 1997: 60.

¹² Translated quotes from this article are by Jeremy Thurlow; for the original context, and for further commentary on the ramifications of the article, see Thurlow, 1998: 105–7.

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Ex. 6.2: *Mystère de l'instant*, 'Rumeurs', bars 4–8.

On the face of it, then, it is easy to see this composition as an aesthetic *volte-face*, an attempt by a composer in his seventies to break out of working methods which he felt were growing increasingly stale. (After all, in conversation with Roger Nichols Dutilleux did describe the piece as an opportunity to 'renew myself'.)¹³ The principles of moment form (whether adopted consciously or unconsciously, through the influence of Messiaen or the more general '*levain de l'étranger*' which has often coloured Dutilleux's style) would certainly have offered a striking contrast to his existing

¹³ See Dutilleux and Nichols, 1994: 90. If Dutilleux was indeed motivated here by a desire to 'break free' in this way, it seems to have been short-lived. Any brief survey of the compositions following *Mystère de l'instant* will show that after this piece he quickly returns, without any apparent discomfort, to the linear organicism of his earlier output: *The Shadows of Time* (1997) is a large-scale symphonic work in the same mould as *Métaboles* or the symphonies, for example, whilst the violin concerto *Sur le même accord* (2001) is based (as its title suggests) around a single six-note chordal cell.

approach.¹⁴ A comparison of Dutilleux's commentary, and the basic analytical details of *Mystère de l'instant*, with the definition of moment form given by Kramer shows a very close overlap: the commentary stresses the independence and discontinuity of the movements, and implies ('the structure of the whole not responding to any pre-established canvas') a large-scale form which is both anti-teleological and potentially free in its ordering, even if in practice it is presented only in one arrangement. Dutilleux's desire to 'seize the moment and to organise musical time differently' resonates very closely with both Stockhausen's and Kramer's concerns, of course; on the face of it, then, his compositional approach seems to imply an expectation that the listener, too, will hear the piece in this way – as a sequence of self-contained, discontinuous moments, time being expanded to timelessness in the way that Stockhausen hoped.

Moment form and Mystère de l'instant

In performance, *Mystère de l'instant* bears out this expectation in some respects, but differs from it in others; this can be seen from a comparison of Dutilleux's own description with the details of the work. His first comment, that each section is 'focussed on a particular perspective', is visible even in the widely-ranging associations given by the titles of different movements; closer examination of their musical content reinforces this impression. Whilst it is, of course, quite possible to unify material and mood by other methods besides long-range thematic connections, here Dutilleux takes pains to keep movements *distinct* – between the different sections there are striking contrasts in terms of texture, rhythmic devices, timbre and the handling of registral space, as well as in mood, as Ex. 6.1 illustrates.

These contrasts often rely on a particularly polarised stance towards the handling of musical elements; this is reinforced by the second of Dutilleux's comments, which states that each section is 'deliberately "stereotyped" in its material'. Perhaps more than any other score by this composer, here every movement is very strongly characterised around a single timbre, gesture, or expressive idea: in '*Rumeurs*', sequences of layered

¹⁴ Kramer finds evidence of 'moment form' principles in Messiaen's *Chronochromie* (1960); see Kramer, 1978: 190–2. For more on the relationship between Dutilleux and Messiaen, see Potter, 2007. The influence of foreign sources on Dutilleux is discussed in Rae, 2010.

glissandi; in *'Litanies'*, the unfolding of a single, unison melody; in *'Soliloques'*, a sequence of solo cadenzas. This is not to say that individual movements never contain any internal development; in fact, in some of them, the basic unifying 'idea' is a process rather than a single piece of material (as in the gradual textural growth of *'Appels'* or the motivic transformations of *'Metamorphoses'*).¹⁵ Nonetheless, every movement is concerned with the elaboration of a single, distinct and self-contained 'atmosphere'.

As far as the handling of material unity (or, rather, disunity) is concerned, then, *Mystère de l'instant*, and Dutilleux's description of it, map closely to the concerns of moment form. However, when it comes to issues of continuity and sequence, the situation is more complex. Dutilleux writes that 'the structure of the whole [that is, the sequence of movements which makes up the piece] does not respond to any pre-established canvas'. This might be taken to imply the absence of any dramatic curve whatsoever; listening through the whole work, however, this reading is untenable – different sections clearly *do* play different roles in the management of long-range tension and release. For example, the anguished unison of *'Litanies'* presents a kind of central emotional crisis, to which the *'Choral'* that follows emerges as a brief but calming response, functioning as a kind of ultra-compressed, minute-long slow movement – a microcosmic parallel, perhaps, of the ethereal slow movements which are found in the composer's two earlier string concerti.¹⁶ Above all, the ending is certainly unequivocal in its dramatic force: following a cumulative, movement-long escalation in dynamic and pitch, which marks its final 'arrival' with the introduction of a Chinese gong, the final bars hammer out complex (but triad-based) *tutti* chords in rhythmic unison across the entire register of the ensemble (Ex. 6.3).

¹⁵ In itself this is no barrier to a conception of the work as moment form: Kramer notes that any given moment 'may comprise a static entity [...] that lasts throughout the moment, or [...] may contain a process that completes itself within the moment' (Kramer, 1978: 181).

¹⁶ These are the *'Miroirs'* movement of the cello concerto *Tout un monde lointain* (1970), and the *'Lent'* movement of the violin concerto *L'arbre des songes* (1985).

Connections 3: Shape, continuity, development

The image shows a page of a musical score for the final bars of 'Embracement' from 'Mystère de l'instant'. The score is arranged in systems for various instruments. The top system is for Violins I (VI. I), with staves 1 through 8. The second system is for Violins II (VI. II), with staves 1 through 6. The third system is for Alto Saxophones (Altos), with staves 1 through 4. The fourth system is for Cymbals (Cymb.), with two staves. The fifth system is for Timpani (Timb.), with one staff. The sixth system is for Viola (Vlc.), with staves 1 through 4. The seventh system is for Contrabass (Cb.), with staves 1 through 2. The music is in 3/4 time and features complex rhythmic patterns, including sixteenth and thirty-second notes. Dynamic markings include *ff*, *sf*, and *souffez*. There are also markings for *2ed.* and *ff* at the end of the piece.

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Ex. 6.3: *Mystère de l'instant*, 'Embracement', final bars

When Dutilleux states that there is 'no pre-established canvas' within *Mystère de l'instant*, then, he is not referring to long-range drama; rather, he is noting the absence of simple and clearly-defined formal distinctions. Here the movement divisions are in

one sense only notional; although in content each is very different, Dutilleux uses overlapping gestures and textures to ‘dovetail’ them together so that it is never quite clear where one ends and the next begins. For example, ‘*Echos*’ begins (as its title suggests) with an echo of the sonority which ended ‘*Appels*’, and its closing unison G sets up the beginning of ‘*Prismes*’; likewise, the sudden evaporation of the texture at the end of this movement, leaving F#s six octaves apart, connects directly in pitch and register with the opening of ‘*Espaces lointains*’. At first, movements are still kept audibly distinct, by means of rests and pauses between them; from ‘*Rumeurs*’ onwards, however, the overlaps are totally seamless – another important factor in the control of large-scale momentum.

This, of course, flies in the face of Kramer’s description of moment form in terms of total disconnection; however, the presence of these links does not necessarily imply longer-range relationships of expectation or implication. The nature of this dovetailing is clarified by Dutilleux’s next comment: ‘Ideas are put forward as they present themselves, without allusions to that which precedes or that which will follow’. Whilst the majority of Dutilleux’s mature compositions are concerned with setting up long-range architectural connections, within *Mystère de l’instant* each of these dovetailing links is only highly localised, based on a kind of immediate ‘free association’; once the listener has settled in the new section, the music moves off in a contrasting direction – in keeping with the underlying material disunity of the piece. Yet here there is a prominent exception which undermines any straightforward ‘momentary’ interpretation of Dutilleux’s comments. Towards the end of the work, at the close of ‘*Metamorphoses*’, there is a direct reprise of material from the ‘*Choral*’ which serves as a transition into the final movement (Ex. 6.4). This single instance of overt structural repetition is driven again by concerns of overall drama: following the enormous twelve-note chord of ‘*Metamorphoses*’, which represents the dramatic high-point so far, the restatement of the chorale provides a means of reducing the tension (both through its calmer character and through the familiarity of the material) and preparing for the gradual, cumulative *crescendo* which closes the work.

a)

b)

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**Ex. 6.4; Reduction of ‘chorale’ material:
a) ‘Choral’, bars 3–6; b) ‘Métamorphoses’, bars 62–6**

Even a cursory examination of the musical detail as events unfold over time, then, suggests that moment form is too restrictive an interpretative model for the experience of this piece. Whilst it fits in some ways – in the distinct, clearly-defined characters of different sections, and the relative absence of recurrent material – it cannot account for the relatively clear long-range dramatic trajectory which Dutilleux creates out of these instants (and in particular for the role played by the recurrence of the chorale), nor for the close dovetailing connections which exist between sections. An aural perspective clearly challenges over-enthusiastic interpretations of compositional aesthetic here. Indeed, in some senses *Mystère* might better be understood, from a listener’s point of view, as an ideal candidate for Levinson’s concatenationist approach: rich in superficial continuities (the processes of individual moments, and the localised connections between them), but lacking any large-scale architecture beyond the shifting drama of individual sections and the triumph of its concluding gesture.

Expanding the frame: Snapshots and musical form

Rather than replacing a viewpoint based primarily on compositional theory with one exclusively fixated on immediate listening experience, however, here the focus will be upon a middle way which draws elements from both in the service of a particular

analytical interpretation. The starting-point for this is the metaphor of a snapshot. (Dutilleux's working title for the piece was *Instantanés*, which means 'snapshots', so this seems like an appropriate place to begin.)¹⁷ A snapshot is an instant frozen in time, fixed and immutable. The viewer may not look at it in a fixed and immutable way, because different elements may draw the attention at different times, something which many tricks of photographic composition depend upon, using directed threads such as rivers or roads to lead the eye across the picture. In a sense, then, there may even be a process inherent in a snapshot. But the picture itself stays fixed and unchanging.

The most pertinent contrast here is between snapshot and narrative.¹⁸ A narrative is linear and directed, whereas a snapshot remains fixed and static. Things can change in a narrative, but because of that nothing really lasts – everything is temporary; by contrast, in a snapshot things are frozen as they are, but because of that they become timeless. The focus (so to speak) is thus totally different: whilst a narrative is concerned with tension and release, and is fundamentally goal-directed, a snapshot is simply about evocation – taking a moment that was special and making it last forever. In this sense snapshots sacrifice the opportunity for long-range development in return for an increased expressive power. A snapshot can only ever be a partial representation of its source, but because of this fixity it has a concentrated emotional weight which goes far beyond its real accuracy – it carries in one frozen tableau all the rich associations of the event it commemorates. Because it does not try to expand on or exhaust the possibilities of its material, its effect is timeless.

Of course, this does not imply that it is impossible to *make* a narrative out of snapshots. When a photographer compiles an album (or an exhibition) and places the pictures in sequence, the viewer is being invited to look at them in a particular order; in selecting that order, decisions might even be made on the basis of narrative ideas such as tension and release, transformation and climax. Indeed, if the pictures are being presented as a slideshow on a computer, fades of various kinds may even be used to 'dovetail' the transition from one snapshot to the next, so that at some points the viewer

¹⁷ See Dutilleux and Nichols, 1994: 90.

¹⁸ The application of narrative theory to musical structures is, of course, a burgeoning field, and one that goes far beyond the scope of this thesis. For discussions of post-1980s Western art music which foreground issues of narrativity, see for example Cumming, 1997; Meelberg, 2006; Venn, 2006; Reyland, 2007; Mailman, 2009; and Rofe, 2011.

cannot tell which picture is on display – they seem for a moment to have become continuous. Nonetheless, for all this, an album of snapshots remains fundamentally different from a conventional narrative, because of the freedom of perception which it provides. At every stage of a photo album, in the absence of a written or spoken narrative, the onus is on the *viewer* to create the links between different elements (if indeed they want to experience it in a continuous way); there is no guarantee that these links will be the same for every viewer.

The parallels with *Mystère de l'instant* should be clear. Individual sections do often represent processes in themselves, the connections between them are frequently seamless, and there are obvious signs of large-scale dramatic thinking in the arrangement of moments; yet there remains something fundamentally self-contained and non-narrative about this collection of instants, as audible to the listener as it is visible in Dutilleux's own comments. Formal 'coherence' thus arises here as a continual negotiation between the ordering and sequencing which Dutilleux sets up, listeners' own varying expectations of continuity and development, and the continuing invitation (central to the piece) to 'lose oneself' in the moment – without thereby renouncing the opportunity of stepping back later and attending again to broader concerns of shape and direction.

Moreover, the brief comparison presented here serves to illustrate possibilities for expansion in both sides of the analogy between music and verbal narrative. On the one hand, whilst the form of 'narrative' espoused by most musicological writing tends to conform fairly closely to established norms of linearity and structure, much modernist literature is notable for its transgression of these norms; in the French context supplied by the musical example here, one notable pioneer in this respect is surely Proust, whose influence upon Dutilleux's approach to large-scale form is well-documented (Potter, 2001: online; Dutilleux and Glayman, 2003: 59; Joos, 1999: 151–153). On the other hand, given the productive conflict discussed here between a conceptual understanding of the work, which stresses the 'momentary' quality of each section, and the relative continuity and sense of shape which emerges in performance, it is clear that a 'narrative' listening strategy can also be helpfully expanded to incorporate a wider degree of divergence from conventional archetypes – resulting, for example, in the snapshot metaphor described above. As much as specific metaphors might have a

Connections 3: Shape, continuity, development

particular (and potentially pernicious) influence upon the way a piece of music is experienced, then, it is clear that particular musical experiences also have the opportunity to challenge, and potentially change, the analytical metaphors which are used to approach them.

Strolling through a formal garden: Takemitsu's *How slow the Wind*

Issues of development, continuity, and long-range formal process are central to the late style of the Japanese composer Tōru Takemitsu (1930–96). A number of features of Takemitsu's aesthetic align him clearly with the other composers under discussion in this thesis. Over the course of his life, he evolved a style which is strikingly syncretic, anti-ideological and forcefully expressive; his music draws freely and widely upon the techniques developed by the various avant-garde movements of the preceding half-century, as well as paying occasional homage to the sound-world of Japanese traditional music. Yet even in the early part of his career, when ideological oppositions within music were much more clearly-defined, he refused to be drawn into any particular camp, and his late works retain that eclecticism and individuality. He saw the solution to the 'isolation' of contemporary music in an emphasis on 'conveying vivid musical impressions' above 'external formulas' (Takemitsu, 1971a: 79), and his insistence that attentiveness to the nature of sound itself should always be the prime element in any musical experience prevented him, in general, from offering specific insights into his expressive intentions or compositional process – he was concerned that too detailed explanation might 'inhibit the evocative powers of music', by changing the way we hear it (Takemitsu, 1987: 97).¹

Takemitsu also brings a particularly ambiguous perspective to bear on issues of nationality and cultural influence. It would certainly be naive to think of him as a token 'Japanese composer' in the post-war avant-garde, an outsider bringing his particular brand of Orientalism to the West; his first experiences of music were of the Western tradition, and his later investigations of traditional Japanese music (and its incorporation into several of his best-known pieces) were undertaken from the perspective of an outsider (Siddons, 2001: 12). Even if his basic musical language stems from

¹ The prime exception to this rule is his article 'Dream and Number', where he describes in detail the construction of the work *A Flock Descends into the Pentagonal Garden* (Takemitsu, 1987). This article begins, however, with a disclaimer explaining the composer's concerns about excessive verbal description of his music; this is the source of the quotation given above.

fundamentally Western principles, however, it is clear from his writings that his approach towards many of the broader issues of music – large-scale cohesion, material development, and expression – is strikingly distinctive, and at times quite alien to a Western mindset.² These broader aesthetic concerns are most visible in his theoretical writings; unlike Kurtág or Adès (and to a far greater extent than Saariaho), Takemitsu wrote copiously throughout his life on subjects related to his work. Those looking for a Messiaen-esque *Technique de mon langage musical* (outside of Burt, 1998) are likely to be disappointed, however; in their relaxed, free-flowing ambiguity and lack of dogma, his texts share most in common with those of the experimental tradition, and in particular with John Cage. This connection is hardly surprising: much of Cage's writing has its source in Japanese Zen Buddhism, and indeed the influence of the American composer was largely responsible for Takemitsu's own, rather belated engagement with the artistic implications of his own cultural background (Burt, 1998: 39–43). Yet these ideas feed into their music in very different ways: where Cage's output often embodies his theoretical concepts very directly (the use of chance operations to govern pitch selection in his early indeterminate compositions, for example), Takemitsu's aesthetic principles permeate his music only in a more indirect manner.

Fundamentals of Takemitsu's aesthetic

A few of these principles are worth mentioning briefly here. The first is an emphasis on the individual, physical moment as the focal point of the listening experience: Takemitsu was adamant that his music should be appreciated above all on a moment-to-moment basis, enjoying each sonority for itself and not allowing the materiality of this instant to be overridden by the intrusion of longer-term developmental processes (Burt, 1998: 378). He traced this stance to traditional Japanese aesthetics, where musical timbres were seen as a microcosm of the universe in their complexity, something to be appreciated rather than understood (Burt, 1998: 301). Peter Burt argues that an acceptance of this agenda could, in fact, result in a wholly different mode of musical

² A number of sources present a more detailed examination of the relationship between Western and Japanese elements in Takemitsu's music. For a primarily music-theoretical perspective, see Smaldone, 1989; for two broader discussions (both quite different) of the issues involved in cross-cultural philosophy and power relations, see Tio Ee Ming, 2000: 210–99, and Nuss, 2002.

perception, one which Takemitsu himself even seems to have associated with a kind of enlightenment (Burt, 1998: 377).

This gives rise to the second principle, which is an anti-linear, non-unified approach to the appreciation of multiple musical events. Takemitsu's analogy here is with a garden, where a diverse collection of beautiful things are laid out in a way which is balanced, but which leaves the freedom of motion to the viewer: he described the orchestra as 'a small sound-garden', and wrote of his desire to 'make up an orchestra that pan-focuses on sound images rather than focusing on only one musical image' (cited in Burt, 1998: 177). Burt sees this as a reference to the textural stratification seen in earlier pieces, where individual lines are self-contained and do not interact with their surroundings; the listener is thus left to decide what is 'foreground' and what is 'background'.

The third principle is an open-ended approach towards material relationships; just as the music does not present any one element as constantly in the 'foreground' or the 'background', so also it does not limit connections between elements – motives and gestures are interrelated in wide-ranging but very flexible ways. Here a more specific connection with Cage's aesthetic might be drawn: his own radical rejection of the distinction between artistic performance and everyday life, most visible in the stream of quasi-theatrical works he produced in the 1960s (Pritchett, 1993: 145), had its roots in his particular reading of the Zen Buddhist concept of 'interpenetration', whereby every part of the universe is seen as deeply interconnected with every other part (Pritchett, 1993: 75). In the case of Takemitsu's later music, the theatrical implications give way to a rich network of motivic and harmonic interconnections. Where the concept of the orchestra as 'sound-garden' encourages a selective but detailed approach to listening ('pan-focus'), the idea of 'interpenetration' gives rise to a broader, more detached awareness of the underlying unities between different passages of the music.

The language of the last period

These issues are particularly evident in Takemitsu's later music. He had always been interested in the interaction of avant-garde experimentation, particularly in the realms of timbre and texture, with aspects of consonant harmony and linear melody; in the final two decades of his life, however, his musical language underwent a noticeable

simplification, a process which some critics saw as parallel to the stylistic 'retreat' of a number of Eastern European composers (most notably Gorécki and Penderecki) as the Iron Curtain fell (Burt, 1998: 366–7). In Takemitsu's case a more pertinent comparison is with Ligeti, since many of the features of his 'last style' are simply more emphatic versions of concerns he had always carried, and the final works are certainly not simplistic. Rather, the move away from a highly complex surface language into something more single-mindedly lyrical allows the underlying formal and conceptual issues to come more clearly into focus; working with materials which the listener can quite easily process allows broader ambiguities of shape, direction and ordering to take their effect all the more powerfully.

The expressive power of the late music stems from an unusual combination of simplicity and subtlety. His language freely incorporates a number of 'traditional' elements – above all, linear, *cantabile* melody (in homophonic textures which allow it to be heard clearly), and consonant triadic harmony – which give it a surface of disarming naivety; at times, it can even become rather cloying. Yet the handling of these elements is often complex and highly ambiguous, with broad implications for questions of formal perception, development and expectation. Takemitsu makes much use of a limited set of melodic formulas, which are often shared between a number of pieces, but they have no 'definitive' form; between appearances they may be transposed, cut short or extended, altered slightly in their interval content (but little enough to remain recognisable), or joined with other motifs to form larger complexes. Nor can these alterations be understood easily as part of a linear underlying 'process' of any kind. The same is true of harmony: sumptuously-voiced, almost jazz-like triadic sonorities festoon the pages of any late Takemitsu composition, yet they never assemble themselves into any kind of extended harmonic progression, nor is it analytically wise to designate a 'key' for the vast majority of his works, even though many of them end on a very clear triad.

Perhaps the most striking aspect of Takemitsu's language at this time, however, is his control of rhythm and phrase-structure; this goes some way to explaining the ambiguities seen in the other elements. As Timothy Koozin notes, the late music is constituted primarily of individual 'gestures' surrounded by silence, and often emerging from and returning to it gradually in their contours of dynamic and tempo (Koozin, 2002: 17). His rhythmic language is thus a strange combination of the conventional and

the innovative: within any given phrase, the metrical structure is often quite simple (albeit very fluid and flexible), yet there is never any sense of continuous pulse for more than a couple of bars. No attempt is made to connect phrases except through silence. This is an area where Takemitsu's non-Western aesthetic is particularly evident; he explicitly associates his use of silence as a kind of 'counterpoint' to the composed sounds with the Japanese concept of *ma*, the 'expressive force which fills the void between objects separated in time or space' (Koozin, 1990: 36, in Burt, 1998: 116; see Takemitsu, 1971c: 51).

Ambience and ambiguity: experiencing How slow the Wind

The orchestral tone-poem *How slow the Wind* (1991) provides an ideal opportunity to explore some of these issues. In many ways it is typical of the composer's late style: cast in a single movement of relatively stable mood, it draws on the implications of a highly poetic title and makes full use of the subtle timbral possibilities of a medium-sized orchestra; likewise, its musical language is highly characteristic in its richly-coloured triadic vocabulary, modally-inflected melodies (drawing particularly on whole-tone and octatonic collections), and rhythmic flexibility. The title is drawn from an Emily Dickinson poem:

How slow the Wind – how slow the Sea –

How late their Feathers be!

(Dickinson, 1999: 589)

Takemitsu's own description of the role of titles within his compositional process places the emphasis on subjective experience, and on the generation of productive ambiguity: a title should be 'precise but not limiting' (Takemitsu, 1971b: 86). Certainly, this example – and the poem from which it is drawn – connect closely with the expressive atmosphere of *How slow the Wind*; on the surface, it is easy to hear it as an evocation of 'gently blowing grass and flowers amid rocks and trees' (Knight, 2006: 9), and at a deeper level it is as long-breathed as much of Takemitsu's output.

Closer examination, however, raises questions which parallel a number of the issues of temporal experience dealt with in the previous chapter. In keeping with the title of the work, the starting point is the idea of 'slowness': this is music which seems to be going nowhere fast, but which is nonetheless full of subtle changes – an unusual

approach towards the control of formal perception.³ A further challenge arises when attempting to understand the articulation of musical events here: the piece is full of individual gestures, and yet in practice these prove well-nigh impossible to separate out, or to build into larger subdivisions or hierarchies – the surface proves obstinately ‘flat’. Finally, issues arise with the construction of meaningful relationships throughout the composition: the interconnections between different materials and sections are so multi-directed, and so saturated, that attempts to understand them in more linear terms, or to make sense of them in terms of conventional cycles of expectation and fulfilment (or denial) are bound to seem contrived. The issue, then, is how the particular qualities of this work – its slowness, its flatness, its multi-layered connections – can be understood, and fitted into an overall conception of *How slow the Wind* as coherent, without forcing them into an inappropriately all-encompassing larger framework. The solution adopted here is based on a ‘ground-up’ approach to analysis which is intended to ensure that larger generalisations all stem from the immediacy of a listening experience: the discussion begins with the momentary and slowly ‘zooms out’ to consider broader issues of connection and cohesion.

For simplicity, this ‘zooming-out’ process is presented as three ‘levels’. Following on from the scepticism expressed by Fink towards issues of hierarchy, however, these will not be construed in the surface-depth terms of ‘foreground’, ‘middleground’ and ‘background’ familiar to a more Schenkerian approach. Rather, in order to emphasise their instability and their nature as purely analytical constructs, they will be related to a more obviously artificial metaphor, deriving from the ‘garden’ image which has often arisen in Takemitsu’s own writings.⁴ If motional metaphors are to be used here, *How slow the Wind* is less like the linear, directed ‘journey of self-discovery’ archetypal to Classical and Romantic symphonic music, and more like a quiet, calm stroll around an

³ Metaphors of motion are often problematic in the discussion of contemporary music, where the experience of change is often organised according to entirely different means from the developmental, linear conventions of tonal music; see Adlington, 2003. I have chosen to retain this metaphor here, however, to point up the particular way in which *How slow the Wind* subverts it. As with a number of the other pieces studied here, much of the effect of this work comes from its direct engagement with certain aspects of conventional experience; the development of a motional metaphor throughout this analysis (in quite a different direction, so to speak, from ‘linear’ ideas) allows this engagement to be explored further.

⁴ For an overview, see Burt, 1998: 118–19.

ordered Japanese garden.⁵ Although there is no broader sense of 'development', perspectives nonetheless change as objects move in and out of the attention, and although the path taken may be circuitous and wandering, the formal stability of the garden itself nonetheless gives some coherence to the experience: a walk around a formal garden is a very different experience from a ramble in wild forest or parkland. Moreover, as was suggested in the previous chapter, inverting the surface-depth metaphor to one of surface and *height* fits well here: an exploration of a garden can move freely between close examination of particular features (an especially attractive flower, the play of light on water), to a broader overview of the route the walker is taking, and even an attempt to survey the layout of the garden as a whole, which may often prove possible only with the aid of a map or a bird's-eye view.

The three 'levels' described here will be identified with these types of attention: 'ground level', or attention to the moment, 'eye level', or attention to broader continuities, and 'sky level', or consideration of overall proportions and balance. Whilst there clearly remain some similarities with a threefold Schenkerian conception, the change of terminology is more than simple camouflage: in fact, the framework adopted here differs from Schenkerian approaches in two important ways. Firstly, the shift from a surface-depth analogy to a surface-height one removes the questionable 'hidden depths' agenda identified by Fink; this analysis is thus liberated from the dangerous compulsion to see immediately perceptible details as barriers which musicological writing needs always to move 'beyond'. Secondly, and perhaps even more crucially in the case of *How slow the Wind*, the levels described here do not presuppose an *Uralinie* or teleological thread of any kind; as the analogy of a garden stroll emphasises, experiences of musical change here are very different from the goal-directed, cumulative trajectories which Schenkerian methods trace.

As an adjunct to the written discussion below, Ex. 7.10 (the fold-out diagram on page 218) shows a large-scale 'map' of *How slow the Wind*, outlining several of its most important structural 'layers' – the recurrence of melodic material, underlying focal pitches for given sections, tempo changes, and the permutational variations of timbre

⁵ Roger Reynolds likewise hears the earlier work *A Flock Descends into the Pentagonal Garden* (1977) as evoking 'the experience of a garden stroll, reflecting [...] changing perspectives, rewarding encounters' (Reynolds, 1987: 483). Although the two pieces are strikingly different in some respects, there are substantial resonances between his reading of that composition and the account presented here.

and texture (here illustrated by a two-dimensional 'orchestral garden', where textures are marked by colours and choices of orchestration by a necessarily schematic summary). A 'map' like this – as stylised as a formal garden, perhaps – is as notable for what it cannot represent as for what it can, of course, and as the analysis proceeds it will become increasingly clear that the experience this piece invites is far from the passive, static structural 'absorption' a visual diagram might imply. Nonetheless, it is useful as a general overview of the layout of materials and techniques within *How slow the Wind*: in particular, it shows just how frequently the primary thematic material recurs, and it also serves to demonstrate the fluidity with which different musical parameters are handled, both concerns to which the text will return. Indeed, even the block-like layout of the diagram will become relevant in the 'sky-level' discussion; there is more to the large-scale form of this work than its immediate character might suggest.

Ground level: hearing the moment

The natural place to begin, however, is not the large-scale but the immediate: here Takemitsu's distinctive style means that the emphasis is placed firmly upon individual sonorities right from the outset. Nonetheless, the results of this emphasis are far from simplistic. In fact, the gestural immediacy of *How slow the Wind* challenges the experience of 'close listening' by presenting a tension between two ways of hearing musical detail. The first pays close attention to the distinct qualities of each individual moment; it is thus attentive, transient, and enveloping. The second is more concerned with the wider unity of these moments; it therefore focusses on broader connections of gesture and motif across time, but is less deeply embedded in the experience of the music as it unfolds directly. Both of these listening strategies find confirmation in the material and presentation of this layer; they represent two poles between which the listener's experience is suspended – something which is to an extent true of all music, of course, but which serves here as a kind of focal point for the sense of expressive 'slowness'.

Discontinuous 'eventfulness'

The first listening stance – focussed on moments rather than the whole – is strongly affirmed by Takemitsu's striking and unusual control of phrase structure. The division of the aural experience of any piece of music into perceptual units is heavily dependent on the content of these units: where a melodic line is spun out over an extended period of time, as in Bach or Bruckner, the listener naturally expands their 'frame' of perception to encompass the whole phrase as a single unit – a phenomenon which Levinson refers to as 'quasi-hearing' (Levinson, 1997: 14–16). This approach is dependent on the presence of continuous, stable elements in the music, as well as a sense of connection between them. Here, however, such continuity is notably absent. Instead, at the level of direct, moment-to-moment experience, *How slow the Wind* is built of a sequence of very short musical units, a few bars long at most; as noted in the introduction, this is a central feature of Takemitsu's later music in general.

This disconnected quality is accomplished not only through the use of silence and short, self-contained phrases, but also through continuous variation; even where sound-events flow into another without clear gestural or phrase-structural divisions, numerous small shifts in orchestration, register, dynamic and tempo serve to mark them out as distinct from one another. Indeed, the constant variation in the parameters *being* varied prevents the establishment of any individual element as the means by which the phrase-structure is articulated: at one moment it is instrumental sonority which marks the emergence of a new gesture, at another it is a sudden change of harmony, tempo, or texture; the sequence of moments thus remains highly unpredictable, never settling into anything approaching a recognisable pattern. The result is an aural canvas which comes across at times as almost pointillistic, but with none of the regularity of unit size or arrangement seen in the visual equivalent: the music is continuously 'eventful' at a local level, but does not provide any easy means of grouping these events into temporal hierarchies or directed trajectories.

The image displays a musical score for the piece "How slow the Wind" by Takemitsu. The score is written for multiple instruments and includes several performance markings. The tempo is marked "Più mosso" with a tempo of approximately 60 ca. (♩ = 60 ca.). The key signature is one sharp (F#). The score is divided into two sections: the first section is marked "♩ = 46 ca." and the second section is marked "slow down" with a tempo of approximately 46 ca. (♩ = 46 ca.).

Independent sound-events are marked in boxes throughout the score. These include:

- hn. (horn)
- fl., picc. (flute, piccolo)
- perc. ^{8va} (percussion, 8va)
- bowed perc. (bowed percussion)
- ww. (woodwinds)
- str. harm., hp. (string harmonics, harp)
- hp. (harp)
- cel. (celesta)
- fls. hp. celesta (flutes, harp, celesta)
- obs. solo (oboe solo)
- ves. (violin)
- str. harm. (string harmonics)
- cel. str. harm. (celesta, string harmonics)
- cb. (contrabass)
- str. harm., hp. (string harmonics, harp)

The score features various musical notations, including triplets (marked with '3'), slurs, and dynamic markings such as *pp* (pianissimo) and *8va* (octave up). The instruments are arranged in a standard orchestral layout, with strings at the bottom and woodwinds and brass at the top.

Ex. 7.1: *How slow the Wind*, reduction of bars 1–10 (independent ‘sound-events’ marked in boxes)

The opening (Ex. 7.1) provides a clear example of this overwhelming 'eventfulness'. Over the course of 40 seconds, at least 15 individually distinct sound events can be identified (marked by boxes in the reduction); this makes an average of one every 2.5 seconds, but in fact they tend to overlap in short 'bursts', surrounded by pauses and held notes, so that the effect is far more strikingly unpredictable. The reduction shows clearly the frequent alternations between different registers and instrumental groupings, as well as the range of playing techniques and unusual timbral combinations used to broaden the set of available sonorities; it also shows the variety of different ways in which gestures interact – sometimes a new sound emerges from an existing one, only gradually becoming prominent (such as the *crescendo* note in percussion and violins, bar 3), sometimes there is a delicate 'hand-over' from one group of players to another (as in bar 5, where the string chord gives way to a wind one with slight overlap), and sometimes gestures are simply superimposed so that one interrupts the other just for a moment, creating multiple layers of event rather than a single line (bar 6 in the strings, for example).

This opening passage is perhaps not a wholly representative example of the way phrase-structure is controlled in general. The oboe solo which begins at bar 10 heralds a much more extended phrase of more consistent texture (it lasts a full five bars before being interrupted again); after this point the recurrent melodic line which the solo introduces acts as something of a structural counterbalance to the more pointillistic exchanges seen here, allowing the focus to remain stable for several bars at a time. The opening is perhaps best seen as a kind of dramatic introductory gesture, an extreme point in the textural fragmentation which dominates the momentary experience of the piece. Nonetheless, even this emerging counterpoint of more stable and more fragmented passages adds to the generally unpredictable phrase-structure – it simply shifts the problem of grouping to a higher level.

This 'eventfulness', arising from a multiplicity of overlapping sound-events which is almost overwhelming when one listens to it in detail, is rather surprising given the slow tempo and generally quiet dynamic; it is built from subtle distinctions rather than overtly dramatic contrasts, with little of the sense of urgency felt in more straightforwardly teleological music. The results of this approach are plainly audible: within many of Takemitsu's late works, as Robert Adlington puts it, 'one may retain an

impression of a number of highly memorable musical gestures which yet exist in a fluid, unfixed relationship with each other' (Adlington, 1997: 19). The remembered experience of this piece seems almost entirely detached from questions of succession. It also encourages a mode of listening which is highly attentive to the subtle details that distinguish each sound-event, and less concerned with issues of longer-range connection or expectation.

Motivic interconnections and thematic flexibility

The previous discussion focussed on the opening as a series of more-or-less disconnected events, but there are in fact a number of significant recurrences of material in these ten bars. The forceful opening gesture is characterised by the combination of very high and low registers, and by the use of percussive strikes along with sustained string notes; this combination recurs in bars 2 and 4, expanding the isolated higher pitch into a cluster, and then in bars 6 and 7 is divided into its component registers (the upper gesture on harp and strings in bar 6, and the lower double-bass note in bar 7). Likewise, the A-G# figure on bowed percussion and harmonics appears in bars 3, 4 and 7. And although more obviously melodic material is not restricted to a particular timbre or instrumental grouping, there is certainly a prevailing sound-world in the instrumentation of accompanimental chords even at this early stage; throughout this section there is a tendency for the strings to be used only in extremes, whilst the wind fill in the middle register, something which the build-up to the 'enveloping' chord of bars 8–9 makes clear.

There are thus already grounds for a listening stance which is less exclusively focussed on the details of each moment, and more open to stable or recurrent materials between them. This approach finds ample confirmation in Takemitsu's handling of melodic ideas throughout the work. The composer's late style is notable (within its relatively avant-garde surroundings) for its wholesale embrace of linear, lyrical melodic figures, and this piece is no exception; in fact, here the melodic dimension is arguably the principal generator of large-scale stability and coherence at a surface level. The first ten bars already featured a number of small melodic figures, most clearly in the horns and the flutes, and this kind of brief but highly characterised patterning continues throughout. The oboe solo which follows goes much further, however, introducing an

extended motif which is so all-pervasive throughout *How slow the Wind* that it might easily be described as its 'main theme' (Ex. 7.2a)); clearly-recognisable presentations of this theme (either in full or as either of the two indicated halves) account for nearly half of the duration of the work.⁶

Ex. 7.2: *How slow the Wind*: a) main theme (taken from appearance at bars 40–1); b) underlying pc-content of theme, and possible partitions; c) reduction of lower strings, bar 8

In fact, its influence goes much further than obvious repetitions: even the melodic passages which come between these recurrences are generally audibly related to this 'main theme', either as reorderings of small cells from it or through shared intervallic content. Viewing the pitch-content of the motif as a whole (Ex. 7.2b)) shows further generative possibilities: it is built of a series of stacked thirds (stabilised by a fourth in the bass) which can be divided in a number of different ways, always retaining prominent juxtapositions of triadic and augmented or diminished sonorities; these provide the source of a number of passages which make use of sequences of rising-third

⁶ The theme is also immediately striking for its similarity to the primary material of Debussy's tone-poem *Prélude de l'après-midi d'un faun*, particularly in its final chromatic tritone descent and its rhythmic fluidity, as well as the varied harmonic contexts into which it is placed; moreover, *How slow the Wind* spends much of its time in or around C#, which is a recurrent melodic focal pitch throughout the *Prélude*. A full exploration of these connections is outside the scope of this analysis; suffice it to note that the *Prélude* and Debussy's 'poème dansé', *Jeux*, were the two scores of the composer for which Takemitsu professed a particular admiration (Burt, 1998: 308), and a number of the issues discussed in this analysis – most notably the 'permutational' control of timbre, the free but not wholly 'momentary' approach to teleology, and the generation of pervasive, multi-directional motivic networks – have particularly close resonances with these pieces, especially *Jeux*. See Berman, 1980; Eimert, 1961; Pasler, 1982; and Hargreaves, 2008: 146–80.

figures. For example, the cello 'flourish' which precedes the first statement of the theme, in bar 8, is a simple transposition of this set of pitches (Ex. 7.2c)).

The theme is just as flexible when viewed from a harmonic perspective. The initial and extreme pitches of its first bar outline a C# triad, whilst the second traces its tritonal opposite, G; there is a clear diminished element to the rising figure, but it also hints (in its A^b) at augmented sonorities around C#, whilst the descent compresses whole-tone and chromatic elements into a six-note figure. The breadth of its harmonic 'affordances' means that this material is able to appear unchanged in a wide variety of harmonic contexts. The flexibility of this underlying collection renders claims of any directed, 'organic' proliferation of material rather meaningless, of course; rather than a clear cellular 'blueprint', it makes more sense to view thematic material here as a statement of possibilities which are then explored – in multiple different 'directions' – through the rest of the work. This is perhaps what matters, though: content and form are to a large extent separated within *How slow the Wind*, yet this separation is achieved not by detaching one from the other, but rather by the creation of materials so rich in generative potential that formally almost anything will 'fit' with them.

This flexibility is certainly exploited here. Takemitsu's omnivorous approach to harmony is very much in evidence: whole-tone, octatonic, and diatonic sonorities are freely combined alongside occasional passages based around the total chromatic. Such overwhelming syncretism renders detailed analysis – particularly the kind that ascribes important sectional distinctions to pitch-content – rather difficult, particularly since different scales are often combined within the same passage or even the same chord. Nonetheless, some general connections can be identified. The first is the widespread use of chords with very clear tonal allusion – in particular, 'acoustic' chords built from triads with added sevenths or tritones – at points of relative stability. The second is the frequent recurrence of sonorities built out of a whole-tone scale with an added semitone dissonance, the 7–33 septachord of Forte's *The Structure of Atonal Music* (1973) which Burt identifies as an important harmonic building block of Takemitsu's style. Where this collection is absent, octatonicism is also frequently used as a means of generating pitch-material in a functionally static manner. Across all of these different contexts, the continued presence of the theme provides some measure of unity.

Momentary continuity

The unity created by thematic recurrence does not necessarily imply any similar conception of audible *continuity*, however. If the experience of time presented here is multi-connective and circular, moment-to-moment connections seem to lose their function – we are caught between an experience of the work which focusses entirely on individual phrases, and one which is fixated on its essential ‘wholeness’ in a way which is almost mystical. In fact, the situation is (again) more nuanced than that. Just as an examination of brief extracts emphasises their distinctness, so the overview of the entire piece given in Ex. 7.10 shows just how widely the main thematic material recurs – not just in the broad, ‘holistic’ sense implied by shared motivic associations, but as direct audible repetition; the same is true of particular focal pitches, and (although this largely represents a level of detail beyond that found on the diagram) of certain gestures, textures and sonorities. Moreover, tracing the unfolding of events chronologically at a lower level also reveals a number of stronger, more specific connections between adjacent individual gestures – a kind of momentary linearity which acts as an immediate counterbalance to the sense of contrast which the overriding ‘eventfulness’ provokes.

The most obvious of these connections is, again, pitch-centric. Although they may differ strikingly in terms of texture or timbre, consecutive gestures are often connected throughout by individual shared focal pitches, pivot-notes, or clear stepwise voice-leading motions. This was already visible in the opening, with the recurrent top-register C#s in strings and piano, the descending bass sequence of bars 1–4, and the shared focus on A and G# in the bowed percussion and the subsequent horn melody. An even clearer example comes in bars 15–17, where a relatively emphatic F[♯] in horns and percussion (stated initially as a dissonance to the implied D major of the flute line) is re-contextualised as the bass of a first-inversion C# major sonority for the following presentation of the ‘main theme’. The connections continue for some time: this gesture comes to an end in bar 22 on a middle D which then moves one chromatic step to D[♭] for the ‘chorale’ of bar 23, and this sequence ends on an acoustic F major sonority which forms the basis for the bell-like exchanges of bars 25–7, leading back to a repeat of bars 17–18 (with the F again forming the bass). Notably, these connections are not only local: the ‘map’ shows how frequently a few specific focal pitches recur over the

course of the whole piece. The same is true for particular pitch alternations: over the first 70 bars F (generally linked with whole-tone-related 7–33 sonorities) appears often as a kind of ‘rival pole’ to more triadic harmonies around C#, whilst in the second half D is a more common opposite.

Bars 46–55: a patchwork of variants

Another kind of immediate connection between individual passages is found in the way in which the varied thematic possibilities discussed above are explored. The appearance of the various smaller figures which relate to the main material is not arbitrary: rather, in general, they are presented (as with *Mystère de l'instant*) so as to ‘dovetail’ with one another, new ideas growing out of the final pitches or gestures of the preceding passages – thus allowing the connections between them to be evident. Bars 46–55 show this at work within a span where the ‘main theme’ is absent in recognisable form. The whole section arises out of a three-note motif given at the end of the previous section in the viola (Ex. 7.3a); this is then explored in bars 46–9, generating a number of canonic responses which are all still clearly related before expanding into a rising ‘augmented arpeggio’ gesture (Ex. 7.3b, c)). The chorale of bar 51 stems from a rearrangement of this gesture, and also carries clear resonances of the main theme (Ex. 7.3d)); the melodic figure of bar 52 varies it further into a more open 6-note phrase (Ex. 7.3e)), which then generates its own gestural imitation in bars 54–5 (Ex. 7.3f)), after a repetition of the bar 51 chorale in bar 53.

The image contains six musical examples labeled a) through f).
a) A single staff in 3/4 time showing a three-note motif: G4, A4, B4.
b) A single staff in 3/4 time showing a series of three-note chords: G4-A4-B4, G4-A4-B4, G4-A4-B4.
c) A single staff in 3/4 time showing a rising arpeggio: G4, A4, B4, C5, D5, E5.
d) A grand staff (treble and bass clefs) in 7/4 time showing a complex chordal structure.
e) A single staff in 4/4 time showing a six-note melodic phrase: G4, A4, B4, C5, D5, E5.
f) A single staff in 3/2 time showing a gestural imitation of the six-note phrase: G4, A4, B4, C5, D5, E5.

Ex. 7.3: *How slow the Wind*: a) three-note cell, bars 47–8; responses in bars b) 48–9 and c) 49–50; d) chorale, bar 51; melodic imitations, bars e) 52 and f) 54–5

Taken as a whole, the section is a patchwork of different variants which all stem recognisably from the underlying material of the main theme; crucially, however, they are organised in such a way as to emphasise the internal linear continuity of the passage. This opens the way for a more continuous understanding of the music: no longer is the choice only between direct moment focus or detached overall unities. Instead, listeners are free to hear elements of linear continuity and even localised developmental trajectories between individual moments.

Eye level: connections and continuities

The longer-term implications of this more continuous perspective for the experiential coherence of the piece are not yet clear, however; in order to gain a deeper understanding of this strand of the music, it is necessary to take a step back from the surface and explore the handling of relationships across more extended durations. This exploration yields a number of insights: firstly, that any sense of broader teleology here is not altogether absent, but is certainly considerably weakened; secondly, that the continual textural and timbral variations are not developmental but rather principally ornamental; and thirdly, that these effects are achieved by a careful overlap of structural levels which would have to align for conventional arcs of tension and release to be created. Returning to the horticultural analogy, here we are strolling through an ornamental garden, but one with no clear path (and hence our progress is slow, and our bearing rather wandering). These three aspects are unpacked below, along with the experience of form which they create.

Attenuated teleology

There is a paradox at the heart of this work, expressed in the combination of 'eventfulness' and 'slowness': although new things are happening all the time, there is rarely any real sense of urgency about them. *How slow the Wind* makes carefully-restricted use of the cycles of tension and release seen in the majority of music from Western traditions; here the sense of tension is never allowed to rise to levels that would generate real long-range momentum, but neither is it abated entirely. This is evident in the control of harmony, for example: the piece makes widespread use of triadic

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sonorities, and there is a clear association between these sonorities and points of almost cadential stability, but this is never allowed to develop into any broader functional system.

This approach is implied by the shape of the 'main theme' (see Ex. 7.2a): its first half traces a clear progression away from and back to C# major (although via a diminished chord, a relatively 'non-functional' sonority), but the second half leads away to G \sharp , its tritonal opposite. Any presentation of this theme in full will thus inevitably end up moving off at something of an 'angle'; the twist in its tail prevents any straightforward development proceeding from it. As such, the structure of the piece as a whole, at this higher level, emerges inevitably as a series of episodic alternations between portions of the 'main theme' and interludes which explore a variety of different directions – deflection, rather than development, is the principal generator of change.

The image displays three musical excerpts, labeled a), b), and c), from the piece 'How slow the Wind' by Takemitsu. Each excerpt shows a melodic line and its accompaniment.
a) The top staff is for flute (fl.), the middle for strings and woodwinds (str., hn. and str., ww.), and the bottom for strings and woodwinds (str., ww.). The melody features a triplet of eighth notes and a quintuplet of eighth notes.
b) The top staff is for flute, oboe, and clarinet (fl., ob., cl.), the middle for strings and celesta (str., celesta), and the bottom for strings and woodwinds (str., ww.). The melody features a triplet of eighth notes and a quintuplet of eighth notes.
c) The top staff is for horn (hn.), the middle for violin 1 and 2 (vln. 1 and vln. 2), and the bottom for lower strings and lower woodwinds (lower str., lower ww.). The melody features a triplet of eighth notes and a quintuplet of eighth notes.

Ex. 7.4: *How slow the Wind*, recurrences of main theme in bars a) 40–1; b) 17–18 and 28–9; c) 45–6

A clear example is found in bars 17–46: this passage moves between presentations of the main theme in a particularly 'romantic', C#-major-based texture, and a variety of

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other material. Each return to the main theme does carry with it a sense of arrival and release, although this varies depending on the manner in which it is presented: the more dissonant harmonies and lower *tremolandi* of bars 40–1 (Ex. 7.4a) render this more unsettled than the appearances at bars 17–18 or 28–9 (Ex. 7.4b)), whilst the rich bass triads of 45–6 reinforce the sense of this as a ‘cadential’ statement (Ex. 7.4c)).

In between these statements, however, the other ideas appear not as logical extensions of the main material, or as interruptions which then have to be somehow re-integrated before tension can be abated; they occupy a position somewhere between these two extremes, departures from the main theme which nonetheless do not differ sufficiently to set up a clearly oppositional dynamism. Harmonies proceed by sidestep rather than continuation or direct contrast; this is achieved through a combination of the pitch-connections between adjacent segments discussed earlier, and the use of whole-tone sonorities, which do not prioritise any scale degree.

Ex. 7.5: *How slow the Wind*, reduction of bars 19–27

Bars 19–26, for example, move away from and back to the C# sonority of bars 17–18 by a rapid third-based progression through A and F centres (Ex. 7.5); in more functional contexts this would be a startling sequence and might generate some longer-term tensions to be resolved, but here its effect is much reduced – each chord is richly coloured by added pitches from the whole-tone collection, and the A and F are both

presented in weaker inversions, so the tonal allusions, whilst not wholly absent, are very subtle. This allows other connections to take precedence for the rest of the interlude – primarily relationships to an underlying 7–33 subset in the chorales, and the use of ‘pivot notes’ from one sonority to the next.

The reduced ‘urgency’ of the music is thus closely connected with the widespread interconnectivity of materials and motifs discussed earlier; since any one idea can lead just as easily onto a whole variety of different continuations and redirections, with none being any more or less appropriate than any other, there is little opportunity for the longer-term cumulative processes necessary for large-scale directed change. The reduced ‘pull’ of tonal and rhythmic processes and the multi-directional nature of the closer, linear connections mean that there is never any real sense of ‘flow’: every few bars there is a shift in mood or material. The music may be ‘rarely sudden, never abrupt’, as Reynolds would have it;⁷ but neither is it straightforwardly continuous.

Recurrent permutations, different perspectives

The manner in which these shifts are generated and controlled also reflects an important distinction from more developmental approaches to formal organisation. The primary melodic material actually remains relatively stable in pitch and gestural terms throughout, but it is only occasionally presented in either or both of its full phrases. Instead, much of the piece is built upon the localised exploration of various smaller subsets (often only two or three notes) of this ‘main theme’, which serve as the basis for the wealth of subtle changes in mood or character in a manner which appears more arbitrary than goal-oriented (in keeping with the ‘wandering’ quality of the teleology here). The reappearance of larger, more recognisable segments of the theme between these passages serves as a kind of ‘punctuation’; far from marking stages in a process of change, however, they only serve to accentuate the fixed quality of the underlying material.

Contrast between sections is thus achieved by the free exploration of the different parameters available to the composer, rather than by goal-oriented progressions. The same superficially ‘eventful’ quality which was noted earlier also finds its way into this

⁷ This is the title of Reynolds, 1987.

level of discussion: individual gestures and even more extended sections are marked out from one another by means of variations in different musical elements, without these variations ever becoming regular or directed. They serve as a kind of ornamentation, preventing listeners from adopting a wholly momentary listening stance, but they do not move into the arena of conventional development as such. Instead, they display a fixed, non-directional, permutational quality which is in keeping with the felt 'slowness' of the piece – an effect produced not by a lack of change, but rather by the absence of regular, audible patterns by which this change could be structured, and within which expectation could develop. With rhythm, for example, the process of variation is constant but very subtle: melodic figures very rarely appear in identical rhythmic presentations twice in a row, and the underlying metre is likewise constantly in flux (and is continually undermined, in any case, by syncopation and fractional subdivisions). The result of this is that rhythmic features cannot form part of the identity of any given material except in the loosest terms, and that no opportunity is provided for the generation of longer-term cumulative tension by rhythmic means.

The control of texture and timbre elaborates upon these principles in a more sophisticated way. Burt notes the consistent use of textural oppositions within Takemitsu's mature output as a means of elevating these aspects to 'the level of a structural element in the composition' (Burt, 1998: 294). This is as true here as it was in the more overtly experimental works of his middle period (Burt, 1998: 295–6); textural variation serves as one of the primary means of controlling formal expectation. The manner in which these contrasts – of texture and timbre – are handled reflects the sense of slowness which characterises the piece as a whole. Firstly, the overall sense of variety is kept decidedly *finite*: in spite of the rich orchestration, textures are generally reducible to a few basic 'types' which recur and interact in various forms throughout. These are based primarily on the contrast between melody and accompaniment; at some points there is a clear focal element in the texture, with other instruments subsidiary or absent altogether, whilst at other moments the distinction is more difficult, if not impossible – the music is 'pan-focussed' and listeners have to decide where to concentrate their attention.

Examples of highly focussed, melody-based textures include the frequent homophonic 'chorales' and instrumental solos which recur throughout; the opposite pole

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is found in the multi-layered countermelodies which build up over successive presentations of the main thematic material, or in the creation of more complex textures based upon layered *ostinati* and timbral effects (for example, bars 107–11, Ex. 7.6). Likewise, although *How slow the Wind* is filled with orchestral nuance, it draws on a fixed collection of timbral possibilities. Takemitsu makes particular use of the opposition between the resonant but fast-decaying ‘bell’ sounds of his extended percussion section and the *legato*, *sostenuto* possibilities of the strings; he also exploits the contrast between bright and dark timbres – string harmonics, metal percussion and high woodwind providing the former, and low woodwind, string *tremolandi* and horns supplying the latter (along with the cowbells when they enter).

Ex. 7.6: *How slow the Wind*: reduction of bars 107–11

Secondly, the interplay of contrasts is *localised*: within given sections of the piece, short-term dialogues are set up between different permutations of the underlying textural and timbral resources, but these never gain enough structural momentum to dictate the larger-scale course of events. They provide a means of structuring time on a fairly local scale, and of keeping the listener's interest and avoiding a shift into a wholly ‘*unexpected*’ listening stance; they do not spill over into the broader structure, however. For example, bars 17–46 are structured as a series of exchanges between richly layered statements of the main theme and low, dark chorales, so textural complexity is set

against textural simplicity (see Ex. 7.4 for some examples of this), but from bar 47 the texture as a whole becomes generally simpler, and thus the emphasis shifts to timbral contrasts between specific instrumental 'choirs'; later in the work, in bars 100–37, the interplay between instrumental monody and athematic, bell-like *ostinati* becomes the primary focus. Because they are kept finite and localised, variation processes lose their explorative and directional force and become more cyclical; they are permutations of a limited set of possibilities, rather than cumulative transformations or developments.

The result is a kind of 'suspended' expectation which produces a distinctive temporal experience: it offers a rather different perspective on the issues of 'moment', 'linearity' and 'whole' within the discussion of Dutilleux's *Mystère de l'instant* in the previous chapter. There, individual movements were distinct in terms of material and gesture, but related by dovetailed connections and their position as part of a wider trajectory (a situation which gave rise to the metaphor of a photo album or computer slideshow); here, a pervasive unity of material and gesture exists in careful balance with a discontinuous presentation and the absence of any climactic arc. This reinforces the sense of *How slow the Wind* as a kind of 'walk' around a closed space, and resonates with Takemitsu's garden metaphor: we revisit objects, gaining different perspectives upon them (by means of the variety of permutations explored), but their basic qualities do not change.

Sky level: organisation and energy

All the discussion thus far has been concerned with the immediate experience of the music, whether at a momentary level or over larger timescales; there has been no consideration of ideas of 'arrival' or of closure. This makes sense, of course, if we see this work as wholly non-teleological; the notion of any kind of musical 'arrival' relies upon cycles of expectation and release which are then simply not valid – without them, the music simply 'starts' and 'stops' at arbitrary points (as Kramer's characterisation of moment form describes). The problem is that such a viewpoint is just as problematic here as a straightforwardly linear, teleological one: although for most of the time the structure is as fluid and ambiguous as described above, there are a number of points which *do* stand as audible 'landmarks' within the form. In order to account for these, it is necessary to consider larger-scale coherence, investigating the features which allow

the fluidity of the lower-level processes to 'hold together' over the course of the whole. This might sound like a capitulation to conventional organic concepts, but this aspect is in fact principally architectural: although linear processes of expectation and release have been largely jettisoned here, broader coherence is maintained by using carefully-controlled durational proportions and ensuring a sense of balance at the large scale in the handling of materials. As such, the garden analogy proves its usefulness yet again: in a formal garden, where a single 'path' is renounced, the architecture of the whole becomes yet more important.

Architecture and balance

Perhaps the most striking gesture in *How slow the Wind* occurs at bar 86: after a brief, calm 'chorale' which appears to have settled (perhaps finally) upon an E \flat triad, there is a series of forceful, bell-like tritonal 'chimes' for piano, harp and percussion, answered by cowbells (Ex. 7.7a)). The gesture itself is startling enough, in its registral extremes and shift of mood, but the entry of the new (and highly unusual) percussion timbre pushes it into the realms of the bizarre. As an aural reference point, then, this passage is hard to contest. Appropriately, then, closer inspection reveals that the gesture is far from arbitrarily placed within the form. In fact, when the work is divided up by notated duration (taking tempo markings into account), the entry of the cowbells falls at the exact centre; the listener's perspective thus aligns startlingly closely with 'abstract' structural proportions.⁸ Moreover, if the cowbells are removed, the gesture which remains over bars 86–93 is a clear rhythmically-augmented version of the first four bars: both are based upon 'bell-like' strikes in the extreme registers of piano and harp, descending by a tone upon repetition. As if that were not enough, a look at the final section reveals the same gesture returning a third time in bar 153, this time elaborated further into a full *tutti* (Ex. 7.7b)). This allows the piece to be divided into two equal halves around a clearly audible midpoint, with an introduction and coda: simple aural surprise at an unusual sonority thus leads rapidly to the discovery of a structural element which goes much deeper than the wanderings of the surface.

⁸ Although such measurements do not account for rubato, which is clearly an important element in this work, all the proportions discussed in this section fit equally well to divisions based upon the reference recording.

Strolling through a formal garden: Takemitsu's How slow the Wind

a)

cowbells

poco mf *poco mf* *poco mf*

pno., hp., fl., cbsn. pno., wind, lower strings

f *f* *f* *ppp*

90

b)

cowbells

poco f *poco mf* *p*

pno., hp., fl., vln. pno., hp., cbsn., cb.

f *mf* *p* *fpp*

Ex. 7.7: *How slow the Wind*, cowbell gestures at bars a) 86–93 and b) 153–5

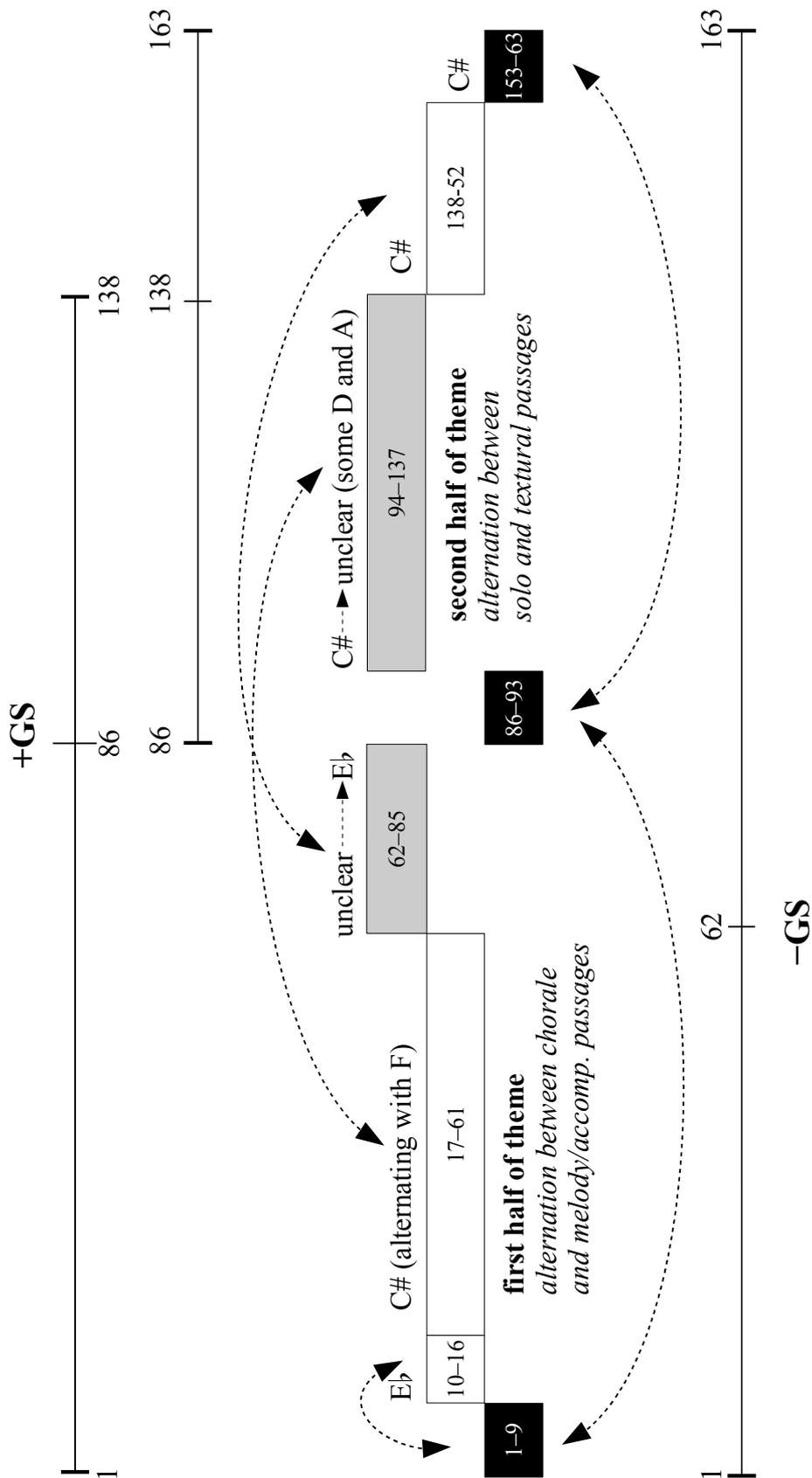
This observation is tantalising enough by itself, but the connections deepen when a more extended proportional ‘map’ is assembled. Using the entrance of the cowbells as a starting point, it can be divided further into eight sections. The three appearances of the introductory ‘bell’ gesture mark out the largest and clearest divisions of the form; the first appearance of the ‘main theme’ forms a section in itself, because it is kept separate from the following passage by a long pause and a *molto ritenuto* – it is a self-contained, ‘timeless’ moment which stands apart from the more continuous,

undifferentiated texture which surrounds it. Between these points, further divisions are made upon similar lines of aural distinctiveness, combined with observations about broad trajectories of pitch foci and thematic appearances. Bar 62 is seen as the beginning of a new section, for example, because it follows immediately after a settled, almost 'cadential' statement of the main theme upon C# (parallel to the statement upon E \flat that precedes the entrance of the cowbells), the bar itself marks a striking change of texture and mood, and it is the beginning of a gradual motion in the bass away from C# and towards E \flat . Likewise, bar 138 marks the first return to C# in the bass, and the first full presentation of the 'main theme', after the central cowbells gesture. Collating all these observations results in the table of Ex. 7.8; laying this out to scale by duration, and marking symmetries and Golden Section proportions, produces Ex. 7.9.⁹

Bars	Section	Duration (secs)
1–9	Introduction (including important percussive gesture)	27
10–16	Opening, elongated statement of theme in oboe	27
17–61	Series of richly 'romantic' statements of theme around C# (focussing on first half), separated by interludes of related material; ends with a cadential 'romantic' statement on C#	148
62–85	Bass motion from C# to E \flat , through more 'dramatic' (and less thematic) material; closes with a cadential statement on E \flat	70
86–93	Intensified repeat of introductory percussive descent, with cowbells; bell-like echoes in orchestra (E \flat -C# in bass)	26
94–137	New <i>più mosso</i> tempo; series of fragmentary statements of theme around D (focussing on second half) separated by athematic 'bell' gestures	139
138–152	Return of full (slightly extended) theme, gradually returning to 'romantic' character; still alternates with cowbells, gradually integrating them	71
153–163	Coda bringing back introductory percussive gesture (with cowbells) integrated into C# tonality	27

Ex. 7.8: *How slow the Wind*, table of main sectional divisions

⁹ The notation used for Golden Section relationships here is taken from Michael Rofe's extended study of their presence in Shostakovich. GS+ indicates a positive Golden Section – that is, an event occurring 0.618 of the way through a duration; GS- indicates a negative or inverse Golden Section, something placed at the point corresponding to 0.382 (1–0.618). See Rofe, 2008: 18.



Ex. 7.9: Diagrammatic representation of Ex. 7.8, with connections of duration and Golden Section proportions indicated

A number of features of this overview are particularly striking. The first is the multi-layered self-similarities which are visible between formal blocks: each recurrence of the section based around the introductory 'bell' gesture is almost identical in duration (certainly no requirement, since after the initial few bars each of these sections diverges from its shared material), as is the first entry of the main theme. Between these points, each half of the work divides into two sections whose durations are equally closely connected, with the additional observation that the first section of each of these halves is almost exactly twice as long as the second. However free-form and wandering the surface of the music might appear, then, there are clear signs of careful ordering at a higher level. The second notable feature is the sense of symmetry which is visible between the two halves of the piece. Moving inwards from the 'edges', the outer sections are characterised by constant returns to C# centricity and the presence of the full theme, whilst the 'inner' sections move more freely between focal pitches and treat melodic material in a more fragmentary fashion. These symmetries are complemented by other areas in which the two halves 'balance' one another: in the first half, for example, partial treatments of the main theme are restricted its first phrase, whilst in the second half the second phrase is the focus of attention.

Symmetry and proportion

A further particularly striking element in this diagram is the presence of clear Golden Section shapes throughout *How slow the Wind*: both of the most significant subdivisions in the two halves (bars 62 and 138) fit into larger proportional schemes of this type. Bar 62 is the apex of a single GS⁻ ratio which spans the whole work; bar 138 forms the pivot for a pair of interlocking GS⁺ relationships around the mid-point, bar 86. Michael Rofe's study of proportional relationships in Shostakovich emphasises the need to exercise caution over the identification of these kinds of abstract, mathematical connections: given the complexity and flexibility of the system, it is possible (with enough time and effort) to find such relationships almost anywhere. Rofe notes, however, that where such relationships fit closely with important structural features of the music as it is heard, their presence becomes much more noteworthy: proportional features act as a reinforcement to other musical processes (Rofe, 2008: 26–7).

The relationship between these kind of high-level proportional observations and the immediacies of listening can seem tenuous, and the findings presented here (whilst highly intriguing from the perspective of compositional technique) can only inform a discussion of aural experience in the most tentative of ways; extreme care is needed in any discussion which takes place (as any listener-focussed application of proportional analysis does) at the fringes of what is perceptible.¹⁰ Certainly proportion should not be used as a means for discovering 'hidden' coherence in music where the aural experience is primarily characterised by incoherence – this would bring us back into the same kind of 'hidden depths' territory criticised by Fink. Yet there remain questions about the role played by conscious and unconscious memory in the perception of extended stretches of music, and about the importance of particular kinds of formal process or material recurrence, for which proportional analysis can provide a useful (and much-needed) framework – particularly in the study of composers whose handling of form is not based primarily upon linear thematic development, as Roy Howat's analyses of Debussy have shown.¹¹ Whilst the Golden Section proportions noted here are certainly less obvious than the broader arch-shape (as delineated by the recurring percussive gesture), or indeed the more general observations about balance in the presentation of thematic material, they certainly fit closely enough with the perceived formal 'landmarks' to be worth taking into account when considering the impact of larger architectural control on the experience.

Above all, this kind of approach can offer a helpful middle route in discussions of form between those that focus primarily on block-like segmentation (like Burt's, in the case of this repertoire), and those which look for overarching linear trajectories (for which Koozin's early analyses of Takemitsu's piano music provide one example). We can never hear music 'all at once', as spatialised blocks, and in this kind of music even linear, sequential organisation is called into question, with the result that attempts to remember the order of events consciously may be rather uncertain; yet the music *is* still inevitably presented as a sequence, in a particular order, and what effects it produces are at least in part due to that ordering – particularly as far as issues of novelty, familiarity

¹⁰ For further discussion of the remit and limitations of proportional analysis, and critical reflection on notable uses (and misuses) of the technique, see Howat, 1983a.

¹¹ See Howat, 1983b. This adds a further intriguing layer to the Debussy connections noted earlier, of course.

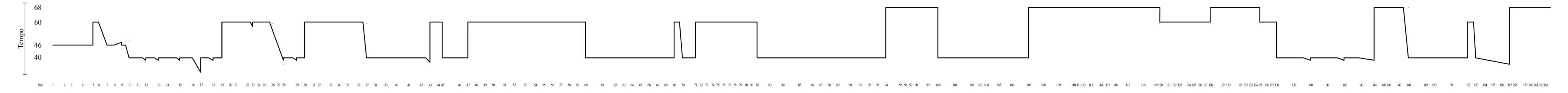
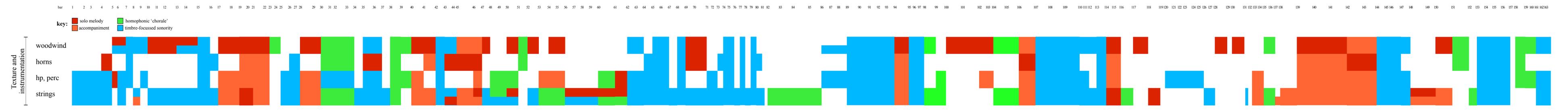
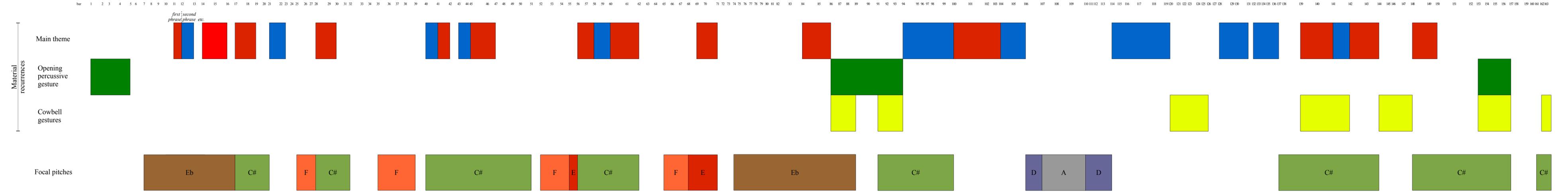
and balance are concerned. To take a concrete example within this piece, the cowbells come as a total surprise not just because of their distinctive sonority, but also in part because the gesture they support has been wholly absent since the first few bars, and also because the repetitions of the first half of the 'main theme' (one of which precedes their entry) have been so frequent up to this point that it becomes hard to imagine anything that might shift attention away from them; after this point, by contrast, this melody virtually disappears until its full restatement at bar 138.

The effects created here are thus highly reliant on a gradually-accumulating familiarity with particular material or sonorities, and this demands a careful control of pacing – something which discussions of proportion can illuminate. Each of the GS positions noted above coincides notably closely with a crucial turning point of longer-range energy: bar 62 marks a decisive shift away from harmonic and thematic clarity and towards more dramatic, unstable material; bar 86 is extremely striking for the reasons discussed above; and bar 138 is the point at which the harmony settles decisively around C# for the final time, and the full (indeed, slightly extended) theme returns – it might be seen as the beginning of the coda. Given the momentary, self-contained nature of Takemitsu's gestural language, it is indeed notable that some sense of broader formal coherence (and even a degree of expectation) persists throughout, such that the final gestures are heard as cadential rather than arbitrary; the presence of these proportional relationships offers one viewpoint on this careful balance.

This is particularly notable in the interlocking Golden Section relationships of the second half, which Rofe identifies with music of particular dynamism, since relationships do not cluster around any particular shared point or hierarchy but 'chain' cumulatively onwards (Rofe, 2008: 24–5). Here, however, bars 94–137 are perhaps the most fragmentary of the piece, with the texture reduced frequently to monody, yet the music never loses momentum entirely (however 'slow' it might feel); the return of a focal pitch and the full theme in bar 138 still connects with what precedes. Perhaps the interlocked proportional 'chain' here acts as a kind of counterbalance to the especially fragmentary nature of the low-level texture over this section. In this context, it is notable that Takemitsu also chooses bar 94 to introduce the fastest tempo of the piece, which alternates with the two existing tempi from then onwards; the 'physical' increase of energy this produces acts as a low-level parallel to the dynamic asymmetry of the

Strolling through a formal garden: Takemitsu's How slow the Wind

larger-scale proportional relationships. Just as processes at lower levels were often in tension with one another – momentary eventfulness set against broader motivic interconnections, or continuous, permutational variations which resisted attempts at higher hierarchical groupings – so here elements which emphasise symmetry and balance are set against more asymmetrical aspects; stasis and dynamism are thus held in continual tension until the final bars. The result is music of very particular expressive effect: unhurried, poetic, and calm, yet also surprisingly eventful and unpredictable. Strolling through a formal garden may end up leading us nowhere, but the journey is of value in itself.



Ex. 7.10: Takemitsu, *How slow the Wind*: 'map' of piece

Strolling through a formal garden: Takemitsu's How slow the Wind

Connections 4: Expression, meaning, coalescence

The foregoing analysis of *How slow the Wind* turned (again) upon a paradox. Music that at first appeared to be ‘all surface’, and a particularly chaotic, discontinuously ‘eventful’ one at that, emerged through the discussion as extremely carefully managed in its broader structure; moreover, its particular ‘meandering’ quality – always slow, but never static – was shown to be closely dependent upon a delicate balance between localised freedom and more controlled long-range formal proportions. Some of this became apparent gradually, over the course of the analysis (which was structured to correspond with an account of a particular listening experience); however, in both listening and analysis, there was one passage which acted as a crucial turning-point in the discussion – the introduction of the cowbells at bar 86. This sudden, disconcerting sonic intrusion, coming after a moment of timbral, textural and harmonic repose, served to emphasise a large-scale structural repeat; indeed, it was the first indication in the piece of any concern for formal symmetry beyond localised melodic recurrence. Upon closer examination, this larger shape proved to be dependent on a number of other relationships as well, but the cowbell gesture was so striking in its force that it provided a reason to assemble a more consciously ‘coherent’ analytical account – one where symmetry, balance and proportion stand next to the more immediate experience which is the obvious focus.

As such, it was able to form a bridge between perceptual and analytical concerns. Analytically, it sparked a revealing investigation into formal proportions, which closely matched the aural ‘landmarks’ that were identified. Perceptually, it marked a fundamental shift in character: from this point on, its memory colours the texture continually as a felt absence, a kind of sonic ‘shadow’ (an effect which is reinforced by its recurrence in bars 120–4, 139–46 and 151–62). As such, it acts as a kind of ‘grounding’ upon the meandering tendencies of the musical line, with the result that the second half of the work is noticeably sparser in texture and darker in tone, much more preoccupied with spacious instrumental solos and abstract, colouristic timbral interplay.

This reversal of energy is crucial to the larger shape of *How slow the Wind*, the sense that in spite of its ‘slowness’ it does nonetheless eventually reach some kind of endpoint. The cowbell passage is therefore a vital structural pivot: it marks the structural and dramatic centre of the piece, the point when overarching formal coherence becomes a genuine experiential possibility.

Yet there is more to this event than the establishment of formal coherence. Something irretrievable is lost if the cowbell gesture is treated as analytically important primarily because of its role in articulating a larger form. In the instant when the gesture is first heard, any formal considerations are far overshadowed by the sheer, stark physicality of the sonority, its contrast with the preceding mood of tranquil detachment, the way the cowbells seem to ‘ricochet’ off the extreme-register piano strokes, and the obsessive quality of its repetitions. To stake the significance of these features primarily on their role as contributing factors in a larger structural process would be to put the cart before the horse: the overall form of *How slow the Wind* is emphatically at the service of the immediate, arresting effect of moments such as these, and not vice versa – a conclusion which can only be reinforced (‘poietic fallacy’ or no) by Takemitsu’s own repeated emphasis on direct, immediate musical experience as the core of his aesthetic. One could argue just as easily that the larger structure of the tone-poem, with its symmetries and carefully-managed proportions – material ‘filling out’ form, rather than ‘defining’ it through directed development – is organised so as to draw attention to isolated gestures such as this one. Although in many senses it is far from characteristic of the sound-world of *How slow the Wind* as a whole, its distinctive qualities mean that this cowbell gesture lingers in the mind as somehow obliquely representative of the character of the entire piece; a moment (and a particularly unusual moment at that) thus comes to stand for the whole. Another way to put this might be to say that this gesture is deeply expressive: it conveys something with such clarity and directness that it ends up colouring the memory from that point on.

This perspective is the focus of this final connective chapter. It represents a tentative first attempt to explore in writing some aspects of the works under discussion which evade more conventional analytical techniques – even the extended techniques employed elsewhere in the thesis. Throughout this study, musical examples have deliberately been characterised not only in terms of form, process and material, but also

in terms of their perceived expressive qualities; this has often demanded recourse to metaphors and descriptive imagery which go rather beyond those of traditional music theory. Nonetheless, these observations have been necessarily partial, rarely more than brief asides in more wide-ranging analytical discussions. Yet the issues which they raise refuse to go away. A distinct kind of expressivity remains one of the most striking and unifying characteristics here: these works are notable not only for the depth and directness of their experiential impact, but also for the arresting particularity of the expressive worlds which they evoke. As the focus on continual technical innovation gives way to an increasing plurality of process, and a willingness to engage with a variety of traditions, the result is instead a striking originality of aural impact.

The balance of tradition and innovation means that familiar elements, with recognisable expressive connotations, are juxtaposed with others that are starkly alien or even disturbing; yet still some degree of expressive coherence remains, because of the way in which these elements are combined and the distinctive qualities of particular moments. This chapter addresses this complexity by approaching it from two different directions. The first section is theoretical and relatively general, exploring a number of different musicological approaches from the first decade of the twenty-first century; the second is more practical and specific, focussing on the role played by specific points of coalescence within the expressive dimension of these pieces. Between these two poles, a brief analysis of a movement from Ligeti's *Violin Concerto* (1993) acts as an intermediary (an 'Intermezzo', as Ligeti's title suggests), providing an opportunity for abstract ideas to be given concrete form.

Rediscovering expression: approaches to contemporary music

As with almost every aspect of the analysis of contemporary music, the discussion of questions of expression and meaning within this repertoire has been heavily influenced by the phenomenon of the 'composer theorist', and the particular ideological positions which have often accompanied it. For much of the twentieth century, writing on this topic was unavoidably coloured by Stravinsky's (in)famous statement that 'music is, by its very nature, essentially powerless to express anything at all' (Stravinsky, 1962: 53); it is only in the last two decades that analytically-focussed discussions of contemporary art music have gained the courage to cross the disciplinary boundary which Stravinsky's

statement implicitly established.¹ This new openness coincides with the challenges posed to ‘formalist’ music-analytical methodologies by Kerman and the rise of ‘new musicological’ thinking; it also coincides with a notable stylistic shift towards more overt (and at times more apparently ‘conventional’) expressivity in a number of prominent avant-garde composers, including Ligeti (Metzer, 2009: 14–15).

In spite of this, however, there remain a variety of differing conceptions in musicological writing as to the most helpful way to explore the expressive qualities of contemporary music. Two examples will be discussed of different kinds of ‘symbolic’ approaches (from Joseph Straus and David Metzer), finding correspondences between musical expressivity and broader verbal and cultural concerns; following this, two broader challenges to prevailing conceptions of musical expression and ‘meaning’ (from Caroline Abbate and Nicholas Cook) will be explored, and their relevance assessed for contemporary music in particular – since neither of them foreground this repertoire in their discussions. A critique of these varied perspectives provides the opportunity to integrate the most effective elements of each into subsequent analytical work.

The problem of symbolism: Stravinsky and Straus

One of the boldest examples of a new openness towards issues of expression in the contemporary arena comes from Joseph Straus; his study (2001) of Stravinsky’s late music storms the epistemological Bastille, as it were, by confronting the issue of expressivity in this repertoire. Straus’s own dissection of the famous ‘anti-expressive’ statement, and of Stravinsky’s later, rather more cautious attempt to clarify his position,²

¹ This resistance to discussions of musical expression can be traced back much further, of course, finding another possible origin in Eduard Hanslick’s classic text from 1854, *Vom Musikalisch-Schönen* (see Hanslick, 1986); a number of more recent commentators have argued, however, that the conception of this book as an anti-expressive polemic is based on a selective approach to his ‘richly polysemic’ argument, and that the text is in fact far more subtle and ambiguous (Cook, 2001: 174; see also Maus, 1992, Kivy, 1988, and even as far back as Hall, 1967).

² Stravinsky wrote in 1962:

‘That overpublicized bit about expression (or non-expression) was simply a way of saying that music is suprapersonal and superreal and as such beyond verbal meanings and verbal descriptions. It was aimed against the notion that a piece of music is in reality a transcendental idea “expressed in terms of” music, with the *reductio ad absurdum* implication that exact sets of correlatives must exist between a composer’s feelings and his notation [...]. A piece of music may be “beautiful”, “religious”, “poetic”, “sweet”, or as many other expletives as listeners can be found to utter them. All right. But when someone asserts that a composer “seeks to express” an emotion for which the someone then provides a verbal description, that is to debase words *and* music.’ (Stravinsky and Craft, 1962: 101)

leads him to the conclusion that what the composer opposed was not the fact of music's expressivity, but rather the tendency for listeners to identify this explicitly with 'self-expression' on the part of the creative artist (Straus, 2001: 184–5). Contrary to established thought, Straus argues that there is in fact a rich fund of 'static symbolic representations' within Stravinsky's late music, built up through 'an extensive network of cross-references'; particular textures, gestures and pitch-centres carry with them recurrent expressive connotations. These provide a means of generating and controlling expression in a way that is as far from anti-expressive as it is from conventional 'late-romantic gestures of heightened self-expression' (2001: 185). Straus's approach thus takes the methodology of topic theory, hitherto most commonly used for the study of Classical (and, to a lesser extent, Romantic) repertoire, and applies it to the expressive challenges of musical modernism.³

Straus's approach is to be welcomed in its reintegration of expression as a central part of musical discourse, in contemporary as much as common-practice repertoire; his re-reading of Stravinsky's position marks an essential turning-point in the broader status of these concerns within contemporary music. Yet it is certainly not without its problems, and these reflect wider issues with the application of topic theory to this repertoire. Crucial to the effectiveness of this approach for the study of meaning in Classical music is the identification of recurrent, shared stylistic features which can form the basis for larger, recognisable tropes; the presence of these, in audible (albeit varied) forms, within a broad range of works spanning an extensive period allows them to be elevated to something approaching the status of a common 'language' of musical signification – something which is vital to the interpretative force of the resulting analyses. Furthermore, writers such as Raymond Monelle and J. Peter Burkholder make much of the associative nature of these topics: they emerge from a network of other sonic experiences, whether memories of other music and its context, or of 'real-world' sounds – fanfare calls, galloping rhythms, birdsong; expression thus arises as the result of a play of evocation and rarefied mimesis which can encompass multiple interlocking

³ Core texts in topic theory include Ratner, 1980; Agawu, 1991 and 2009; and Hatten, 1994. The theory has not been without its detractors, of course: in particular, Leo Treitler (1997) offers a thoughtful critique of its dependence upon questionable assumptions about linguistic meaning, which provides a number of parallels with the essay by Caroline Abbate discussed below.

fields of reference, allowing highly nuanced expressive worlds to be constructed.⁴ The expressive meanings which this ‘classical’ topic theory presents are thus reliant on a shared reservoir of musical material and specific, albeit rather distanced extra-musical resemblances for their force. Because topics are shared between pieces, and draw on allusions to the outside world, they remain accessible (topic theory argues) even to listeners who are not consciously aware of them as a specific expressive ‘language’.

In the case of Straus’s analysis, however, both these aspects are rather less clear. Some of the topics which he describes – such as gestural ‘stuttering’, ‘chorales’ and ‘learned’ canonic textures – do fit convincingly both with broader expressive traditions, and with the particular interpretative associations which Straus makes; the ‘devotional’ associations of homophonic ‘chorales’ are a recurrent concern from *The Soldier’s Tale* onwards, for example, and the late works audibly reinforce this link. Elsewhere, however, his connections seem rather more arbitrary, and the expressive detail which he supplies rather less convincing. This is particularly the case with his discussion of pitch-centres, where the question of perception also inevitably looms large: for example, ‘framing’ perfect fifths and (027) trichords can evoke either ‘a garden of delight; love’s kingdom; a transcendent realm beyond the vicissitudes of daily life’, or else ‘death, funerary, dirge, mourning’, depending on whether they are based upon A or F (Straus, 2001: 186). The interpretative weight and specificity which Straus places upon these topics demand some kind of warrant, and his response is to look to compositional intention: he concedes that decisions such as pitch-focus are not expressively ‘causal’ – ‘the music is not grief-stricken because it is centered on E [...]. Rather, Stravinsky orients the music toward those centers when he wants to represent a certain dramatic situation’ (2001: 207–8); he takes pains to note occasions on which Stravinsky’s own explanatory comments appear to provide corroborating evidence for this (for example,

⁴ See Burkholder, 2006 and, for a specific example of this kind of associative layering, Monelle, 2000: 33–40.

Straus, 2001: 184 n. 5). Yet these attempts at justification raise anew the spectre of Taruskin's 'poietic fallacy', which Straus makes no attempt to dispel.⁵

The problem here is that Straus's approach, stripped to its basics, is essentially a fresh act of expressive *creation*: the interpretations which he constructs are so detailed, and the relationship of 'topic' to effect so explicitly non-'causal', that he is in essence *constructing* an framework within which a listener can hear this music expressively. This is his right as an interpreter, of course, and it is (in that sense) no different from any other verbal account of musical experience, but to then suggest that *this* kind of 'expression' is the 'superreal, superverbial' kind which Stravinsky himself had in mind is simply not tenable. In spite of its merits, Straus's reappraisal of Stravinsky's *ex cathedra* statements on expression arguably introduces significant new distortions of its own: whilst the composer does allow the possibility of music being described as 'beautiful', 'religious', 'poetic', 'sweet', and so on, this is a reluctant concession (he still considers these terms 'expletives') to set in contrast to the direct attributing of feelings to composers which he abhors – it is no invitation to a hermeneutic free-for-all.⁶ If Stravinsky argued that music was 'beyond verbal meanings and verbal description', and formulated his own compositional processes accordingly, then an approach to musical meaning which works predominantly by offering a 'catalogue' of symbolic possibilities, each 'representative' of a specific, often detailed verbal meaning, cannot help but run into difficulties. However much Stravinsky's warnings are disclaimed, there are still far too many 'exact sets of correlatives' here for the endeavour to be convincing.

I have dwelt here on the example of Stravinsky – a composer who died a generation before the first of the works studied here was composed – for two reasons: firstly, because his supposedly 'anti-expressive' position has been at least as influential as his considerable technical innovations, and both have lingered through the remainder

⁵ The forced nature of some of these interpretations is evident, for example, in Straus's decision to read the trajectory of *In Memoriam Dylan Thomas* (because of its motion from E to D) as 'an acceptance of death, or possibly a triumph over death' (2001: 191); his assertion that this arc supports 'the expressive meaning of the poetic text' is simply astounding in its misreading of the Thomas – surely among the least accepting, least triumphant poems ever written about death and bereavement. (There lurks here, too, an unspoken – and arguably unwarranted – assumption about Stravinsky's approach to text-setting, and to the relationship of textual and musical meaning in particular.)

⁶ The real target of Stravinsky's later clarification is surely Schoenberg: 'the notion that a piece of music is in reality a transcendental idea "expressed in terms of music"', which he dismisses, is a surprisingly accurate summary of Schoenberg's own variety of German idealism – even if Stravinsky's *reductio ad absurdum* devalues it by substituting 'a composer's feelings' for 'transcendental ideas'. See Schoenberg, 1946: 122–3, and Carpenter and Neff, 1995: 5–7.

of the century; secondly, because the difficulties which Straus faces in attempting to trace networks of ‘symbolic’ meaning in this music are highly instructive in the present context. Topic theory certainly provides a valuable perspective upon issues of expression in contemporary music; indeed, the analysis of Kurtág’s *ΣΤΗΛΗ* in the following chapter includes some discussion of the significance of particular expressive topics within that piece, and this draws to some extent upon the influence of Straus. Yet its value lies above all in the interpretative ‘grip’ which given topics provide upon a work, and the extent to which they can be recognised as embedded in particular musical material and particular referential concerns; in other words, topical association within contemporary music is most usefully approached in terms of the questions ‘how’ and ‘why’, rather than simply ‘what’. The more ‘taxonomic’ the collation and application of topics becomes, the less insight they provide into musical expression.

Shifting states: Metzer and the modernist narrative

One alternative to this approach is found within a broad analytical study by David Metzer. In *Musical Modernism at the Turn of the Twenty-First Century* (2009), he presents an approach to expression within contemporary music which is based around the principle of a renewed strain of ‘musical modernism’ flourishing post-1980. He crystallises his discussion around the exploration of what he calls ‘compositional states’, recurrent sound-types – here purity, silence, fragmentation, lament and what he calls ‘sonic flux’ – which guide compositional process and provide an environment within which expressivity can be combined with archetypally modernist concerns. Although on the surface these ‘states’ may look like simple variants on the building-blocks of topic theory, placing his investigation into a roughly equivalent methodological arena to Straus’s, in fact they are notably broader and less deterministic; indeed, as reviewer Martin Iddon notes, in some senses they are closer to ‘ideal forms’, such that ‘each piece considered represents a sort of phenomenal instantiation of a particular Platonic idea’ (Iddon, 2010: 319). They thus provide an effective way for Metzer to trace particular recurrent expressive preoccupations in a relatively broad range of music; certainly, the extreme specificity of Straus’s topics is not in evidence here.

There is much of value in Metzger's work, especially in his specific case studies, which provide illuminating close readings of much music that has hitherto received little or no detailed analytical attention. What is problematic is less the methodology of 'compositional states' in itself (as it was with Straus's application of topic theory), but rather the overarching conceptual framework within which it is conducted. Metzger's study is explicitly designed to demonstrate the continuation of musical modernism into the twenty-first century; he shows this by linking all of his 'compositional states' with a broader concept of modernist composition as a kind of 'inquiry into the act of expression' (Metzger, 2009: 23). In other words, as much as any given piece is an expressive act, it is also simultaneously a play with, commentary on, and deconstruction of the process of expression itself, and Metzger directly foregrounds these elements: 'modernist works set up the act of expression only to tinker with it' (Metzger, 2009: 22). At root, then, Metzger's accounts of the expressive content of individual pieces are always filtered through the lens of his modernist historiography.

At the same time, Metzger is careful to make a distinction between the longstanding association of modernism with constant 'innovation' (the 'new tradition' of modernist historiography critiqued in Chapter 1), and his own focus upon 'inquiry': rather than 'fixating on the new' and devaluing tradition, he argues that inquiry functions by reworking existing elements and finding novel ways of putting them together (Metzger, 2009: 7). This is a helpful perspective, one that certainly fits with the stylistic and expressive plurality of the repertoire studied here, but it does not wholly counterbalance the restrictive character of the 'modernist' classification for discussion of this repertoire. Rather than treating the expressive characteristics of the music under study as worthwhile in themselves, Metzger is forced to justify their inclusion by fitting them into a grand historical narrative, where they can be once again appraised from a safe distance, as exemplars of a particular way of 'inquiring' into expression. The yardstick here is that of the modernist aesthetic, which is all too easily turned into simply another classificatory 'box'; coherence is treated as a function of conformance to the 'inquiring' principles of this aesthetic.

At heart, Metzger's study represents a continuation of a long trend of writing upon the musical avant-garde which follows in the footsteps of Adorno, and most obviously of his diagnosis of contemporary music as paralysed by more general social malaise,

forced into ‘definitive negation’ and able to be meaningful only by ‘its denial of any meaning in organized society, of which it will have no part’ (Adorno, 1973: 20). Metzger’s presentation of expression foregrounds conflict, failure and impossibility as constitutive of its ‘inquiry’ into this aspect; it is noteworthy that the chapters which bring the dual themes of compositional states and expression together are discussions of the states of fragmentation, lament and flux (Metzger, 2009: 28). In spite of his protestations to the contrary, this viewpoint fits very well with the ‘innovation’ meta-narrative of musical modernism, which climaxes in the end of history and the subsequent impossibility of further meaningful intersubjective communication; although Metzger is adamant that his investigations reveal modernism’s startling tenacity, he does not offer any clear way out of this teleological impasse.⁷ This stance fits well with the core composers of his narrative: Webern, Stockhausen and Nono are all central to his argument, and others such as Sciarrino, Lachenmann and Neuwirth certainly continue to pursue the stylistic ramifications of this broader narrative. In the context of other composers such as Adès, Takemitsu, Dutilleux or Adams, however, this need to establish aesthetic ‘credentials’ by reference to an established ideological movement seems rather irrelevant.⁸

Getting ‘drastic’: experience, hermeneutics, and the ‘ineffable’

This kind of ‘symbolic’ approach to musical meaning is the subject of an extended critique by Caroline Abbate (2004). Drawing upon her study of the French philosopher Vladimir Jankélévitch, and in particular his conception of the ‘ineffable’,⁹ she attacks the tendency of much musicological writing to ‘retreat from real music to the abstraction of the work’, and then to domesticate this abstraction further by relating it to

⁷ Furthermore, as Iddon notes in his review, nor does he offer any composers who might stand as evidence for a genuine renewal of modernism; the majority of his exemplars are ‘soft targets’, either present and correct at the height of developments in the mid-century avant-garde, or else deeply and openly indebted to that tradition (Iddon, 2010: 319).

⁸ There are statements from all of these composers (as, indeed, from Ligeti) expressing unease with the broader modernist project, or indeed with the tendency to categorise music upon these ideological lines altogether. See Wroe, 2008: online; Takemitsu, 1971a; Dutilleux and Glayman, 2003: 126; Adams, 2008: 32; Szitha, 1992: 15, in Searby, 1997: 9. Although composers are notoriously unreliable witnesses in these matters (as the example of Stravinsky should demonstrate), there are certainly grounds for allowing them at the very least the same voice in the broader ideological debate as their supposed musicological advocates.

⁹ For her translation of the latter’s *La Musique et l’Ineffable* (1961), see Jankélévitch, 2003.

‘something behind or beyond or next to this mental object’. This fixation upon questions of abstracted structural process, or externalised ‘meaning’, she argues, comes at the expense of the ‘material acoustic phenomenon’ of performance itself (2004: 505–6). A particular target is the ‘hermeneutic’ approach to musical meaning widely adopted within ‘new musicological’ writing, which finds specific cultural meanings within particular compositions;¹⁰ using Jankélévitch’s terminology, she declares this as tantamount to ‘gnosticism’, exploiting the ‘mysticism’ which surrounds musical expression in order to give credence to the seductive idea that it has a true ‘hidden meaning’ which interpretation can draw out – an idea she refers to as the ‘cryptographic sublime’ (2004: 524). Instead, she calls for a recognition of the ‘drastic’ nature of musical activity – this term deliberately carrying the dual resonances of ‘physicality’ and ‘desperation’ – and sees this recognition as beginning with the decision to write about ‘actual live performances’ and their decisive experiential effects, rather than falling back upon the abstractions of scores and distancing methodologies (2004: 510).

Once again, there is much that is attractive about Abbate’s argument, and it certainly has a considerable bearing upon the issues explored within this thesis. In some senses it might be seen as a more involved, more music-focussed development of Sontag’s ‘erotics of art’ polemic, which was examined in Chapter 2, and a number of Abbate’s arguments about the way in which verbal interpretations can tend to ‘overpower’ musical experience resonate strongly with issues that have recurred throughout this study. Her account of attempting to perform a work whilst remaining aware of its hidden hermeneutic depths (‘Where exactly is the Enlightenment subjectivity in these notes?’) highlights effectively the accidental absurdities that can arise from over-reaching interpretations of any kind, whether cultural or formalist (Abbate, 2004: 510). Perhaps most strikingly, her descriptions of the discomfort which accompanies any attempt to write honestly about aural experience (the secondary resonance of ‘drastic’) certainly ring true: again, the clearest example of this can be found in the analysis of Kurtág’s *ΣΤΗΛΗ* which makes up Chapter 9.

¹⁰ Writers notably associated with this approach include Susan McClary, Lawrence Kramer, Rose Rosengard Subotnik and Richard Taruskin, all of whom come under critique at different points within Abbate’s essay.

Nonetheless, for all its effectiveness as a polemic, Abbate's stance likewise runs into problems when it is adopted wholesale as an ideology for writing about expression in music. As with Sontag, provocation rather than pragmatism is the primary aim of the essay; although Abbate's targets are clear, the concrete practice with which she would replace them is far less so. Several times she raises, and then neatly sidesteps, the most 'drastic' action of all – falling silent altogether (Abbate, 2004: 510, 513);¹¹ but the only positive examples she is able to give of performance-focussed writing (at the end of the essay) in fact serve to resurrect the 'gnostic' as a *product* of 'drastic' experiences, rather than a means to bypass them – and this is, as Ayrey notes, rather unsatisfactory (Abbate, 2004: 533–6; Ayrey, 2006: 353). The more polemical passages betray an unhelpful tendency to polarise, which extends ultimately to the imagined dichotomy of 'drastic' and 'gnostic' itself; as Karol Berger notes, in reality 'there is no such thing as pure experience, uncontaminated by interpretation' (Berger, 2005: 497).

Yet Abbate's rhetoric often carries its own troubling aura of 'mysticism'; this time, it is not found in the 'cryptographic sublime', but rather in a transcendentalist conception of art as hot-wired to the soul and impervious to conscious thought.¹² For music (such as the repertoire upon which Abbate focusses) where the reception tradition is firmly established, and many questions of interpretation have thus become culturally and psychologically relatively fixed, this kind of 'drastic' mysticism might pass unnoticed; by contrast, in the case of contemporary repertoire, where all and any interpretations must be developed *ex nihilo* to a degree, the denial of any broader (apparently 'gnostic') reflection as a support to the immediacy of experience is likely to lead primarily to bewilderment (Ayrey, 2006: 354–5).

Constraining meaning: multiplicity and expressive affordance

In spite of its limitations, Abbate's essay raises a crucial issue for any attempt to confront musical expression: this is the problem of multiplicity and constraint. On the one hand, it is clear that music possesses the capacity for richly expressive, emotionally

¹¹ As Craig Ayrey notes in the context of Janélévitch's work, this would be the most natural response to an experience that was truly 'ineffable' as the word is usually defined (Ayrey, 2006: 344).

¹² It is this undercurrent of mysticism which reflects most clearly the influence of Jankélévitch, who is, after all, the source of the primary polarising 'culprits' here, the slippery terms 'drastic', 'gnostic' and 'ineffable' (Ayrey, 2006: 346–7).

meaningful experiences, of a character which often inspires verbal response. On the other hand, any attempt to scrutinise these experiences in any consistent way seems doomed to an overzealous ‘gnosticism’, irretrievably diminishing the complexities of the ‘material acoustic phenomenon’ by reducing it to a rather anodyne verbal account at best (and at worst a misleading set of ‘exact correlatives’). What is more, there is no way of accounting in any of this for the inevitable differences of experience which are likely to arise between different listeners (perhaps more so in the arena of expression than in any other question of musical perception), nor any criteria by which any particular account might be seen as more or less ‘justifiable’ in analytical terms. In other words, what is needed is a middle path between the ‘ineffable’ and the overly ‘symbolic’: a way of *constraining* the range of expressive content (and providing some kind of critical metric) whilst still recognising its inherent multiplicity.

In an extended and characteristically wide-ranging essay on musical meaning, Nicholas Cook (2001) proposes one possible solution to this problem. Noting the tendency for discussions of the subject to become unhelpfully polarised between intra-musical (or ‘formalist’, to use Abbate’s terms) and extra-musical (or ‘hermeneutic’) approaches, and noting equally the dangers of attempting to ‘assimilate’ musical meaning to ‘verbal signification’, something of which both these camps (as Abbate noted) have been guilty, he turns to the example not of language but of *material* culture – the study of objects and artefacts (Cook, 2001: 174–7). He suggests that although meaning within these artefacts remains negotiable and difficult to pin down, it is always ultimately dependent upon particular physical *attributes* of the objects themselves, which serve to constrain the significance that can be assigned to them (2001: 178). Things are rather more complex with music, since compositions have no fixed physical form but are rather made manifest in a ‘bundle’ of scores, performances, recordings and so on; nonetheless, across the constituent members of each ‘bundle’ there are certain shared potentialities, which can combine with specific cultural contexts to generate expression (2001: 178–80). In this way, meaning ‘emerges as an autonomous agent’, arising from ‘aporias and points of slippage’ in musical structures and in their relationship to the surrounding world; and it can be subject to analysis as such without simply collapsing back into formalism or hermeneutics (2001: 191). There is a striking parallel here with the issues raised in Chapter 4, where a route had to be steered

between traditional hierarchy and rhizomic smoothness to provide an adequate methodology for the analytical segmentation of different musical layers. Indeed, Cook explicitly identifies his approach – which distinguishes between the ‘potential’ meaning of a passage, the broad possibilities arising from its particular attributes, and specific ‘actualized’ meanings which emerge when these attributes combine with particular contexts – with the concept of ‘affordances’ which was adopted earlier (2001: 180–5).

Although Cook’s discussion makes little reference to contemporary music, this conception of musical meaning as an ‘emergent’ process – arising out of a conjunction of specific attributes, or affordances, and the expectations of a given situation – brings with it a number of consequences which are particularly helpful for the discussion of this repertoire. The emphasis on the ‘blended’ nature of *all* musical expression (arising out of a conjunction of intra-musical features and external circumstances) means that it makes no distinction between the ‘purely musical’ attributes of an established gestural language, and features such as quotation, intertextual allusion and stylistic pluralism. This attitude serves the music under consideration here very well, since much of its effect comes from a combination of all these elements – as the varied metaphors employed over the course of the preceding analyses have demonstrated. Moreover, the conception of meaning as one ‘agent’ among a variety of other ‘structural agents’ arising from particular musical processes liberates analytical methodology from the responsibility of ‘demonstrating music’s unity and autonomy’ (an epistemological responsibility which has often dogged contemporary music theory, as Chapter 2 noted), allowing it freer rein to explore issues of multiplicity, overlap and contradiction (Cook, 2001: 191–2) – in short, to ‘redefine coherence’ in a way which fits far better with contemporary repertoire.

Above all, this perspective creates a broad shift of focus for musicological approaches towards expression: since meaning is emergent, and does always evade verbal duplication to some extent (something upon which Stravinsky and Abbate seem agreed), the aim is not to ‘translate meaning into words’, but rather to ‘attend to the conditions of its emergence’ (Cook, 2001: 190). This is a task that analysis is well-equipped to do, with its rich methodology for identifying and tracing processes and relationships, especially when it consciously defers to aural experience as the final arbiter of emergent meaning. Indeed, where contemporary music is concerned, the

interpretations which this kind of analysis can produce may prove crucial in creating a space within which a shared social meaning for the music *can* emerge, separate from generalised pronouncements about the irrelevance of the avant-garde to society, or its aloof withdrawal into the exploration of the ‘purely musical’. Both of these prescriptive attitudes towards expression, if Cook’s analysis is accepted, may serve to ‘close off’ the other, richer potential meanings of the music before they can gain any broader societal traction.

With this end in view, the use of metaphor in the analysis of expression, and the exploration of particular creative associations, changes in character: rather than appearing to be either ‘cryptography’, or else a rather fatuous attempt to find verbal parallels for a particular musical effect, it serves as a means to *open up* analysis from its insular tendencies, and provides a point of purchase for the expressive potentialities of an aural experience. Listeners experience things in a wide variety of ways, of course: a metaphor which provides helpful grip for one may produce nothing but ‘friction’ for another, and yet even then the perceived mismatch may prove a stimulus for further exploration (why does the music resist characterisation in terms of a rainbow? What aspects of your experience grate with this? Are there any other phenomena which might ‘fit’ better?). As such, they represent an example of ‘the manner in which as musicologists or theorists we use words to grasp and worry at what lies beyond words’ (Cook, 2001: 190) – not to run away from musical experience, to make it safe or to dominate it, but to confront it more wholeheartedly.

‘Intermezzo’: Ligeti’s Violin Concerto, third movement

The third movement of Ligeti’s Violin Concerto (1990/2) stands as an example of a music where striking dramatic force arises from layers of different processes, gestures and associations, each of which carries its own expressive connotations – and of the way in which these ‘musical’ attributes can fuse with particular contextual associations to produce meaning.¹³ The movement is a *tour de force* of interlocking processes and shifting moods: over the space of two-and-a-half minutes it moves seamlessly from

¹³ My analysis of this movement is drawn in part from work I have done on this concerto in the past; see Hutchinson, 2008: 25–31. The focus upon issues of expression and meaning here is new, however, and much of the material has been substantially rewritten.

detached, almost otherworldly lyricism to a climax that is devastating in its ferocity, and this trajectory is achieved through the careful manipulation of every aspect of the underlying material, so that disintegration arises from within, rather than being ‘imposed’ via some externalising gesture (as with the sudden intrusion of ‘Das klinget...’ within *Arcadiana*, for example).

The constituent elements in this process can be summarised relatively briefly. The opening sets up three textural ‘layers’. The first is a ‘soaring cantilena’ for solo violin (Steinitz, 2003: 336); it is delicately balanced between modality and chromaticism, full of recurring melodic shapes, and governed by an irregular underlying *talea* which sounds aurally like written-in expressive *rubato* (Ex. 8.1a). The second is a series of chords based upon the harmonic series (Ligeti making careful use of string harmonics and supporting soloists with overtone *scordatura* to keep tunings exact), which moves through a sequence with clear tonal connotations (Ex. 8.1b)). The third is a complex texture of closely canonic descending chromatic scales, at breakneck speed, distributed among the upper strings; barely audible at first, its aural effect is a ‘rushing wind’, a note of tension on an otherwise idyllic canvas. At the opening, then, the constituent elements of the sound-world seem relatively clear: melody and harmony (‘foreground’ and ‘background’) are clearly defined, the sonority is predominantly consonant, the dynamic *piano*.

a) *senza sord., sul tasto*

b)

bar: [1] [5] [10] [17] [26] [31]

implied 'tonality'

**Ex. 8.1: Ligeti Violin Concerto, third movement:
a) opening solo violin melody; b) reduction of harmonic background**

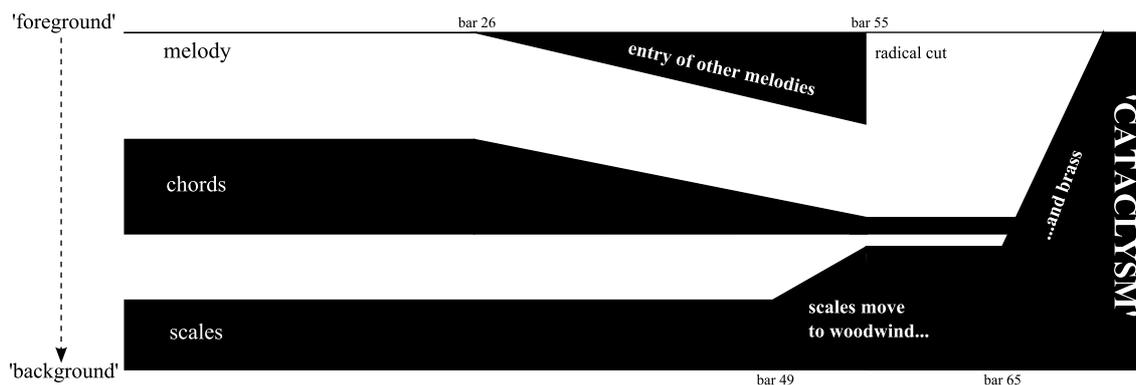
The overall shape is governed by a series of gradual reversals in this initial state of affairs. Harmonically, the consonance of the opening quickly begins to sour: by bar 17, the phrases of the violin line have moved out of sync with the underlying changes of harmony, and the chords themselves are increasingly ‘contaminated’ by chromaticism and (in particular) microtonal deviations. Texturally, the violin melody is joined from bar 26 by a host of other independent solo lines, playing various distortions of its material (Ex. 8.2); the result is that the soloist is forced to move to artificial harmonics and then to furious octave *tremolandi* in order to remain audible. The defining transformation, however, is found in the scales (which seemed to function initially as pure colour): they gradually ‘colonise’ the rest of the orchestra, first the lower strings, then the woodwind, brass and finally percussion, so that they eventually overwhelm the entire texture in the ‘cataclysmic’ descending gesture which ends the movement. A summary of these textural interactions is shown in Ex. 8.3.

a) Solo
senza sord.
In B \flat

b) Solo

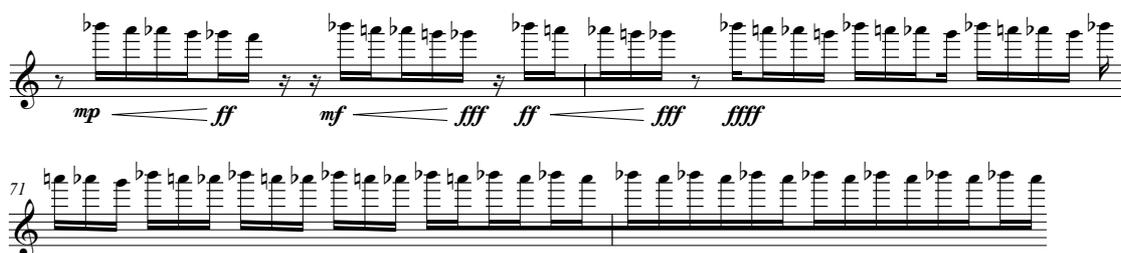
c) cheeky

Ex. 8.2: Ligeti Violin Concerto, third movement:
solo entries in bars a) 26–30, b) 30, c) 36–38



Ex. 8.3: Ligeti Violin Concerto, third movement, textural summary

A number of elements help to strengthen the drama: as the trajectory is becoming clear, Ligeti inserts a sudden cut at bar 55 which restores the texture of the opening (albeit with the descending scales transferred to woodwind, where they are far more audible), so that the whole process can repeat itself twice as fast. Moreover, from this point onwards the distinctions between the three ‘layers’ are increasingly blurred: the scales decrease in length until they are simply sped-up imitations of the soloist’s opening descent, before crushing further into simple trills (Ex. 8.4); and the background chords move into the brass and are embellished with ‘blaring’ runs, so that they too merge with the scales. In the final two bars of the piece, a pair of suspended cymbals re-enact the exchange of foreground and background a third and final time, growing from *pppp* to overpower the entire orchestra.



Ex. 8.4: Ligeti Violin Concerto, third movement, compression of running scales in first violin, bars 69–72

A brief analysis like the above can provide a helpful overview of the ‘constituent elements’ of this music, but it is rather less helpful when it comes to engaging with the aural effect of the whole, which in this case is nearly overwhelming. One way in which analytical writing might engage more closely with this aspect is to consider ways in

which specific ‘attributes’ of the experience might connect to broader metaphors. One connection that a number of commentators have seized on elsewhere in Ligeti’s late music (as was mentioned in Chapter 1) is the influence of chaos theory. This meshes with a number of the attributes of this movement: its trajectory from order to disorder; the growing prominence of seemingly-insignificant details as a central part of this trajectory; the way in which its separate elements merge slowly into a single undifferentiated mass of sound; and its self-similar, ‘fractal’ construction – when it is segmented according to the dramatic cut of bar 55, and especially if the final cymbal gesture is taken to be a climactic re-enactment of the whole. The ‘actualized meaning’ which emerges from this connection is one of the movement as a ‘theatre of entropy’, as Thomas has described the fourth movement of the Piano Concerto (Thomas, 1993: 378) – a musical dramatisation of the physical process by which order becomes chaos.

What is important for the purposes of this chapter, though, is that this represents only one of many (an infinite number of) possible interpretations which the piece can sustain; equally, however, the forceful nature of its underlying expressive attributes means that other interpretations would just as clearly be ruled out.¹⁴ A second reading, for example, might fix its attention on the relationship between soloist and orchestra: the gradual process by which the violin is slowly ‘drowned out’ here is the most obvious example of a tension between the two which runs throughout the concerto.¹⁵ Moreover, in a sense this reflects the wider conflict of the movement: the disappearance of the soloist under a crowd of imitations and accompaniments mirrors the gradual overpowering of ‘foreground’ elements – here characterised by melody, diatonicism, and sectional clarity – by the ‘background’ features of pure sonority, saturated chromaticism, and formal homogeneity.

This observation might be taken in several directions: it could be seen in formalist terms (to use Abbate’s description) as purely a novel approach, in a spirit of modernist inquiry, to the ‘individual against the masses’ drama which is so characteristic of the

¹⁴ For example, the ‘joy through sorrow’ trajectory which Cook identifies in many of Robert Hatten’s Beethoven analyses would clearly be untenable as an interpretation of this movement (see Cook, 1996: 108).

¹⁵ It is noteworthy that Ligeti inserts a footnote to ensure that over-helpful conductors do not try to ‘correct’ the balance at crucial points in the movement (Ligeti, 1992: 51); this offers some tantalising insights into the numerous balance issues which Gawriloff, the work’s dedicatee, recalls in his own account of the original partial première (Gawriloff, 1993: 18).

concerto model, and which is a particularly prominent feature in all Ligeti's forays into the genre; or it could be read hermeneutically as a depiction of an individual voice being slowly drowned out by the pernicious machinations of the state apparatus.¹⁶ Both these readings represent tenable actualized meanings from the attributes identified here, even if they are relatively extreme in their specificity; if the second of them errs somewhat towards 'cryptography', it has a considerable advantage over the first (and over the abstractions of chaos theory) in that it provides an imaginary situation whose horror resonates persuasively with the aural impact of the movement, and which thus provides some purchase upon its more 'ineffable' expressive qualities.

Momentary expression and coalescence

The cumulative arc of Ligeti's 'Intermezzo' gives it a visceral force; this very linear approach – a striking dramatic dimension arising as the direct outcome of a single transformation process – provides one very direct means by which expressive possibilities can be generated. This kind of process is generally strikingly localised within the repertoire under discussion, however. The same kind of disintegrative arc is found in the 'Auf dem Wasser' movement of *Arcadiana*, and the central 'coalescence' section of *Solar* is equivalently linear in trajectory, as are several sections of *Mystère de l'instant*, yet all these passages represent only small portions of a much more complex whole. (Indeed, the same is true of the 'Intermezzo' movement, which is the shortest of the concerto, even though its impact in formal terms goes far beyond its duration.) As such, these passages serve as examples of moments – similar to the cowbell gesture noted in *How slow the Wind* – which linger as expressive high-points long after they have passed.

A closer examination of how these moments are 'marked out' can yield a deeper awareness of the distinct nature of expressivity within this music. The practice of focussing attention upon specific musical events is certainly nothing new: many successful analytical accounts take as their starting point certain 'problem' passages that seem to resist homogenisation, often acknowledging the way these passages come to

¹⁶ Perhaps the most unusual 'hermeneutic' interpretation that I have heard of this movement is that it is a depiction of the frustration of Ligeti, ever the maverick, that his own individual compositional style was slowly being submerged under a growing crowd of imitators. I am thankful to Bill Brooks for furnishing me with this account.

shape the experience of the whole (Guck, 1994a: 71–2; Robinson, 1997: 14; Dubiel, 2004b: 276), and Lawrence Kramer has developed the idea of some such points as ‘hermeneutic windows’ whose strangeness provides access to richer interpretative possibilities (Kramer, 1990: 12). There is resonance here too with Cook’s comment (noted earlier) that meaning is to be found in the ‘points of slippage’, the instants where ‘purely musical’ order seems to break down (Cook, 2001: 191). What is particularly notable within this repertoire, however, is the status these points as sites of expressive possibility in and of themselves, rather than purely in the challenge or resistance which they present to the processes which surround them. This is in part due to the complex, non-systematic nature of this music: where there is no clear single ‘purely musical’ order, events which are striking must be so for reasons other than ‘slippage’. Indeed, in the case of the Ligeti, and the other examples listed above, it was the *presence* of a clearly linear process (in other words, a ‘purely musical’ order) which marked particular passages out as distinctively expressive; elsewhere, as with the cowbell gesture of *How slow the Wind*, it is sheer timbral or gestural interest which distinguishes them.¹⁷

Another particularly notable means by which expressive moments are created here is through the generation of trajectories of *coalescence* between interacting elements. The idea of coalescence has been a recurrent one throughout this thesis, and it is worth elaborating upon its expressive significance here. Chapter 4 stressed the multi-dimensional nature of interactions in these works; unlike more hierarchically-structured or process-oriented music, here different formal, technical and perceptual layers are often at odds with one another, or at least operating in accordance with their own independent demands. Much of the experiential richness of these pieces, I argued, comes from this multi-layered character, and the multitude of interacting perceptual foci which it affords. At the same time, however, such multivalency carries its own expressive possibilities: once a listener has adapted to the flexible attentional stance which the music requires, a sudden ‘alignment’ of different layers, even for a fleeting instant, creates a single-mindedness of focus whose effect can be extremely powerful, in particular in its freedom from the kind of mounting expectation found with more conventional linear trajectories of ‘arrival’.

¹⁷ This is arguably also a factor in the Ligeti: the opening sonority is luminous to a degree unprecedented even in this unusually timbrally-rich work.

For this reason, such points have an almost timeless quality (analogous to Stockhausen's 'lyric form' ideal): they offer the chance for some kind of self-contained 'closure' within a work which does not follow any conventional teleological thread. In Adès's *Arcadiana*, for example, the 'O Albion' movement – a point where several types of melodic, harmonic, rhythmic and textural material 'coalesce' in a short-lived moment of Elgarian nostalgia – allows a degree of closure to be reached without the 'vanishing, vanished or imaginary' quality of the quartet as a whole being undermined; a similar effect is achieved in the coda of Kurtág's *Officium breve*, although the unfinished nature of the final quotation shifts the expressive impact considerably. Elsewhere (as in Saariaho's *Solar*, or Adams's Violin Concerto), points of coalescence are used to generate energy rather than to resolve it; nonetheless, their ability to fix attention on particular focal instants remains an essential element in a musical language where a systematic perceptual syntax is notable by its absence.

Ruined artefacts: Kurtág's *ΣΤΗΛΗ*

György Kurtág's output frequently approaches (and, indeed, transgresses) the borders of sound and silence, of sense and nonsense, of continuity and utter fragmentation; its expressive qualities prove equally elusive. Extremely demanding for both performer and listener, its challenges come not so much from technical difficulties or harsh dissonances (although these are often strongly in evidence), but rather from a restless search for 'real' expression, a 'heroic quest for unity' (Walsh, 1982a: 12) which permits no respite and allows no superfluity. His music frequently takes the barest materials – a single interval, a pair of notes, a tiny rhythmic fragment or scrap of melody – and subjects them to painfully intense, compulsively single-minded scrutiny; what results is music whose extreme compression belies its expressive depth and visceral impact. Even works such as the hour-long *Kafka-Fragmente* (1987) are built from 'cycles' of self-contained miniatures; this concern for terseness, technical purity and aphoristic precision has led, understandably, to comparisons with Webern. Kurtág's own intensely critical teaching methods – although placing him in the highest possible esteem as a chamber music coach (Beckles Willson, 2001: online) – testify equally to this obsessively perfectionist attitude: players wishing guidance on performing his own compositions soon find themselves drowning under a deluge of frequently contradictory interpretative details and intertextual allusions (see Beckles Willson, 2004: 159–167).

Yet this is only one side of the story. In notation Kurtág's music is often startlingly free, frequently reducing rhythmic notation to a simple, almost plainchant-like distinction between 'long' and 'short' notes or rests, and allowing considerable variation as to the order of performance. Indeed, even in a work with so clear an internal plan as the *Twelve Microludes* for string quartet of 1977, whose sections move stepwise up the chromatic scale (Walsh, 1982b: 12), Kurtág is quite willing to undercut this formal integration by re-using individual movements in the 1987 *...quasi una fantasia...*

(Walsh, 1989b: 43), or indeed to allow excerpted performances of the set.¹ Similarly, the comparison to Webern is dangerously one-sided: in spite of his clear admiration for the earlier composer, whose complete works he copied out by hand during his stay in Paris in 1957–8 (Williams, 2001: 64), Kurtág's own music is far more catholic in its range of reference, often alluding to (and even directly quoting) conventional Western tonality, native folk traditions and his own earlier pieces (Grmela, 2002: 371). This is hard to reconcile with the notion of a composer dedicated – as Webern was – to the creation of tiny, crystalline, immutably abstract artistic statements; so, too, is the notion of composition as a 'game' (with all the flexibility, humour and unpredictability implied by the word) underpinning the series of *Játékok* books which form a backbone to all Kurtág's mature output (Hohmaier, 2001: 48).

Signs, games, messages: brevity and meaning in Kurtág

It is perhaps the *Játékok* set which proves most helpful in understanding what lies beneath these seeming contradictions – of earnestness and wit, control and freedom, structuralist abstraction and referential openness. Originally commissioned as teaching pieces for beginners, *Játékok* approach the process of learning in a rather unconventional way: instead of focussing initially on the basic mechanisms of playing (finding notes, fingering, and reading pitches and rhythms, for example), they begin with the raw 'gesture' of performance. The first piece in the collection simply consists of *glissandi* up and down the keyboard, aiming to encourage 'a sense of physical confidence with the instrument' before the student becomes lost in the minutiae of technical proficiency (Williams, 2002: 361). Throughout the set, this focus on the theatrical remains prominent; the player is encouraged, from the very beginning, to develop an awareness of their growing status as 'performer' rather than simply 'player'.

This approach carries through to Kurtág's non-didactic music: the flexibility of the notation is an indication not of a Cagean contentedness with any and all results, but rather a mandate to the performer to create their own, highly committed realisation. The composer's own notes to the first book of *Játékok* demand 'a great deal of freedom and initiative from the performer', instructing them to value 'the musical process, the

¹ For example, the 'composed programme' presented in a 1993 Salzburg retrospective, which featured the Keller Quartet playing only four of the movements (see the recording in Kurtág, 1994b).

quality of sound and silence' far more highly than the details of 'the written image' (Kurtág, 1970: 1). This fits with the composer's own coaching style: the pressure upon the player is *heightened*, not relaxed, by the lack of specificity in what is written, since it forces them to think through every aspect of their performance to ensure it is appropriate to the expressive situation. It is perhaps partly for this reason that the vast majority of his music is for chamber ensemble: the 'extra-notational' demands which it makes upon performers are extremely difficult to realise within the restricted rehearsal schedules and somewhat altered interpretative situation found within an orchestra; equally, there are suggestions that early experiences of orchestral writing (with his Viola Concerto) may have undermined Kurtág's faith in the level of commitment which such a group can offer (Toop, 2001: 129–30).

This deliberate yielding of responsibility extends to listeners, too: Alan Williams has argued persuasively that the fertile referentiality of the music since 1970 stems not from a retreat into the past, but from the combination of an (almost Adornian) acceptance of the unavoidable cultural baggage of any musical gesture with an aphorist's desire to retain the power of ambiguity as an expressive device (Williams, 2001: 58–60). As such, Kurtág's later music continually sets up multiple layers of reference – allusions to tonality, child-like 'games' with isolated gestures and sonorities, materials from the serial era, and direct quotations both overt and hidden – without ever allowing any of them to become the dominant 'structural principle' (Williams, 2001: 59). As such, the oft-noted brevity and seeming fragility of almost all Kurtág's work becomes one of its principal strengths. As with literary aphorism, the power of this music rests in its willingness to leave multiple layers of possible readings unresolved, an effect which more extended material would render ever more difficult. This flexibility leads to a particular variant on the concept of expressive affordance described in the previous chapter: Kurtág's music creates its effect through a network of shadowy and often conflicting expressive attributes, so that meaning arises from a complex process of negotiation and uncertainty.

Grief and grandeur: ΣΤΗΛΗ

In this context, the mere existence of *ΣΤΗΛΗ* (1994) appears something of an anomaly.² His first orchestral work since the early Viola Concerto, it is lavish in its scoring, demanding sextuple wind as well as a contingent of Wagner tubas and Kurtág's characteristic 'tuned percussion section' of harps, cymbalom, grand and muted, 'supersordino' upright pianos; and if its ten-minute duration is short by the standards of the symphonic tradition, it is certainly more extended than much of the composer's miniaturistic output. The external circumstances surrounding this seeming *volte-face* are fairly straightforward: *ΣΤΗΛΗ* arose from a commission by the Berliner Philharmoniker, itself the product of a residency with the orchestra which their then-conductor Claudio Abbado had arranged in the autumn of 1993 (Toop, 2001: 141); the mammoth scoring which results certainly befits the status of this kind of commission as an indication of a compositional career at its zenith. Yet these circumstances are hardly the whole story. In fact, as Richard Toop has described, *ΣΤΗΛΗ* represents the culmination of a 'long march' towards orchestral writing which can be traced through the increasingly substantial ensemble pieces ...*quasi una fantasia...*, *Grabstein für Stephan* (1979/89), *Samuel Beckett: What is the Word* (1990) and *Opus 27 No 2 "Double Concerto"* (1990); clearly the composer's thoughts were heading in this direction in any case (Toop, 2001: 131–141).

Moreover, even the triumphal image which the massive orchestration might initially present is highly deceptive: in fact, *ΣΤΗΛΗ* is just as unflinchingly fragile, fractured and liminal as any of Kurtág's chamber music. A detailed study reveals it to be a natural extension of the composer's existing preoccupations into new territory, which takes as one of its underlying artistic goals the investigation of how such an expansion can be achieved; an important feature running throughout *ΣΤΗΛΗ* is the idea of objects – musical material, external reference, even perceptions of time – being 'stretched' to fit a situation which is beyond them. This sense of acute strain is in keeping with the demanding nature of Kurtág's output as a whole, but it connects in particular with

² This Greek term transliterates as 'STELE', a tombstone or commemorative monument; since the composer uses the original script, it will be retained throughout this study.

certain issues bound up with his long sequence of 'in memoriam' compositions:³ although the score of *ΣTHAH* carries no explicit memorial dedication, its title points clearly towards this emotional world, and its final movement is an expansion of a *Játékok* piece in memory of fellow composer András Mihály.⁴ This work presents a complex, forceful and deeply affecting exploration of grief and remembrance; it thus represents an ideal opportunity to examine in more concrete terms the issues of expression and meaning raised in the previous chapter.

Memory and distance: the first movement

Although the shortest of the three, the first movement effectively sets up many of the concerns which emerge throughout *ΣTHAH*. Its remarkable achievement is to create in the listener the same sense of acute, intimate tension which is so clearly felt in Kurtág's chamber music, but in the context of a full, late Romantic symphony orchestra, usually the realm of grand, sumptuous, serene or haunting (but rarely raw, fragile or disquieting) public statements. This is achieved by quite distinct means from the chamber music (which is ultimately far more predisposed to such an effect, by dint of its small and inherently dramatic team of highly committed performers). Kurtág's genius here is to recognise that such a specific, subtle and ultimately devastating effect as he requires – the audible, almost tangible experience of utter loss – cannot be created by sheer dissonance, timbral inventiveness or pure volume: the only way of effectively disabling the 'public', rhetoric-filled persona of the Romantic orchestra is to subvert it entirely, to turn its most treasured gestures against it and show how they have crumbled with the passage of time. By stretching players, listeners and even external material to its limits and beyond, Kurtág opens up an expressive dimension to the orchestra which has rarely, if ever, been explored before. In order to understand how this effect is achieved, it is necessary to look at the different levels of experience which are involved. Three different readings of this movement will thus be presented here: the first is 'analytical',

³ Other examples of this strand within Kurtág's output include *In Memoriam Zilcz György* (1975), *S. K. Remembrance Noise* (1975), *Grabstein für Stephan*, *Messages of the Late Miss R. V. Troussova* (1980), *Officium breve in memoriam Andreæ Szervánsky* (1989), discussed in Chapter 2, 3 *In memoriam* (1990), and the numerous smaller memorial pieces found throughout the *Játékok* books.

⁴ Because of this direct reworking, most commentators see the composition as an explicit memorial to Mihály, and this certainly seems a reasonable assumption; see for example Toop, 2001: 141.

focussing upon issues of material and process; the second is ‘perceptual’, an account of the experience of these elements from a listener’s perspective; and the third is ‘referential’, considering the broader issues towards which they point – and in particular the significance of the two quotations which bookend the movement.

Reading 1: filling space

On one level, the analytical reading which the first movement invites is relatively straightforward: it presents a process of expansion and saturation on several levels simultaneously. The forceful initial gesture – five octaves’ worth of G across the whole orchestra – defines a huge, hollow registral space; the remainder of the movement fills in this space chromatically, by means of the gradual expansion and transposition of a simple chromatic motif (Ex. 9.1a)) which spreads progressively from the clarinets across the rest of the ensemble even as it slowly moves up the chromatic scale (Asmus, 2000: 5) – Ex. 9.1b) shows a reduction of this process.

a)

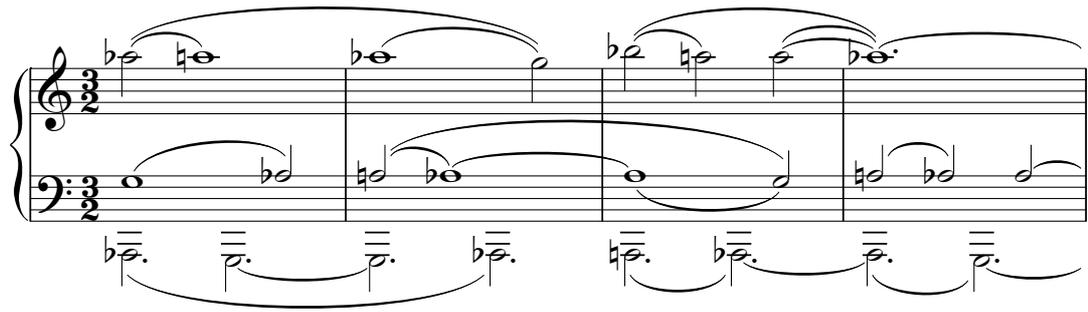
b)

bar 1 (tutti) bar 4 (clarinets) bar 11 (flutes) bar 15 (strings) bar 19 (oboes) bar 21 (Wagner tubas)

timbre: tutti mellowest -----> brashest

**Ex. 9.1: Kurtág, ΣΤΗΛΗ, first movement:
a) initial chromatic motif, bar 4, clarinet 1;
b) reduction of pitch and timbral processes**

This slow chromatic accumulation mirrors equally straightforward processes of increasing textural and rhythmic density and of timbral development. The simple cross-rhythms of the opening clarinet lines (Ex. 9.2) are gradually joined by layers of ever more complex tuplet patterns in the accompanying parts, until the pulse is nearly impossible to discern (just as it was in the opening bar). Likewise, the progression of the main thematic material across single-instrument choirs, which only gradually blend with one another when they retreat into accompanimental roles, allows a clear timbral trajectory to be followed from the most neutral sounds in the orchestra (sub-tone clarinets) towards the bright (albeit here very restrained) sonority of the brass.



Ex. 9.2: Kurtág, ΣΤΗΛΗ, first movement: reduction of clarinet lines, bars 4–7

Arrival at this timbre – the introduction of the quartet of tubas – coincides with the re-attainment of G as a melodic note, the whole chromatic scale now having been traversed; the structural importance of this moment is marked by a deliberate act of clarification, the main material now transformed into a solemn, homophonic chorale designated ‘*Hommage à Bruckner*’ (Ex. 9.3a)), and the accompanimental gestures gradually fading out. Only the horns, the last instrumental group to be introduced, are allowed to break free from the bare chromaticism which conditions the rest of the movement; their highly evocative closing gesture (Ex. 9.3b)) continues the solemn mood, whilst also pointing ahead to the layered thirds which will provide the focus for the final movement. The last chord confirms what has been achieved: chromatically saturated, and covering the whole of the opening range, its striking sonority is created by blending different instrumental choirs in a way which had been carefully avoided up to this point (but which will become fundamental in the remaining movements).



Ex. 9.3: Kurtág, ΣΤΗΛΗ, first movement:
a) ‘*Hommage à Bruckner*’ material, bars 21–26; b) horn gesture, bars 26–29

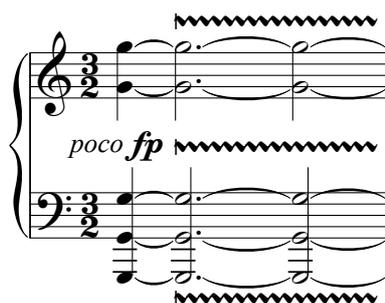
From this overview the first movement emerges as a kind of ‘prelude’ (Asmus, 2000: 5), a gradual introduction of the various elements of the orchestra (through its division into distinct ‘choirs’), and of the main aspects – chromaticism, antiphony, timbre, rhythmic stratification, registral space – which will play significant roles in later movements. As such, it establishes the ‘ground rules’ of the whole work, as well as offering subtle pre-echoes of aspects which will later be treated in more depth; this careful manipulation of listeners’ memory is itself a crucial feature of the overall effect. The simplicity and regularity of this analytical narrative is rather attractive; indeed, it highlights certain technical features – in particular, the systematic and exhaustive exploration of very limited intervallic material, the ‘filling in’ of empty pitch-spaces, and the wider focus upon the structural potential of the total chromatic – which are highly typical of Kurtág.⁵

However, there is a real danger, in reducing the movement to these interacting processes, that very important aspects of the experience will be overlooked. Bernd Asmus, the first to write in detail about this work, freely admits that such reductionism brought a distinct feeling of ‘unease’ at ‘failing to bring out the most essential elements’ of the music (Asmus, 2000: 7). In reality, much of the impact of this music comes from the way in which these features (which in themselves constitute an audible and linear progression) are undermined and subverted. The result is a sustained play on the nature of musical time, continuity and movement, and on the whole baggage of the Romantic orchestral tradition, which goes far beyond these initial analytical observations.

Reading 2: stretching time, hearing grief

Placing greater focus upon the ‘material acoustic phenomenon’ of this movement (as Abbate puts it) demonstrates that this element of disruption is present from the very beginning. The opening sonority is not merely an outline of space to be filled, but a stark, arresting gesture of striking clarity and certainty; yet within a few seconds (a single crotchet in the score), the certainty of the octave Gs has given way to unstable, unpredictable pitch fluctuations across the whole ensemble (Ex. 9.4), and the music ‘seems literally to dissolve’ (Adlington, 2003: 315).

⁵ For further discussion of these features, see Halász, 2002; Hohmaier, 2002; and Leung, 2009.



**Ex. 9.4: Kurtág, ΣΤΗΛΗ, first movement: reduction of bar 1
(wavy lines indicate microtonal fluctuations)**

The conventional analytical reading presented above establishes this, in retrospect, as a microtonal analogue of, and preparation for, the wandering, directionless melodic chromaticism which dominates the rest of the movement (Asmus, 2000: 5). This is certainly one aspect of its effect; indeed, the kind of ‘retrospective listening’ which this reading engenders, forcing the audience to rethink their perspectives on an event after the fact, serves as a further play upon the concept of memory within ΣΤΗΛΗ, and thus connects with one of its recurrent concerns. At the same time, to ‘write off’ this gesture in such abstract and reductive terms would be at best something of an oversimplification: in reality, although this connection may well be perceived and appreciated once the piece has been heard a number of times (and can only reinforce the sense of tight-knit interconnectedness and single-minded intensity which characterises the whole work), it is far outweighed in import, at the time of listening, by the sheer visceral impact of the sonority itself.

The effect is hypnotic and deeply unsettling: without any pulse, directed dynamic marking, or even stable pitch as guide, the listener is left suspended, trapped in the inexorable (but unpredictable) decay of an archetypal gesture of clarity and purpose in Western music. Zoltán Farkas compares this gesture with the use of quarter-tone piano tunings in the earlier composition *Lebenslauf* (Farkas, 2002: 304); deprived of the hitherto unassailable certainties of basic intonation and pulse, the sound ‘gravitates downwards as if attracted by some power towards the abyss’ (Farkas, 2002: 300). Although in real time this process of degeneration is comparatively brief (lasting less than ten seconds on the première recording), the sense of discomfort which it engenders, as well as the absence of any audible pulse, mean that it is felt as something far more

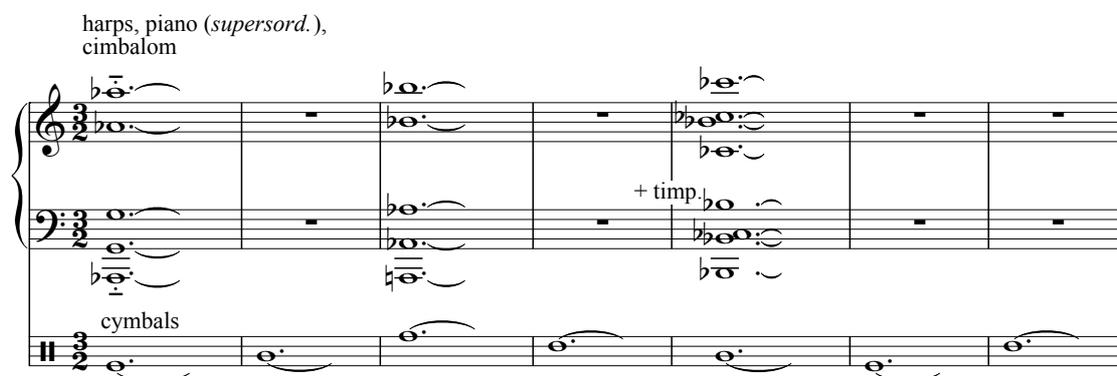
extended: time is 'stretched' in the listener's ear by the agony – the *Angst* – of the gesture.



Ex. 9.5: Kurtág, ΣΤΗΛΗ, first movement: trombone entry, bar 2

The entry of the trombones (Ex. 9.5) alleviates this tension somewhat: their 'groaning' glissando,⁶ moving from E# to coincide with the fluctuating Gs (though it stops just short of an actual unison), allows the listener to perceive a simple, audible goal – convergence on a pitch – amid the vacillation and instability; as such, it allows some sense of time and expectation to be recovered. This seems to 'shore up' some of the uncertainty elsewhere too: from this point on the fluctuations in other instruments gradually subside, and the unison G becomes stable again. Nonetheless, the damage has been done: there is no possibility now of a return to the certainty of the opening. This combination of extreme tension and irrevocable subversion has a theatrical element, too: the entry of the double basses in the second bar, playing the *highest* notes in the texture, uses a wholesale reversal of convention to create further devastating 'strain'.

The change in tempo which accompanies the entry of the clarinets at bar 4, with the painfully slow *Larghissimo* becoming a more straightforward *Adagio*, seems to indicate a shift from such a disconcertingly gestural approach to something more stable.



Ex. 9.6: Kurtág, ΣΤΗΛΗ, first movement: percussion pulse, bars 4–10

⁶ The score has the German 'stöhnend' at this point (Kurtág, 1994a: 1).

This is reinforced by the new material: although the clarinet lines are highly chromatic and full of dissonant vertical combinations, they nonetheless remain free of microtonal inflections; likewise, even if the layered polyrhythms of these lines leave the underlying triple metre inaudible, the use of harps and the tuned percussion section as a slower-moving backdrop (Ex. 9.6) allows some sense of pulse to be maintained. There is even a loose phrasal structure over the whole melody, in spite of its wandering chromaticism: the entry of the Eb clarinet at bar 7 allows the solo line to be divided into two four-bar phrases, rhythmically identical and with roughly inverse overall contours (Ex. 9.7).

The image shows a musical score for Kurtág's *ΣΤΗΛΗ*, first movement. It consists of three staves. The top staff is for Clarinet 1 (cl. 1) in E-flat, and the bottom staff is for Eb Clarinet (Eb cl.). The music is in 3/2 time. The top staff shows a melodic line with chromatic movement, divided into two four-bar phrases. The bottom staff shows a piccolo entry (picc. enters:) in bar 7, which overlaps with the second phrase of the clarinet line. The piccolo line continues the chromatic progression of the clarinet line. The score includes various musical notations such as slurs, ties, and dynamic markings.

Ex. 9.7: Kurtág, *ΣΤΗΛΗ*, first movement: phrase divisions of clarinet line, bars 4–11, and overlap with piccolo entry

The transfer of this melody to the flute section in bar 11 continues the rising progression delineated by these phrases. At this point the sense of direction provided by the earlier analytical narrative – the gradual traversal of the total chromatic – is clearly audible; the rising contour of bar 10 allows the initial piccolo line to emerge directly as an extension of it (as Ex. 9.7 shows). Indeed, the closest parallel at this point, in terms of the expectancy created by the slight asymmetry, careful voice-leading and awareness of an expanding pitch-space, is with the entries in a fugue.

However, this growing connectedness, direction and argument is short-lived. The entry of the flutes marks the beginning of a process of disintegration which is more protracted, but no less disturbing, than that of the opening gesture; this, too, is based fundamentally around the gradual distortion and destruction of the stable, structured elements which would allow a listener to hear the abstract analytical ‘narrative’ described earlier. This begins almost immediately after the entry of the flutes, with the

loss of the metrical reinforcement provided by the harps and percussion; in place of their chords are single cymbal-strokes and a simple, although still metrically ambiguous pattern (Ex. 9.8a) on 'supersordino' piano.⁷

The image contains two musical staves. Staff a) is a grand staff (treble and bass clefs) for piano, showing bars 11 and 12. It includes the instruction 'con tutti sordini' and 'ppp'. Staff b) is a single treble clef staff for piccolo, showing bars 11 through 15. It includes the instruction 'ppp senza colore' and a 'pochiss.' marking with a hairpin.

**Ex. 9.8: Kurtág, ΣΤΗΛΗ, first movement: a) piano part, bars 11–12;
b) piccolo part, bars 11–15**

Only two bars later this piano figure has moved out of sync with the rest of the ensemble; as if in response, the solo piccolo line extends its phrase to five bars, breaking the pattern established earlier (Ex. 9.8b)). The situation is made yet more ambiguous by the 'delicatissimo' semitone patterns of the clarinets, tracing triplet and quintuplet figures under the texture and blurring the timbral (and antiphonal) clarity ostensibly provided by the use of instrumental choirs. This increase in complexity and discontinuity is reflected in the entry of the strings at bar 15. This time, there is no attempt to transfer the line audibly from the flutes: the two sections overlap by a full bar, with none of the linear connection of bars 10 and 11; indeed, Kurtág has to mark the upper violin line '(pochissimo) in rilievo' to ensure that it actually does override the flute parts. Intonation loses its stability once again, too: the microtonal inflections of the opening return in the lower strings (Ex. 9.9).

⁷ The 'supersordino' piano is an upright with practice mute applied; Kurtág has grown increasingly fond of the 'incomparable, silky tone' of this instrument, which fits his fragile aesthetic closely, and has begun to use it in his duo concert performances where amplification renders this viable (Kurtág jr. and Scherter., 2006: 9).

Ex. 9.9: Kurtág, ΣΤΗΛΗ, first movement: violoncello and contrabass parts, bars 15–16 (arrows indicate microtonal deviations)

This all goes hand-in-hand with a gradual compression of rhythmic values and phrase-lengths, with the main string line moving into crotchet values for the first time at bar 19, and the accompanying gestures of the flutes and clarinets being compressed into increasingly ‘fleeting’⁸ and rhythmically intricate patterns. At the same time, any metrical regularity that might help this compression to be heard as a cumulative process is further undermined by the brief introduction of a 4/2 metre in bars 18 and 19. By the time the double-reed choir (briefly) take over the main material at bar 19, it is hard to tell whether they are in the foreground or simply another part of the general texture; all the mechanisms – of metre, phrasing, timbre and linear continuity – which could be used to make such a distinction have been dismantled.

In this context, the ‘*Hommage à Bruckner*’ chorale which follows is far more than a simple act of clarification: it is simultaneously a reinstatement of the textural simplicity and external reference of the opening, and a demonstration of how far things have changed since then. Nor does this external intrusion offer any lasting solace from the disintegrative processes of the preceding section: around it, brief antiphonal ‘sighing’ figures continue, now incorporating microtonal *glissandi* as a further expansion of their characteristic ‘stretched’ quality.⁹ Ultimately, the role of this passage – in a purely structural sense – seems to be primarily to reverse the increasing formal compression of the preceding sections, and so to allow the music to come gradually to rest. As such, the final chords embody the paradox which underpins the movement: they

⁸ The score makes frequent use of the German cognate ‘*flüchtig*’ in bars 16–18 (Kurtág, 1994a: 3).

⁹ Earlier in the movement, Kurtág explicitly marks a number of these figures as ‘*gedehnt*’ – ‘stretched’ (Kurtág, 1994a: 3).

may be transparently 'conclusive' from an analytical perspective, in their chromatic and registral saturation as well as their sophisticated blend of timbres, but for a listener the ending gives no sense of resolution or even arrival. It is merely a resting-point, engineered by the manipulation of rhythmic impulse. After such restless chromatic perambulations, even the final timpani roll, such a universal signal of resolution and arrival, cannot find the 'right' note to settle on (Ex. 9.10).



Ex. 9.10: Kurtág, ΣTHAH, first movement: timpani, final bar

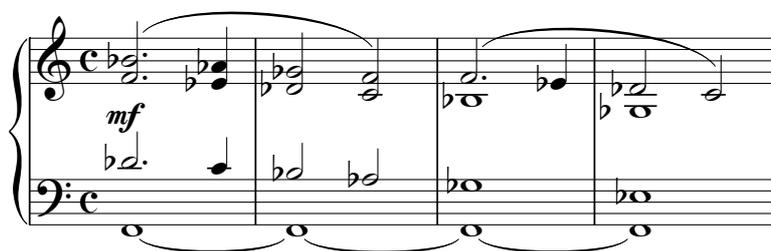
This second reading, focussing on a more instinctive listening experience than the measured analytical details of the first, opens up the first movement of ΣTHAH as far more than a simple exploratory prelude. Indeed, the issues it raises connect closely with the identification of the whole work as music of mourning: beyond its treatment of the more overt conventions of the lament *topos*, in its chromaticism and the 'sighing' and 'wailing' implied by microtonal and accompanimental gestures, it presents a subtle exploration of the cumulative power of grief to overwhelm. The ever-multiplying reverberations of the lament gesture, overlapping and compressing in their desperation, like mourners in a crowded funeral procession, subject the whole process of 'active' listening to increasing tension; only once it has broken under the strain does the movement come to a close.

This process of 'stretching' – exploring (in highly Kurtág-esque fashion) the boundaries of our ability to perceive – is analogous to that experienced by the players: quite apart from the neutral-to-bright gradation of timbres identified in the conventional narrative, Kurtág is also careful to order his instrumental choirs so that in spite of the very gradual increase of dynamic through the movement, every player is forced to play as quietly as possible right up until the entrance of the tubas; although the dynamics of the oboe entry at bar 19 are *pp* not *pppp*, for example, this is the absolute limit of their ability at that high register (as the *possibile* marking indicates). The extreme nature of

the experience, for player as well as listener, is vital in the creation of the intended effect: this lament goes far beyond the tender but refined niceties of its tradition and engages with the rawness of real loss.

Reading 3: Hölderlin and the ruins of Romanticism

The two quotations which surround the movement offer yet another reading of its basic ‘narrative’, and one in which the circumstances (quite unusual for Kurtág) surrounding the composition of ΣTHΛΗ become particularly suggestive. Behind the gestural impact of the opening octave sonority lies an equally forceful historical edifice: it is a specific, concrete quotation, a reference to the first chord of Beethoven’s second and third *Leonore* overtures (Kropfinger, 1996, cited in Toop, 2001: 142), and even for a listener unfamiliar with the direct source, the allusion to the ‘grand symphonic opening’ of early Romantic tradition is all but obvious. The disintegration of this gesture goes beyond its disturbing perceptual impact: over the course of a few seconds ‘the spirit of the Beethovenian-Brahmsian-Brucknerian tradition’ of symphonic writing has been simultaneously invoked and undermined (Farkas, 2002: 304). Where this chord presents a gesture from the very beginnings of Romanticism, the ‘*Hommage à Bruckner*’ chorale alludes to its final gasp: the most explicit source for the tuba sequence is a passage in the *Adagio* of Bruckner’s Symphony no. 9 (Ex. 9.11), the last completed movement in the composer’s final work – indeed, the tuba chorale was most probably intended as a ‘farewell to life’ (Asmus, 2000: 6, n. 3).



Ex. 9.11: Bruckner, Symphony no. 9, *Adagio*: Wagner tuba motif, bars 29–32

This in itself connects to an expressive *topos* active since the early Romantics, the use of horn-calls as ‘symbols of memory – or, more exactly, of distance, absence, and regret’, rooted in Beethoven’s Sonata op. 81a, ‘*Les Adieux*’ (Rosen, 1995: 117);

Kurtág's references here are not so much to specific musical moments as to whole traditions, with all their mythic resonances.¹⁰ The presentation of the chorale here is certainly striking: its *pesante* indication is a direct contrast to the myriad *delicatissimo* and *flüchtig* markings which fill most of the movement, and it offers the first moment of real homophony since the opening chord. At the same time, its referential connotations are far more overtly tainted than even the opening: the gently melancholy harmonies of the Bruckner version are here transformed into yet another presentation of the vertical and horizontal chromaticism which has served as principal thematic material throughout, so that in reality it is only the texture, instrumentation and descending contour (along with Kurtág's inscribed citation) that link it to its source.

With these two allusions as milestones (or perhaps gravestones), the movement traces a conceptual path through the whole German Romantic tradition, from its Beethovenian openings to its Brucknerian final steps; it is surely no coincidence, in writing for the Berliner Philharmoniker and Claudio Abbado – particularly as the result of a residency with them (Toop, 2001: 141) – that Kurtág should choose such a focus. There is even a gradual shift, over the course of the central section, from Italian terms to Germanic ones – '*flüchtig*' and '*Flüsterton*' replacing '*delicatissimo*'. Yet this rich musical heritage is used not as a model or as source material for transformation or parody: there is no 'neo-Romanticism' in evidence here. Rather, the quotations are presented as fragile artefacts, irretrievably distant from the present moment, and heavily dilapidated by the passage of time; even the process of placing them in a present context brings an inevitable distortion and disintegration.

This, too, connects with the 'lament' aspect of the movement: external reference allows Kurtág to explore the *separation* of grief, the sense of the past as irreconcilably remote and utterly disconnected from the mourner. Against these two artefacts, both weathered but still weighty in their significance, the hushed and very simple chromatic material which fills in the intervening time appears as a kind of 'background', an empty space. One might imagine a visit to some Classical temple or monument where all that is left are two broken pillars and a great expanse of mossy rubble: what little remains intact only serves to heighten the sense of loss and distance. The use of Greek capitals –

¹⁰ Just over a decade earlier, Ligeti had invoked the same 'farewell' associations more explicitly in the opening of his Trio for Horn, Violin and Piano; see Steinitz, 2003: 255.

inscription-like – for the title invites a perception of ΣΤΗΛΗ in this way as a kind of relic, a damaged artefact from another age which can be deciphered only with difficulty and which remains always somewhat distinct from the organic growth and interlocking trajectories of human life.

The work of the German poet Friedrich Hölderlin (1770–1843), although itself as distanced in time from Kurtág as the traditions he quotes, nonetheless offers a number of striking insights into the composer's own singular depiction of loss. Although no concrete reference is made within ΣΤΗΛΗ to Hölderlin, it is not altogether surprising that his poetry and worldview should prove illuminating here: Kurtág's connections with the poet date from as far back as 1975 – when he set an aphorism about him as part of his *Four Songs to Poems by János Pilinsky*, op. 11 – right up to the *Hölderlin-Gesänge* of 1997 (themselves begun even before the composition of ΣΤΗΛΗ); in between these two stand a number of other small settings, as well as instrumental pieces with epigrams by the poet, such as *...quasi una fantasia...* Moreover, Zoltan Farkas directly connects the dense, chromatic 'lament' material found here with material which runs throughout many of the explicitly Hölderlin-based works (Farkas, 2002: 303).¹¹

These surface connections point to a deeper correspondence of focus and aesthetic between Kurtág and the poet, something which the three movements of ΣΤΗΛΗ bring out with particular force. Hölderlin's writing, although fixed within the historical context of German Romanticism, was rooted in longing for another age; his poetry continually invokes the Ancient Greece of myth as the concrete embodiment of a 'wholeness and immanence' in life and culture which has long been lost (Constantine, 1988: 164).¹² The realisation of this loss engenders a profound sense of isolation, of grief even, which is not assuaged by the hope of eventual restoration which always accompanies it; this deep separation points forward, even at the height of Hölderlin's creative maturity, to the mental illness which would eventually isolate him completely. Such desperate longing 'breaks upon an absence quite as hurtful as that of death' (Constantine, 1988, 186).

¹¹ For a detailed exploration of the connection between Kurtág and Hölderlin's thought in the context of the slightly earlier and more fragmentary *...quasi una fantasia...* (1987), see Hodkinson, 2004.

¹² This Greek element offers another tantalising possible influence for the unusual title of ΣΤΗΛΗ.

The comparison David Constantine makes between yearning for a lost (or mythical) Arcadia and the pain of bereavement is central to Kurtág's own response. The opening of *ΣΤΗΛΗ* sees him take an obsessive nostalgia of his own – the remembrance of the early Romantic period which runs through the previous decade, most obviously in *...quasi una fantasia...* (1987) and *Hommage à R. Sch.* (1990) – and turn it into an emblem of real mourning. This quasi-invocatory use of direct 'relics' of a lost past (a period as 'heroic' musically as Hölderlin's Greece was mythologically) also mirrors the poet: his continual appeal within his work to direct figures and places, rather than the abstract ideals of more conventional philosophical poetry, reflects a desire to give this ineffable longing tangible substance by grounding it in historical reality. As such, Hölderlin's (and Kurtág's) 'historically finite' references become 'the manifestation of the absolute as its own necessary moment' (Adorno, 1974: 123), making the conceptual terrifyingly concrete.

Force and fragmentation: the second movement

The quotations within *ΣΤΗΛΗ* share an aura of distance and dilapidation with Hölderlin's Greek mythos, one which is almost physical in its effect. In the poetry, this separation has important formal consequences, too: shorn of the comforting conceptual certainties of the era for which it longs, Hölderlin's writing is frequently forced into 'parataxes' – ruptures of logical continuity which draw the reader's attention to the incompleteness and artificiality of the evocation, 'shattering the symbolic unity of the work of art' in order to give it a power beyond the purely conceptual (Adorno, 1974: 127). A similar effect is seen in the issues of (dis-)continuity which appeared in the first movement – increasing uncertainty about where one instrumental voice ended and the next began, as well as difficulty in perceiving the overall direction – but it becomes all the more prominent in the second. Here, the severance between material and form is made complete: music of extreme violence and rhythmic energy – the necessary successor to the painfully repressed intensity which preceded it – is set within a larger structure which continually undercuts it, refusing to settle into any systematic, developmental arc.

Continuity and discontinuity

Paradoxically, the *attacca* connection between these two movements serves to accentuate their discontinuity, if anything: the opening *fortissimo* whip-crack and frenetic, ‘desperate’¹³ repeated notes come as quite a shock after the slowly-shifting *pianissimo* chords of the preceding coda, and the orchestration (including whip, log-drum and cimbalom) certainly favours the exotic and strident above the conventional or mellifluous (Ex. 9.12a)). At the same time, however, the main melodic idea which enters almost immediately (Ex. 9.12b)) links directly with the main material of the first movement (Asmus, 2000: 7), and the heavy chromaticism and limited pitch-range of the surrounding texture (as well as the painfully high double-bass line) point backwards too.

a)

b)

Ex. 9.12: Kurtág, ΣΤΗΛΗ, second movement: a) opening, b) basic melodic idea

¹³ This movement is marked ‘*disperato*’ in the score (Kurtág, 1994a: 5).

At the same time, these fundamental unities are often difficult to hear on the surface: clear as the process of chromatic accumulation may be in theory (in both 'lamento' motif and brass hockets), its multi-layered, fugal presentation – amid a torrent of incessant Bs, Cs and Dbs from the trumpets and percussion – serves to camouflage it very effectively. Likewise, the way in which the principal melodic idea is transformed in each of its new appearances (as Ex. 9.15 shows) serves to render its audible unity rather questionable: instead, this opening achieves its fiercely escalating intensity by the simple but rapidly escalating process of 'accumulating instrumental layers', a method more comparable (as Toop notes) with Stravinsky's *Rite of Spring* than with the techniques of conventional fugue (2001: 143). The first climax, at bar 51, is reached not by clear material development but by a rapid re-establishment of textural unity: one particular permutation of the lament in the violins (Ex. 9.15e)) suddenly takes over the whole ensemble, and there is a moment of *tutti* rhythmic unison.

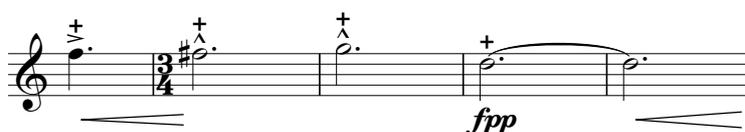
The image displays five musical staves, labeled a) through e), each showing a different instrumental variant of a principal motif. Staff a) is for violas, staff b) for second violins, staff c) for clarinets, staff d) for upper winds, and staff e) for violins. The notation includes various rhythmic values, accidentals, and dynamic markings such as 'non troppo f' and 'sempre sim.'. A dashed line above staff a) indicates a melodic contour. Staff d) features a series of trills. Staff e) includes triplet markings.

Ex. 9.15: Kurtág, ΣTHΛH, second movement, variant forms of principal motif:
 a) violas, from bar 11; b) second violins, from bar 15; c) clarinets, from bar 33;
 d) upper winds, from bar 38; e) violins, from bar 43

A window to the past

The section which follows is equally caught between integration and discontinuity: the wholesale incorporation of a repeating passage from the previous movement serves as a reminder of the links between the two in terms of chromaticism and melodic content, yet it also remains markedly separate – in its independent tempo, quiet dynamic, and gentle timbre – from the complexity and violence of the ‘foreground’ material. There is a sense of irony here: the material which previously served to point up the distanced and damaged state of the Romantic elements surrounding it now itself appears as a static object, a ‘window’ to what has gone before (Asmus, 2000: 8) which remains far removed from the violence of the musical present. As elsewhere in Kurtág, the bare materials of modernism are treated here with the same sense of detachment as those of far earlier periods (Williams, 2001: 59). Bernd Asmus sees this ‘potentially endless folding of time’ as a kind of musical equivalent to the illusion of perspective in two-dimensional painting (Asmus, 2000: 9), allowing the resultant work a level of expressive and temporal ‘depth’ belied by its relative brevity or the simplicity of its underlying materials. For the listener, it serves equally as another example of the way in which Kurtág plays with our memory, and simply as a further decisive ‘rupture’ of large-scale continuity.

This look backwards is brief, however. After a few false entrances, the main fugal *lamento* subject returns again, this time without the kaleidoscopic layering of different variants, and presented in canon across the brass and double basses; in response, the whole orchestra gradually settles into a set of interlocking ostinato patterns so regular that Kurtág is eventually able to enclose them within repeat bars. The result is the opposite of the cumulative tension seen in the earlier ‘fugal’ passage: the music reaches a point of maximal saturation and becomes effectively static. It takes a break in the pattern – the third horn (Ex. 9.16) introducing a ‘wrong’, rising note to the falling ‘lamento’ melody (Asmus, 2000: 9) – to reintroduce a sense of direction and generate a second climax.



Ex. 9.16: Kurtág, ΣΤΗΛΗ, second movement: third horn, bars 92–6

The breakdown of continuity at this point (another ‘parataxis’ of greater impact than the first) causes a reversal of focus in the remainder of the movement. The final 40 bars present a long coda in which cumulative orchestral accumulation – the main textural process up to this point – is replaced by a series of antiphonal statements between disparate groups of the orchestra, all based upon different treatments of the same basic *lamento* material. There are occasional passing connections between statements – such as the gradual rising sequence which occurs in bars 116–23, for example – but in general the effect is disconnected and fragmentary; metrically, too, it is extremely irregular. In spite of this irregularity, the resultant impression is of a greater unity than the earlier stages of the movement, primarily because the relationships of each gesture to the *lamento* material are clearer, and there is less variation in modes of articulation or playing techniques between them – so the antiphony is based primarily upon instrumental timbre, rather than upon material or character.

Overall arc of section (loss of energy)	Unified	‘High-level’ ‘Low-level’
Antiphonal presentation of basic materials	Fragmented	
Basic materials	Unified	
Metre	Fragmented	
Surface sonorities (<i>legato</i> phrases)	Unified	

**Ex. 9.17: Kurtág, ΣTHΛH, second movement:
levels of unity and fragmentation in second half**

This produces a new configuration of the ‘strata’ of fragmentation and unity found in the preceding sections (Ex. 9.17). Here it is the fragmentary surface (as well as the slower tempo and dynamic manipulations), rather than any particularly extreme variation in the underlying material, which preclude any developing sense of direction; indeed, this passage rapidly dissipates the energy and intensity accumulated during the preceding sections. In its carefully separated phrasal exchanges, it also introduces an awareness of more conventional, articulated musical ‘time’ which was absent from both the opening of this movement, with its unceasing turbulence and ever-increasing intensity, and the ‘stretched’ progressions of the first. As a result, there is an element of

mechanism and emerging ritual in the antiphonal interchanges of this section, looking forward to the static repetitions of the finale. Towards the final bars, the increasing compression of these interchanges, eventually shortening to single, isolated notes, even leads to the establishment of something approaching a recognisable pulse. There is a gradual progression here from wild, uncomprehending horror – a physical manifestation of the grief evoked in the first movement – towards something approaching acceptance; the shift this implies is not so much towards resolution (since no expectations have been generated or fulfilled) as into simple stasis and regularity. This finds its ultimate expression in the third movement.

Ritual and consolation: the third movement

The *Molto sostenuto* finale of ΣTHAH has drawn much critical attention as ‘the most remarkable movement of a generally remarkable work’ (Toop, 2001: 145). It presents a ‘dignified, compassionate, funereal procession’ which somehow generates a strong sense of resolution and even ‘reconciliation’ (Beckles Willson, 1998: 21) without ever reneging on the formal or aesthetic challenges of the preceding movements. The focus remains upon highly physical gestures, distinctive sonorities, stratified treatments of the orchestra, and repetition as a structural device; however, in this movement, these elements do not conflict with one another but rather coalesce into a statement of closure. Several commentators hear this as a ‘musical representation of consolation’ (Asmus, 2000: 15), a balm to the various expressions of shock, grief and anger which it follows, and this is certainly an available reading; yet much of its expressive effectiveness lies in the ambiguity with which this closure is handled – such that others, such as Alex Ross, can hear it as a far more muted, but not quite hopeless, ‘gaunt figure staggering on’ (Ross, 2009: 581).

Rehabilitating consonance, reasserting time

It is tempting to explain this powerful dramatic effect by means of another conventional analytical narrative: namely, the gradual rehabilitation of consonance. Even the piled thirds of the opening chord (Ex. 9.18a), although highly dissonant, offer a greater sense of stability than the constant chromatic fluctuations of the preceding movements;

moreover, although there is no simple linear thread to trace here, through the course of the *Molto sostenuto* there is a clear shift from chromaticism (the first ‘interlude’ to the repeating chords begins with a chromatic aggregate, Ex. 9.18b)) towards greater diatonicism and even hints of tonality. This progresses from the separation of the total chromatic in bar 33 into two complementary whole-tone scales (Ex. 9.18c)), to the wholly white-note sequence of bars 70–5 (Ex. 9.18d)); the final sequence of third-based chords, from bar 77 to the end (Ex. 9.18e)), sees the gradual establishment – through a series of shifts analogous to the gradual moving of fingers on the keyboard (Beckles Willson, 1998: 19) – of a far more consonant white-note chord whose faint D minor implications offer a final ‘resolution’ to the prominently diminished harmonies of the opening sonority.

Ex. 9.18: Kurtág, *ΣTHΛH*, third movement: a) opening harmony; b) chromatic aggregate, bar 10; c) complementary whole-tone sequences in brass, bars 33–7; d) white-note sequence in strings, bars 70–5; e) closing chords, bars 77–end (one chord every two bars)

This pitch-structural process certainly does play some role in the broader character of the piece, but as with the opening of *ΣTHΛH*, there are other features at play here which need to be taken into account. In particular, an analysis based on the interplay of consonance and dissonance implies a directed, linear argument, but in fact much of the whole power of this movement stems from its wholesale abandonment of directed process in favour of the calm and potentially unending articulation of time passing.

This change of focus is operative even at the conceptual level. Rather than distorting or overloading pre-existent traditions or formal schemes (as with the

destruction of the Romantic tradition in the first movement, or the saturation of fugal and hocket forms in the second), here Kurtág simply turns inwards: the whole finale is a straightforward orchestration of a piece from *Játékok* also written in memory of András Mihály. The composer makes no attempt to ‘scale up’ his source-material for the huge ensemble he is using, or to flesh out the bare chords of the piano writing (Ex. 9.19a)) with more sumptuous orchestration; apart from a few alterations to create chromatically saturated chords where the piano was incapable of it (Asmus, 2000: 13–14), there is no significant alteration of its underlying harmonies or form.

a) $\text{♩} = 30 - 20$

pp
con ped. [$\frac{1}{2}$ - $\frac{1}{4}$ ped.] al fine

b) woodwind

pp

strings

pp

string harmonics

bass drum,
low piano clusters

Ex. 9.19: Kurtág, a) opening of ‘Mihály András emlékére’, no. 43 in *Játékok*, vol. 6;
b) ΣΤΗΛΗ, third movement, reduction of opening

His most striking change serves as a means of drawing out further the already extremely slow procession underlying the piano piece: each of the repeating chords which comprise its main materials is here presented in a remarkable 'double shudder' effect (Toop, 2001: 146), created by layering quintuplet repeated notes between strings and woodwind (Ex. 9.19b)).¹⁴ As with the opening of the first movement, a gesture which invites almost physical involvement on the part of listeners is used as the focus for expression. In addition to referring back to the widespread use of repeated-note figures in the second movement, and bringing the orchestra closer to the non-sustaining nature of the piano, this serves to create a kind of 'slow motion' effect by expanding each gesture into a series of distinct sonorities; this is particularly visible in the notation, which requires the conductor to beat each chord as a full bar, but also to remain aware of the 'hypermeasures' which group these chords together, analogous to the bar divisions in the original. Time is 'stretched' again here, but by quite different means to those employed before: rather than articulated pulse being wholly absent (as with the unpredictable microtonal fluctuations of the first movement), here it is the main focus of attention; this regularity affords listeners a sense of stability which they were hitherto denied.

Regularity as closure

This carefully controlled gestural expansion is just one outworking of a sense of ritual and stasis which is already firmly present in the structure of the finale. A number of elements from previous movements are clearly audible here: the contrary-motion lament figure in bars 47–53 is strikingly similar to the main material of the first, for example, and the antiphonal exchanges of bars 33–46 connect with the close of the second; there is even a focus on G throughout the initial section (as the upper note of the repeated chord) which recalls the very opening of the work. Yet these elements are striking here for their disconnectedness and their objectivity: instead of attempting developmental

¹⁴ Paul Griffiths notes also the connection of this movement with the 'lake of tears' episode in Bartók's *Bluebeard's Castle* (Griffiths, 2010: 370): both rely on a distinctively-orchestrated gesture based around stacked thirds (in Bartók's case, an altered minor chord, and in Kurtág's one with a more diminished-seventh character), which repeats between episodes of simple melodic material. Given the importance of Bartók's music to Kurtág's working process (as documented in Hohmaier, 2001 and 2002), this connection is very likely intentional; it certainly adds another layer to the emotional ambiguity of this movement.

connections, Kurtág is happy simply to present musical objects 'as is'. Indeed, a combination of carefully-judged colouristic distinctions – timbres varying from the single-instrument 'choirs' of the first movement to the most wide-ranging and subtle tonal blends (Toop, 2001: 146) – and the more obvious 'punctuation' of percussion strokes and bars of silence serve to keep individual passages and gestures carefully isolated from one another. Likewise, a concern for balance is evident in the handling of pitch-gestural concerns: phrases with clear rising or falling contours are quickly followed by others which are stable or which move in the opposite direction, as if to dissipate any momentum which might be accumulating. Above all, the block-like way in which the main types of material are presented serves to create a sense of stability absent from the far more continuous developmental processes of the previous movements (where sections often even overlapped with one another to heighten the underlying tension). Even though a number of cells of material do return and transform several times – particular the main 'footstep' chord, and the sonority heard first in bar 10 – they do not establish even the localised, attenuated sense of teleology found in Takemitsu's *How slow the Wind*.

The clear separation made by this detached treatment between the various materials of the finale has important consequences for perception and expression: able to encounter each gesture individually, without any 'connective tissue' joining them together, listeners are given the opportunity to come to terms with the wide variety of sonorities and effects present in even such a seemingly solemn and austere collection of musical objects. Like the tricks of perspective seen in the second movement, this unmediated multiplicity, in a setting of such space and with a clear if slow underlying pulse (the passage of full bars) by which to measure it, creates a sense of 'depth' beyond anything else presented thus far. Indeed, it is so pronounced that in retrospect (in another play upon the workings of memory) this movement appears to wholly overshadow the preceding two, in duration as well as effect.

What is perhaps most surprising is that this ritualistic, obsessive, near-static underlying structure should give rise to the overwhelming sense of closure and calm which critics so universally attest, rather than the distanced impersonality or ironic detachment which such 'objective' music usually creates. This arises partly, perhaps, from context: after two movements rife with disintegration, unpredictability and

cumulative tension, the measured reiterations and non-directional, seemingly endless quality of this procession come as a huge relief, a kind of musical representation of eternity to follow the agonies of loss and grief.

It is striking that repetition – so often the *generator* of tension within music – should here serve as a kind of *release*, the longed-for attainment of an articulated regularity which had so far been continually denied. Within a context of conventional functional development, repetition serves to delay resolution, and hence to heighten expectation; here, however, with one of the main ‘dissonances’ of the work its continual disruption of such expectations, the establishment of simple regularity and balance (even though it does not lead anywhere) serves as a substitute for closure. The gradually-fading reiterations of this chord which close the movement offer a final, mesmeric demonstration of this, the felt ‘pulse’ of each gesture suddenly slowed to half speed; only the true rhythmic unison of the final chord, coming after a genuine moment of ‘suspended time’ (in the shape of a pause), breaks the spell.

Creating a blended space: two interpretations

Although it relies on ambiguity, discomfort and fragmentation for its effect, this account presents an experience of ΣTHΛH which is coherent, even in terms of expression: there is a definite emotional trajectory from the brute shock of the opening to the calm repetitions of the final movement. As a closing hermeneutic gesture, two more specific interpretations of this work might be offered, similarly to those found in the analysis of Ligeti’s Violin Concerto in Chapter 8. The first focuses on the sacred. ΣTHΛH might be understood as another, more symphonic ‘brief office’, a concentrated orchestral requiem to accompany Kurtág’s earlier string quartet: the first movement a processional *Introit* which introduces instrumental groups, one by one; the second a ferocious *Dies Irae* outburst with its *tuba mirum* brass hockets and its closing *lacrymosa* antiphony; and the third a measured, distanced *Lux aeterna* – with the nature of this eternity, whether divine light or simply emptiness, deliberately left unresolved. The second interpretation is more secular. The piece might also be read in terms of Elisabeth Kübler-Ross’s well-known model of reactions to grief and personal catastrophe as progressing through a

number of different stages:¹⁵ in this case, moving through shock and denial (the unreal, distanced character of the first movement), through anger and bargaining (the violence and impassioned antiphony of the second), towards the third movement – which might be read as depression *or* as acceptance.

Both these interpretations represent significant ornamentations on the music, of course, and (in Cook's terminology) they can only produce 'actualised' musical meaning when they are combined with an active, engaged listening experience; to see them as representing some kind of 'cryptographic' explanation of its significance would be to risk jettisoning the highly 'drastic' nature of this work. Nonetheless, their inclusion here serves to indicate the way in which the trajectory of *ΣTHAH* connects with some broader societal approaches towards the experience of grief and loss, an aspect which forms an important part of its expressive significance. It also serves as a further reinforcement of the point made in Chapter 8, that broadening musical interpretations does not mean giving them wholly free rein: in spite of their differences, these two viewpoints contain a substantial shared expressive core, and this reflects the direct impact of *ΣTHAH* as an aesthetic experience. It is notable, for example, that both readings are forced to acknowledge the ambiguity of the final movement: although it offers a lasting sense of closure, this does not necessarily equate to a feeling of 'resolution' – it could equally be heard as pure emptiness, as time passing, or as life ebbing slowly away. Ultimately, the ruined, visceral and finally cathartic soundworld of *ΣTHAH* goes beyond any single interpretation.

¹⁵ For the original statement of the model, see Kübler-Ross, 1970.

Conclusions

Redefining coherence means also redefining the conditions of closure. A conclusion which purported to draw together all the strands of this thesis into a clear and singular theoretical position would undermine the spirit of multiplicity which runs throughout. I remain convinced that this music can be coherent on its own terms – the terms, above all, of heard experience, of active engagement and of expressive directness – and that this coherence does not require nor benefit from ‘justification’ in the form of any systematic analytical treatise. The accounts presented here instead represent creative written responses, attempts to engage with aspects of what is heard and to bring to light certain of its features as part of the broader cultural framework within which this music exists; in that sense they are as much free-standing as they are part of any broader theoretical arc. Likewise, the connective chapters, whilst each framed by and centred upon the experience of particular pieces, stand primarily as broader explorations of specific analytical issues; although their coverage is relatively wide-ranging, there are certainly many other questions (relevant to this music as well as more generally) which they neither ask nor answer. The plural in the title is thus deliberate: rather than attempting to create something comprehensive or monolithic, it is a series of interrelated, overlapping conclusions that are presented here, each tackling similar issues from a different angle. It is to be hoped that, as with the music studied here, something coherent will emerge out of their shifting intersections.

Analysis, interpretation, interaction

A number of insights into the nature and utility of musical analysis have arisen over the course of this study. The initial emphasis on analysis as a fundamentally *interpretative* activity (rather than one primarily geared towards quasi-scientific ‘explanation’) was borne out throughout, and the result was a notable creative freedom in the construction of accounts. All of the larger case studies made significant use of specific (often quite far-reaching) imaginative metaphors as part of their analytical language: mosaic in

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Arcadiana, gravity in *Solar*, formal gardens in *How slow the Wind*, and ancient ruins in *ΣΤΗΛΗ* – not to mention rainbows in ‘Arc-en-ciel’, photo albums in *Mystère de l’instant*, and chaos theory in Ligeti’s Violin Concerto. Whilst in one sense these were merely verbal projections on to each piece (albeit ones given some ‘poietic’ justification by titles, programme notes or composers’ statements), it is notable that the interaction between metaphor and musical experience was often two-sided: whilst each particular connection certainly coloured subsequent discussions of the music, there were also points where the extra-musical image itself had to be reshaped in response to aspects of the examined work. This was most obvious in *Solar*, where the long-standing theoretical image of harmonic ‘gravity’ had to be shifted to a more cosmic perspective, in the reworking of the mythic ‘rainbow’ image in ‘Arc-en-ciel’ to incorporate more chaotic aspects, and in the various refinements made to the ‘snapshot’ analogy in the context of *Mystère de l’instant*. Any metaphorical association is defined as much by its points of resistance as by its points of connection, of course (one reason why the apparently unrestricted interconnectivity of Deleuze and Guattari’s approach was ultimately rejected here); without them it would be not a metaphor but simply a description of reality. What matters is the insights which result from the comparison, and these can emerge as much from differences as from similarities.

As such, metaphors were useful here primarily because they provided a ‘way in’ to a more detailed analytical discussion of each piece. In each case, a particular imaginative description of an aesthetic experience acted as the foundation for further work; this stands in contrast to the ‘hypothesis-experiment’ model of more system-driven approaches, where it is a particular structural or critical framework that is the starting-point which later close readings attempt to test and refine. This parallels the broader redefinition of ‘coherence’ undertaken in Chapter 2; a particular strength of this approach is that it allows analytical methodology to stand in closer parallel with the perceived aesthetic of the works under question. Theoretical approaches which attempt formalised clarity soon find themselves constrained in the breadth of stylistic or cultural reference which they can address; by contrast, here the adoption of a broader understanding of what is ‘on topic’ for an analytical study allows the focus of discussion, and the specific techniques used, to adapt continuously in response to the demands of the material. The freedom of method which results is particularly important

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as the detail of an analysis increases: it is notable that particular effects often arise in this music from complex, layered combinations of processes, such that a satisfying account can only be achieved by a similarly intricate and shifting constellation of analytical methods.

For example, *Arcadiana* cuts across any clean analytical distinctions between continuity and discontinuity: in order to hear the continuous thread which Adès describes, the listener needs to ignore much of the intervening material of the interruptions, yet it is the changes in large-scale tension created by this material which allow the thread to develop in the way it does. Indeed, it is in the ‘intrusions’ of ‘Et...’ and ‘O Albion’ in particular that much of the dramatic and expressive substance of the quartet is developed; perceptual continuity here is dependent on surface discontinuity for its effect. Likewise, Saariaho’s ‘parametric’ approach to the handling of process and material in *Solar* means that there is no clear, single way of ‘breaking up’ the interactions of this movement; they overlap and intersect in varying ways. For example, in one sense the perceptual ‘zoom’ of the opening and the gradual ‘separation’ of the end are very similar procedures, both exploring the gradual expansion of existing material, yet their different positions, and the variety of other conflicting processes which are overlaid at both points, mean that the effect of each is strikingly different. The three semiotic squares are useful as a way of engaging with these shifting layers, but they too need to be applied in an equally active, fluid manner, and not reduced to a unifying system: indeed, at times specific additional interactions *between* and *within* these squares needed to be dealt with as well.

The result of all this is that coherence is redefined here as both *more* and *less* than the kinds of structural integration and unity which modernist historiography portrays as the mythical ‘grail’ of composition for much of the twentieth century. It is less, in that its requirements are less immediately stringent: the study of *Officium breve* demonstrated that features which would be ‘disruptive’ according to more formalised standards of unity may, in this viewpoint, actually serve to *strengthen* the experienced coherence of a work, if they combine fruitfully with the expectations and inner narratives of listeners (as generated by titles, programme notes or experiences of other music), or with aspects of the performance situation. It is more, in that it goes beyond the single-element or ‘purely musical’ focus found in conventionally structuralist

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accounts (such as those of Schoenberg or Schenker, in different ways): coherence comes out of this thesis as an emergent phenomenon, one which arises from interactions of material that are often too complex to trace precisely, which makes no clear separation between ‘musical’ and ‘extra-musical’ features in the course of a performance, and which involves the expectations of listeners and performers just as much as it involves the intentions of composers. In this context it is unsurprising that chaos theory has arisen so often in the discussion of composers such as Ligeti: the idea of something clear and perceptible (and often highly arresting) arising from a cloud of unpredictably interacting processes certainly has parallels with that field, whether or not it has directly inspired compositional processes.

Active listening

The emphasis which this redefinition places upon active listener involvement highlights a second important insight – one which connects equally with the decision in Chapter 1 to focus upon the heard experiences of individual works. This music offers great potential for a kind of listening which is neither passively, reverentially structural, attempting primarily to construct a mental replica of the score, nor primarily contextual, using the sound purely as a launchpad for broader discussions. The aesthetic viewpoint adopted here argues for the validity of an active and deeply engaged listening perspective which can move between a wide range of different attentional foci, whilst remaining highly responsive to the ‘sensuous surface’ of a particular performance, as Sontag put it (1966: 12).

Gibson’s concept of affordances arose a number of times within the thesis as a way of describing this active, multi-faceted, and yet clearly circumscribed perspective. It is also noteworthy that this freedom of focus is crucial to the effect of several of the works studied here. For example, the meandering ‘slowness’ of *How slow the Wind* relies on Takemitsu’s ‘pan-focal’ approach to texture and structural interconnection, and the variety of different perspectives – from momentary ‘ground-level’ concentration, to broader linear or even architectural awareness – which result. Likewise, in *Solar*, the proliferation of materials and gestures means that there are a variety of different kinds of experience afforded by the music; in this context, the cyclic returns of the ‘solar chord’ (and especially the slow central section) stand out for their textural simplicity

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and the resultant single-minded focus which they encourage. This viewpoint also helps to clarify the forceful but often ambiguous expressive character of these pieces: as the study of Ligeti's Violin Concerto revealed, expression in this music can very helpfully be described in terms of particular musical attributes which afford a wide (but not infinite) range of possible interpretations and actualised meanings. This argument can be projected back on to earlier case studies, too: the accounts of *Officium breve* in relation to the expressive characteristics of ritual, and of weightlessness in *Arc-en-ciel*, can both be understood as descriptions of the relationships between particular musical attributes and the interpretations which they afford – an example of Nicholas Cook's exhortation for musicologists to 'attend to the conditions of [meaning's] emergence' (Cook, 2001: 190).

The idea of even relatively conventional 'concert-hall' listening as an *active* process of attentional exploration, memory, expectation and surprise is central to the redefinition of coherence presented here, particularly in the way it extends Clarke's account of musical affordance. This attitude is likewise reflected in several of the case-study works, which set up particular perceptual environments only to change them subsequently in unexpected ways, so that active listening explorations are constantly forced to shift perspective. As such, they invite an experience which is direct, and almost physical, in a manner which goes beyond the primarily linguistic, communication-centred models of musical content found in Ler Dahl, the early serialists, or the proponents of the structural approaches to listening which Clarke critiques. In *How slow the Wind*, for example, larger-scale relationships of material never wholly override the particularity of individual gestures and sonorities, and thus the focus of attention in listening is fluid and relatively free – hence the metaphor of a garden stroll.

However, the clearest example of this kind of experience is $\Sigma THAH$: the physical process of decay found in the first few bars generates a sense of timelessness and loss which would be difficult to replicate by any other means. What is particularly startling is the gap found in that piece between supposedly straightforward analytical observations and listening experience: although the basic materials often revolve around the simplest of chromatic pitch-relationships, this aspect is far less important in the heard experience of the work than other features such as timbre, texture or allusion, and these add up to produce a result which is far more complex than study of the score alone

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would suggest. In this context the relationship between compositional intention and heard result becomes increasingly ambiguous, too: tools such as chromatic expansion which obviously proved useful in composition lose their primacy in performance, and it is difficult to discern the extent to which this is a deliberate act on the part of the composer. As such, the idea of coherence as something which is actively constructed in the process of listening becomes even more important. Even more striking is the distortion of perceived time and linearity encountered here: this arises from a network of premonitions, recollections and retrospective alterations which lie behind the more immediate aspects of the experience, and which are reinforced by the careful use of quotations and extra-musical associations – including the shadow of Hölderlin, introduced in this analysis because of his personal and yet highly relevant conception of memory and loss.

Form, process, energy

The way in which aspects of active listening can impinge upon the perception of temporality leads to further insights into form and development. Chapter 6 emphasised that form in this music is a *dynamic* process above all; this is something which is at the forefront of nearly all the case-studies. The arguments of Fink, Levinson and Kramer each point (in their own way) towards a conception of musical form which explicitly problematises the idea of a single, overarching hierarchy, constructed in a listener's mind over the course of a piece; in these works the sense is more often of localised goals or expectations being constantly changed or subverted – as if the perceptual 'goalposts' were being 'shifted'. In *Arcadiana*, for example, the exhaustion with which the climactic 'Et...' ends – a movement that is in some ways 'too long' – produces the shift in larger-scale tension which leads eventually to 'O Albion'; a similar process occurs in the focal coalescence of *Solar*, where the compression of the 'solar chord' on to a single F# seems to undermine its structural force, or in the sudden intrusion of the cowbells in *How slow the Wind*, or the stretched-out lamentations which close the second movement of $\Sigma THAH$, all of which alter the field of expectations in ways which could not have been predicted from the outset.

This is not to say, however, that there is *no* possibility of larger-scale formal perception here; simply that larger formal organisation, if it is experienced at all, will

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most often be experienced ‘in the moment’, as arcs of shifting energy which direct (and sometimes confound) expectation (something which even Levinson, the strongest critic of the ‘architectonic’ viewpoint, seems to accept). The result is a further redefinition: coherence here does not mean that a work can be reduced in formal terms to a single ‘finished picture’ such as a Schenkerian graph or Stockhausen-esque *Formplan*; rather, it arises continuously as the music is heard, through the way that connections and disruptions are handled as part of the broader drama. As a counterbalance to this, one particularly striking assertion from Kramer is that localised discontinuity places a greater burden of responsibility upon larger-scale proportions and formal architecture.

If this is taken to imply that ‘moment form’ music forces a listening stance based upon overarching, ‘spatial’ comprehension, then it is indeed in conflict with Levinson’s thesis. However, it could also be understood in a different way: when the surface of a piece is full of discontinuity, the perception of continuity moves from the immediacy of melodic lines or harmonic sequences to a more rarefied awareness of ‘similar’ and ‘different’ stretches of music over a large scale – and in this case, the relative proportions of different formal blocks can play an important role in the control of energy through the whole piece. This principle was particularly evident in the study of *How slow the Wind* as a pervasive concern for *balance* in the presentation of material; however tentative the conclusions about symmetry and Golden Section proportions were in that case, it does seem clear that the examination of these kind of larger relationships can play an important role in the analysis of music which disavows both conventional teleology and wholly non-teleological aesthetics.

It is notable in this context that several of the works studied trace a kind of ‘zooming-out’ in their formal process: *Arcadiana*, *Solar*, *How slow the Wind* and the third movement of Ligeti’s Violin Concerto all start with the focus decisively upon particular, striking ‘moments’, and only gradually encourage a sense of connection between these to build and a broader formal trajectory to emerge – a process which clearly attests to the complex role played by memory in this music. Moreover, at particular climactic points – the ‘O Albion’ movement of *Arcadiana*, the still centre of *Solar*, or the central cowbell gesture of *How slow the Wind* – the focus reverts again to the momentary, which (as Chapter 8 argued) seems to have particularly loaded expressive connotations in this music. In this redefinition of coherence, moments of

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coalescence – where multiple strands are brought suddenly together – take the place of the kind of lasting ‘arrival’ found in more directed, linear arcs of tension and release. One particularly important consequence of this is the flexibility of expression which it permits: almost all the pieces studied here (except for *Mystère de l’instant* and possibly *How slow the Wind*) end in a strikingly ambiguous fashion, somehow creating a sense of *closure* (the music does not simply ‘stop’) without necessarily any corresponding sense of *resolution*. The result is the kind of interpretative multiplicity which Chapter 9 briefly explored; the model of expressive affordance adopted here makes it clear that ambiguity in this respect is a feature of all music, of course, but in the case of this repertoire in particular it is clear that discussions of expression can sometimes only reach meaningful conclusions by the juxtaposition of several seemingly contradictory readings of a passage – tracing the beauty and chaos of the rainbow in *Arc-en-ciel*, for example, or the tension between comfort and emptiness in the last movement of *ΣTHAH*.

This all raises some significant issues for analysis, of course, since it has always shown a particular interest in tackling questions of large-scale form (perhaps because of their complex relationship with perception). Analytical accounts can fall into two opposing traps in this respect: they can either reduce the form of a piece to a single, static ‘big picture’, in the process erasing the essential twists and turns of perception; or else they can present a ‘blow-by-blow’ description which strives so hard to remain true to the perceptual level that it comes out as a kind of highly personal detective story – formal insights staged as sudden revelations in a way which seriously damages the potential for more distanced reflections and risks reducing the whole analysis to a misguided attempt at verbal ‘translation’. There is no way for a detailed analysis to avoid both of these possible pitfalls entirely: the case studies presented here have tried to steer a path between them which shifts in its emphasis depending on the characteristics of individual pieces, or even of individual moments within them.

For example, whilst several of the studies featured large-scale analytical diagrams of different kinds, these were never treated as formally definitive: the separation of thread and interruption movements implied by the diagram for *Arcadiana* (Ex. 3.1), for example, was increasingly called into question as the account itself progressed; meanwhile, the ‘map’ of *How slow the Wind* (Ex. 7.10) served primarily to *challenge* the idea of a clearly-delineated hierarchy across different structural levels, and also to

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illustrate a concern for large-scale balance in the presentation of material – and thus in itself to counter-balance the more momentary focus of much of the written study. Indeed, in the case of *Solar* the shifting details of the cyclic process necessitated a kind of ‘cyclic’ procedure in the presentation of *analytical* materials: later diagrams of particular sections (Exs. 5.11, 5.17 and 5.18) revisited and revised certain aspects of the initial structural summary (Exs. 5.2 and 5.3) to match better with the shifting formal processes.

In the final reckoning, coherence is redefined every time a musical work is heard and engaged with: it is not a static property, but emerges from the layered intricacies of composition, performance and listening. Nonetheless, certain recurrent features of the works studied here allow analytical conceptions of the term to be redefined more specifically, in ways which give greater prominence to the role of the imagination and metaphor, which invite active, deeply engaged listening stances, and which encourage a more fluid approach to large-scale form – and a recognition of the role that isolated moments of particular force can play within its construction. Redefining coherence thus means also redefining analysis. But the term, used in this sense, means above all *refining*, not replacing: there is in general a refreshing absence of combative ideological posturing in the writings of these composers, and the open eclecticism of the repertoire studied – drawing as freely upon the sounds, gestures and processes of the twentieth-century avant-garde as upon the legacy of tonality – is one of its most striking features. Likewise, attempting to engage analytically with this repertoire need not mean starting from scratch; it simply means ‘opening up’ existing techniques and conceptual frameworks to new and imaginative combinations, in keeping with the multi-directional engagement of the music. As coherence continues to be redefined, so too do analysis, performance, and listening; the flexibility of the process is its greatest strength.

List of primary materials

Scores

The first date is the date of composition; where the publication date differs, it is indicated next to the publisher. References to un-numbered pages prior to the start of the score itself, such as Adès's programme note to *Arcadiana*, are indicated by the use of lower-case Roman numerals (for example, Adès, 1994: iv).

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This is a list of the specific ‘reference recordings’ used for the analyses; it is not a full list of the recordings of these pieces available.

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