

**Stars, Magnetism, Bulls and Heroes: Thomas Adès's
Metaphors and his Music**

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INTRODUCTION¹

This thesis will seek to examine the integration of Adès's programmatic discourse² in his work. In discussing programmatic discourse, I am referring to programme notes, titles, cover images, tempo marking anything that is distributed as part of the work. Furthermore, I am also including in this category relevant interviews with the composer which, though not necessarily distributed with the work, still form part of the discourse surrounding it. My model finds precedence in Nicholas Cook's 'Instance of Multimedia' which exploits Lakoff and Johnson model of conceptual metaphor to examine the interaction between music, text video, cover images.³ This is particularly suited to Adès's music, as he often perpetuates a consistent programme through a variety of media. Similarly, 'musical work' enjoys a wide-ranging definition in this thesis: a musical work is understood as the combination of the music, score, and all aspects of programmatic discourse above. This definition arises from the conclusion of this thesis, which understands Adès's programmatic discourse as a vital part of his compositional process, and therefore as an integral part of his music.

In examining this topic, it becomes pertinent to ask, what can a composer gain from writing about his own music? Does programmatic discourse impart anything to the listener? After all, many composers have expressed discomfort and even frustration when writing about their music.⁴ This is further exacerbated by the

¹ Parts of this thesis (particularly the chapter on *Polaris 2010* have been presented at the Society of

² My use of the word 'discourse' throughout this thesis is intended in the everyday sense, ie an interchange of ideas, conversation, or an expression of thought. This is very similar to Keith Swanwick's use of the word in Music Education literature. Keith Swanwick, *Teaching Music Musically* (London: Routledge, 1999) p 2.

³ Nicholas Cook, *Analysing Musical Multimedia* (Oxford: OUP, 1998).

⁴ See for instance Joseph Finlay, 'A Jewish Quarterly Interview with Thomas Adès (interview by Joseph Finlay), *Jewish Quarterly*, 60: 3-4, 126-127 (2013); James Dillon talk given at the Composers

requirement to write about one's music in order to engage with musical establishments and to get work performed: even if a composer decides to shun programme notes there is still a perceived need to provide a title for a piece. After exploring some of the criticisms that programme notes attract I shall claim that this discomfort stems from, first, the notion that the 'music' should be able to speak for itself, and secondly that a programme note's role is to act as a translation or explanation of the piece. I make the argument that it is more fruitful to understand programmatic discourse as an equal part of the compositional process and thus integral to the work. This shift in perspective would mean that the creation of titles and programme notes could take place during the composition of the work rather than retrospectively.⁵ Taking Adès's writings on *Polaris* and *Living Toys* as case studies, I shall examine how he constructs several sophisticated conceptual metaphors in his commentaries which suggest a particular reading of these works. Consequently Adès's programmatic discourse can be feasibly understood as an integral part of these pieces rather than extramusical additions.

Though Adès has expressed discomfort at writing about his music⁶ he has been singled out for his use of highly evocative and imaginative titles.⁷ Furthermore, Adès's discourse has been read alongside his music to construct elaborate readings that engage with extramusical discourses. These have included readings of *Asyla*,⁸

Forum at Magdalen College Oxford, November 29th 2012; 'Tom Green on Composers and Words'. New Dots composer blog <http://www.newdots.org.uk/blog/2015/5/29/tom-green-on-composers-and-words.aspx> (Accessed 11/08/2015); Harrison Birtwistle *Wild Tracks; A Conversation Diary with Fiona Maddocks* (London: Faber and Faber, 2014); Tom Coult <http://www.tomcoult.com/works-audio/enmimes-sont-les-gougebosqueux> (accessed 11/08/2015).

⁵ Tom Coult, op. cit.

⁶ Joseph Finlay 'A Jewish Quarterly Interview with Thomas Adès (interview by Joseph Finlay), *Jewish Quarterly*, 60: 3-4, 126-127 (2013).

⁷ Arnold Whittall 'Thomas Adès' in Stanley Sadie and John Tyrell (eds.), *The New Grove Dictionary of Music and Musicians* vol. 1, p 156 (London: Macmillan, 2001).

⁸ Edward Venn, "'Asylum gained?' Madness and Sanctuary in Thomas Adès's *Asyla*." *Music Analysis* 25, No. 1-2 (2006): 89-120.

'Ecstasio'⁹ (from *Asyla*) and *Brahms*¹⁰, which have combined the music and the discourse surrounding the works. I shall examine two pieces for which Adès has supplied much programmatic discourse: *Polaris* and *Living Toys* and demonstrate how Adès's commentaries can encourage a specific reading of each of these works. These programmatic discourses can be introspective, highlighting technical aspects of the work, or, can look outwards forming a critical stance to musicological and sociological discourses, as in *Living Toys*. My readings will make use of Facounnier and Turner's theory of Conceptual Blending¹¹ and Zbikowski's application of it to music;¹² Lakoff and Johnson's theory of conceptual metaphor;¹³ and Nicholas Cook's theory of Multimedia¹⁴ to interrogate the conceptual metaphors that Adès develops in his commentaries.

After a review of the literature and discussion of programme notes there will be a chapter focussing on conceptual metaphor and conceptual blending. The next two chapters will explore my two case studies *Polaris* and *Living Toy*. A final chapter will consider a work from my composition portfolio alongside the findings from these case studies and consider how my work has responded to Adès's. A concluding chapter summarises my findings and suggests avenues for further research.

A brief note concerning my use of terminology. Throughout the paper I have used several terms to refer to Adès's process of integrating metaphor and music. These terms include, but are not restricted to: mapping, blend/blending, and integrate/integration. The first two of these terms have been imported from theories of

⁹ Edward Venn, 'Thomas Adès's Freaky Funky Rave', *Music Analysis* 33/i (2014) pp 65-98.

¹⁰ Edward Venn, 'Thomas Adès and the Spectres of Brahms', *Journal of the Royal Musical Association* 140:1 (2015) pp 163-212.

¹¹ Gilles Fauconnier and Mark Turner *The Way We Think: Conceptual Blending and the Mind's Hidden Complexities* (Basic Books: New York, 2002).

¹² Lawrence Zbikowski, *Conceptualizing Music: Cognitive Structure, Theory and Analysis* (OUP: Oxford, 2002).

¹³ George Lakoff and Mark Johnson, *Metaphors We Live By* (University of Chicago Press: Chicago, 1980, reprinted 2003).

¹⁴ Nicholas Cook, op. cit. (1998).

metaphor, including Lakoff and Johson and Gilles Fauconnier. I have also referred to Adès's programmatic discourse as a part of, or an element within his work. These are all used to describe the same process of assimilating the programmatic discourse with the sonic aspects of the work.

I've also used the term 'allusion' to describe instances where Adès's music refers specifically to another piece of music, or more generally to another genre of music. These allusions fall short of direct quotations in that they are inexact or disguised in one way or another. For instance, the Electronic Dance Music reference in 'Ecstasio' is considered an allusion as Adès takes certain features (e.g. a strong pulse) whilst ignoring other (e.g. synthesised sounds). Furthermore, these features are more associated with the genre in general, not a specific piece and are combined with elements characteristic of symphonic repertoire such as orchestral instrumentation and a teleological structure.

LITERATURE REVIEW

Christopher Fox noted in 2004 that whilst scholarship on Adès's music has recently surged, there is still comparatively little published research on his music relative to the fame he has garnered.¹⁵ Though today there is much more work on Adès's music, Fox's statement still holds true. This body of work, as Venn points out, is disproportionately biased towards hermeneutic interpretations, leading him to identify formalism as a 'marked term' in scholarly discourse about Thomas Adès.¹⁶ Perhaps in response to this, a number of journal articles and postgraduate dissertations have surfaced that provide detailed formal analyses of Adès's work.¹⁷ These include those by John Roeder who provides close readings of passages from a number of Adès's works in order to explore multiple temporalities (cooperating continuities) and multiple tempo streams, within his music. Phillip Stoeker¹⁸ develops some of the ideas based on interval cycles in Roeder's article in an exploration of 'aligned cycles' in the Piano Quintet, demonstrating how they shape not only local harmonic progressions but also the large-scale formal design of the work. Additionally there are a number of postgraduate dissertations that focus on individual works including *Five Eliot Landscapes*, *Arcadiana*, *America: A Prophecy*, and *Asyla*. One can detect a divide in Adès scholarship between interpretative studies and detailed formal analyses – either

¹⁵ Christopher Fox, 'Tempestuous Times: the recent music of Thomas Adès', *The Musical Times* Autumn 2004, pp 41-56 p 41.

¹⁶ Edward Venn, 'Asylum Gained?: Aspects of Meaning in Thomas Adès's *Asyla*', *Music Analysis* 25i/ii (2006) pp 89-120.

¹⁷ A number of doctoral dissertations have appeared, mostly from the USA. see for instance Shin Young Aum, 'Analysis of 'America: A Prophecy' by Thomas Adès' (DMA diss. University of Illinois 2012; Huw Belling, *Thinking Irrational: Thomas Adès and New Rhythms* MA dissertation: Royal College of Music 2010); Stella Ioanna, Markou, 'A Poetic Synthesis and Theoretical Analysis of Thomas Adès's Five Eliot Landscapes'. (DMA Dissertation: University of Arizona, 2010); Andrew McNamus. *Nancarrow's Rhythmic Structures in Thomas Adès's Asyla*. (MA dissertation: Eastman University 2004); Peter Van Zandt Lane, 'Narrative and Cyclicity in Thomas Adès's Violin Concerto' (MA dissertation: Brandeis University, 2013).

¹⁸ Phillip Stoeker, 'Aligned Cycles in Thomas Adès's Piano Quintet' *Music Analysis* ii/ii (Oxford: Blackwell, 2013).

with a focus on a single piece¹⁹ or across several works²⁰ – of his music without acknowledging his programmatic descriptions. Jacqueline Susan Greenwood stands apart from those listed above in that she provides a survey of Adès’s early work, highlighting Adès’s use of metaphor as a persistent thread that runs through his music to express meaning beyond the purely aesthetic value of sound and musical processes.²¹ This exploration is organised into themes, including ‘word setting’; ‘engagement with the past’; ‘form and genre’; ‘Adès and Surrealism’ and; ‘Visual Arts and Musical Ekphrasis’. Nevertheless she notes that previous critical studies have focussed exclusively on a single work or have pursued one line of inquiry as in Roeder’s article or Emma Gallon’s dissertation on narrativities.²²

Edward Venn, by far the most consistent writer on Adès’s music, considers the discourse that stems from the title of Adès’s orchestral work *Asyla* alongside the music,²³ making the point that hermeneutic studies tend to take the verbal descriptions as a starting point, rather than beginning with ‘the music itself’.²⁴ After presenting two alternate readings of *Asyla* – one starting from the discourse, the other from the music – Venn, concludes that the verbal descriptions relate to the formal processes in *Asyla* solely in an abstract manner.²⁵

Further to this, Edward Venn has explored the interaction of the widely recognised Electronic Dance Music (EDM) topic in ‘Ecstasio’ (the third movement of *Asyla*) with alternative processes that conflict and comment it.²⁶ This reading

¹⁹ e.g. Shin Young Aum, op. cit.

²⁰ Dominic Wells, ‘Plural Styles, Personal Style: The Music of Thomas Adès’ *Tempo* 66 April 2012 p 2 – 14.

²¹ Jacqueline Susan Greenwood, ‘Selected Vocal and Chamber Works of Thomas Adès: Stylistic and Contextual Issues’ (PhD thesis: Kingston University, 2013).

²² Emma Gallon, ‘Narrativities in the Music of Thomas Adès, (PhD thesis: University of Lancaster, 2011).

²³ Edward Venn, (2006), op. cit. p 90.

²⁴ *ibid.* p 102.

²⁵ *ibid.* p 116.

²⁶ Edward Venn, (2014), op. cit.

questions aspects of the early critical reception of ‘Ecstasio’, which have acknowledged the EDM topic whilst ignoring the other processes within the movement. Venn finds in ‘Ecstasio’ the co-existence of numerous conflicting impulses: between symphonic development and repetitive processes; evoking the concert hall and the club; and directed motion and kinetic impulses.²⁷ It is these conflicting impulses that contribute to the intensity of the movement. Consequently, Venn argues that ‘Ecstasio’ is far from an evocation of the club, or an exercise in compositional virtuosity, but a complex multi-faceted work.²⁸ The following year Venn published a paper that developed a hermeneutic reading of *Brahms* (2001) which drew upon Derrida’s notion of hauntology as a framework to compare both Adès’s and Schoenberg’s visions of Brahms’ legacy as a composer.²⁹ In so doing, Venn devised a reading of *Brahms* that developed a critical position towards the reception of Brahms, and more generally, towards the inheritance of musical tradition. Venn observed a less reverential response to the musical past in *Brahms* and suggested that tradition is impossible to accept or reject uncritically.³⁰

Though there has been a recent surge in detailed interpretative studies of Adès’s work and the discourse around it, there is little scholarship that considers the role of Adès’s commentaries in his music. This divide is arguably reinforced by the notion that Adès is not simply reticent about his music but actively misleading. For instance, Christopher Fox accuses the composer of being knowingly naïve in discussing his work *Brahms*,³¹ and Tom Service notes the way in which Adès is “ by turns thrillingly illuminating and, in the way he plays with my questions, deliberately

²⁷ *ibid.* p 92.

²⁸ *ibid.* p 93.

²⁹ Edward Venn, (2015), *op. cit.*

³⁰ *ibid.* p 211.

³¹ Fox, *op. cit.*, p 50.

and wittily obfuscatory.”³² This view have been reiterated in postgraduate research: Vellianitis notes that “If, as Alex Ross writes, in the 90s Adès simply disliked saying anything about his music, what he has done in the past few years is even more perverse: he says very much while at the same time making close to no sense.”³³ Adès’s opaqueness is not only linked to his commentary but to his music. For instance Belling notes that the composer obscures the metre of a passage in *Powder Her Face*. “Conversely in these later bars, there is so much misalignment, the meter is virtually unperceived. Adès even exchanges the quaver pulse between the top two voices as if to *ensure obfuscation*.”³⁴ Simon Cummings finds a lack of clarity in Adès’s orchestral work *Polaris* “I mentioned obfuscation before and indeed clarification is unfortunately the one thing most obviously absent from this piece, yet the piece seems confused as to whether it’s that [melody] or texture it most wants to project.”³⁵ This trope is harmful in that it could facilitate the dismissal of Adès’s programmatic commentaries as a smoke-screen, which, I argue, is to miss a valuable part of his work.

There are several possible reasons why these misgivings have arisen: Adès often chooses ambivalent titles for his pieces; an oft-cited example is *Asyla*, which plays on the double meaning of the word asylum as a madhouse or a place of refuge.³⁶ Also, Adès’s programmatic discourse makes frequent use of elaborate metaphors, which makes it difficult to pin down a specific meaning. Christopher Fox, note the phenomenon of Adès’s celebrity obstructs serious critical engagement with the

³² Tom Service, *Full of Noises* (Faber and Faber: London 2012), p 3.

³³ Alexi Vellianitis, ‘Kuusisto’s Joke: Reconstructing the Rubble of Tonality in Thomas Adès’s Violin Concerto (Masters Dissertation, Oxford University 2012), p 18.

³⁴ Belling, op. cit., p 21, my emphasis.

³⁵ Simon Cummings, <http://5-against-4.blogspot.co.uk/> (Accessed 19/06/2015).

³⁶ eg. Edward Venn, op. cit., (2006).

composer's work.³⁷ Arguably a part of this phenomenon, Simon Cummings states that Adès's career has been accompanied by consistent 'backroom sneering.'³⁸ Certainly, at talks given at the Oxford University Composers' Forums,³⁹ when Adès's name or music has come up it has consistently been met with derision.

³⁷ Christopher Fox, op. cit.

³⁸ <http://5against4.com/tag/thomas-ades/> (Accessed 20/08/2015) This squares well with my own experience in studying Adès's music. In Oxford at least, saying that you enjoy Adès's music, or are studying Adès's music often needs to be followed by some kind of apology.

³⁹ Oxford University Composers' Forums are a series of talks given by visiting composers to undergraduate and graduate student composers at Magdalen College, Oxford. Specifically I am thinking of talks given by Pier Hellawell in Hilary Term 2013 and James Dillon given in Michaelmas term 2014.

PROGRAMME NOTES

These accusations of obfuscation in Adès's programmatic discourse are possibly symptomatic of a wider problem: composers are often sceptical of their value and frequently interrogate their role, subvert them, or outright reject them. Adès himself expresses discomfort at having to write programme notes and talk about his music in interview:

I admit I do find programme notes and interviews frustrating, very. To me music is the ultimate precision. That's my language. Words to me are a poor second language into which I might sometimes reluctantly be forced to translate my first.⁴⁰

His comments above draw on the analogy of translation to describe the relationship between his commentary and his music suggesting that the former might go some way to stand in for the latter. In one sense, this analogy is appropriate: like a translation of a poem, programmatic commentaries foreground certain aspects of the work whilst concealing others. However, it is problematic in that there is a widely acknowledged tension in trying to describe music in language. Mendelssohn, like Adès, in his letter of 1842 suggests that music is utterly precise in its expression, but he suggests that it is language, which is characterised by ambiguity and vagueness, that ultimately diminishes its usefulness in describing music's expression.⁴¹ Dahlhaus notes that musical expression cannot be translated into language because qualities of music expression can only be what they are in a musically expressive form.⁴² Music is not the more specific representation of impulses that are also comprehensible linguistically but instead the different expression of different feelings.⁴³

⁴⁰ Finlay, op. cit., p 127.

⁴¹ Leo Treitler, *Reflections on Musical Meaning and its Representation* (Indiana University Press: Bloomington and Indianapolis, 2011), p 5-6.

⁴² *ibid.*, p 7.

⁴³ *ibid.*, p 8.

This tension has also been discussed by contemporary composers other than Thomas Adès. James Dillon, in a talk given to graduate composers, highlighted the need to be incredibly careful with the language he uses when talking about his pieces.⁴⁴ Tom Green, a postgraduate composer at Southampton University, has spoken of his discomfort in writing about his piece *Gravity Fragments*.⁴⁵

To take the experience of listening to the opening, ‘*Night of the Electric Insects*’, I went through a thought process a bit like this:

furious violin tremolo > helicopters > metal > childhood memories of play equipment > nursery rhymes > major thirds

Now that’s a messy thing to explain even in this over simplified representation, and beyond my skill even really to explore. So what is there to write about? Can I say anything meaningful about the way I wrote the piece?

Definitely, with caveats. I could tell you that my piece, *Gravity Fragments*, is inspired by the image of the Angels in George Crumb’s piece taking flight. The experience of flight is a fight against gravity, and I expressed this in a disturbance of the standard rhythmic gravity we use in music – the pulse. The string quartet players move between sharing a pulse and having individual undulating pulses, unrelated to their colleagues. You’ll hear notes progressing together, and then taking flight in individual directions.

Hold on, what have I just said? ‘You’ll hear notes taking flight’. Hmmm. Maybe you’ll hear cows taking flight, pigs taking a bus, or a power drill in concrete. Who’s to determine the extra-musical connections? I don’t know how much of my statement is true. One of the things I love about the Crumb is that there is a wealth of extra-musical information (the Schubert quote, the titles, the predisposition towards structures of 7 and 13 etc) but you are left to decipher this (or not) as you wish. Nothing more is given to clutter the field, to colour the engagement.

This passage draws upon some general apprehensions that composers have about writing their music. First, it reveals an understanding about programmatic commentary that sees its role as an explanation of the music or it’s origin. Green begins by describing the thought process behind listening to George Crumb’s ‘Night

⁴⁴ James Dillon, Talk given at the Composers Forum at Magdalen College Oxford, November 29th 2012.

⁴⁵ Tom Green, ‘Tom Green on Composers and Words’, New Dots composer blog <http://www.newdots.org.uk/blog/2015/5/29/tom-green-on-composers-and-words.aspx> (Accessed 11/08/2015).

of the Electric Insects’, a piece which has inspired his own, before he moves on to critiquing this approach, which he does by judging its effectiveness as an explanation. Though he identifies the difficulty with talking about his music he fails to offer an alternative approach to the problem that does not seek to explain his music. Later in the same article, Green offers an expanded description of his piece that develops a number of metaphors around the experience of flight and attributes pitches with agency. However, he is quick to dismiss this due to his concern about potentially prescribing the listening experience and he questions ‘how much of his statement is true’⁴⁶ revealing a positivistic approach to writing about his music.

The text above also expresses a concern that composers, in writing programme notes are working in a medium that they are not trained in. Green suggests that it is ‘beyond his skill to really explore’ and asks if “[composers should] be able to write about their own music?⁴⁷ Is it a necessary skill, or a false expectation we have of people who make work with sound and not words?” suggesting that composers are more competent in writing music than in using language to describe music. There is very little guidance in writing about your own music in compositional training at undergraduate and postgraduate level.⁴⁸ That which is available in public forums focuses on writing about music as a type of self-promotion. ‘Sound and Music’ have published guidelines for composers writing about their own music however, befitting their role as an organisation that supports the careers of up and coming composers,

⁴⁶ *ibid.*

⁴⁷ *ibid.*

⁴⁸ Thinking back through my undergraduate and postgraduate education, my compositional training has almost exclusively focused on the writing of music, through writings compositional etudes, studying exemplar pieces and learning compositional techniques. There has been no significant focus on writing about one’s own music. This is, to my knowledge, is typical of compositional training in the UK.

their focus is on promoting ones music and not on reflecting upon the role that programme notes and titles have in your piece.⁴⁹

Despite the problems above, there is evidence of a widespread approach to writing programme notes that seeks to offer a description or an explanation of the work using a variety of different approaches. Alex Temple, a doctoral student at Northwestern University, Illinois, notes that two particular kinds of programme notes are particularly targeted for scrutiny, the play-by-play account, which describes the progression of the piece, and the shop-talk account, which focuses on the technical devices and theoretical concepts incorporated in the music's composition.⁵⁰ Both of these formats are inadequate, she claims: the first of these takes the surprise out of the music, whilst the latter is esoteric and only of interest to other composers or musicologists. To this I would add a third type of programme note: the origin story, in which the composer explains what has inspired the piece, his thoughts during the compositional process, the derivation of his basic material, and (if applicable) details about the commission.

Alex Temple suggests that these types are distinct, though it is clear that they can mingle within a single passage. For example all three types identified above can be found in Harrison Birtwistle's commentary for *The Shadow of the Night*.⁵¹ The programme note is based around the origin of the work but we soon get elements of a 'play-by-play account' and a 'shop-talk account.'

I conceived *The Shadow of Night* as a companion piece to *Earth Dances*, also in the repertoire of the Cleveland Orchestra. Yet whereas the 1985 work is rhythmically energetic, its structures quite Cubist, *The Shadow of Night* is a mirror image - a slow and reflective nocturne, exploring the world of

⁴⁹ <http://www.soundandmusic.org/create/toolkit/writing-about-work> (accessed 14/07/2015)

⁵⁰ Alex Temple, 'Program Notes and New Music's Image Problem', <http://www.alextemplmusic.com/2012/02/program-notes-and-new-musics-image-problem/> (Accessed 11/08/2015).

⁵¹ Harrison Birtwistle, 'The Shadow of Night', <http://www.boosey.com/cr/music/Harrison-Birtwistle-The-Shadow-of-Night/15138> (Accessed 11/08/2015).

melancholy as understood and celebrated by Elizabethan poets and composers.

The title is drawn from a long poem by George Chapman (1559-1634), which is one of the fullest explorations of this theme, where melancholy is no longer an inert and depressive mood, but a humour of the night, an inspired spiritual condition.

I took inspiration from two dark sources - the expressions of melancholy in Albrecht Dürer's engraving *Melencolia I* (1514) and John Dowland's lute song *In Darkness Let Me Dwell*, the first three notes of which are quoted in the piccolo's solo soon after the opening of the piece. This motif, which rises a semitone and down again, is woven into the fabric of the work and also alluded to figuratively: lines split and later reunite, the notes of a chord move away and back again, and longer melodic lines are interrupted and resumed like the moon shining through a series of slowly passing clouds.

The above note uses technical terms and describes elements in the music 'melodic line', 'motif' 'semitone'; it describes elements of the progression of the work, 'piccolo solo soon after the opening of the piece'; and it describes the origin of the piece 'I conceived *The Shadow of Night* as a companion piece...'. This programme note also develops a number of metaphors to describe the music, 'like the moon shining through a series of slowly passing clouds'. However, I would argue that the majority of the note is given over to describing the processes within the piece and their conception in technical terms. This makes it quite unlike Adès's programme notes, which give more emphasis to the development of conceptual metaphors than to technical descriptions of the music.

Also symptomatic of a discomfort with programmatic description is the derision they attract. For instance, the 'Contemporary Classical Music Bullshit Generator'⁵² devised by Dominic Irving in 2012 rapidly gained in popularity and has been shared several times by several prominent commentators including Alex Ross

⁵² Dominic Irving, <http://www.dominicirving.com/cccbgs/> (accessed 15/07/2015).

and the blog ‘I Care If You Listen’.⁵³ An example programme note from the generator can be found below:

One of my most melodic influences is the concept of challenging passive movements, which deconstructs my vision and causes my tone-row to become somewhat Wagnerian. The most important tip I can give anyone is this: Never compose aesthetic non-linearities; rather, endeavour to inform your artistically-extended oppositions. The fact that cadences tend to (at least in their critical state), choreographically contextualise, even in the presence of a strong ensemble, is, you will agree, patently absurd. The pursuit of flowing study-illusions to superimpose the mostly-progressive paradigm is a key focus of my monophonic study. I build upon the so-called ‘unities of experimental processes’, and transform them into what I term ‘modernistic-post-unified oscillation-resonances’, which I see as a distinct improvement.⁵⁴

In the extract above technical and pseudo-technical terms such as ‘non-linearities’, ‘monophonic study ’psycho-serialist’, ‘tessituras’ intermingle alongside artistic and philosophical movements e.g. Expressionist or ‘deconstruct’. Leo Treitler, cites Harry Franklin’s definition of bullshit, noting that its object is to create a certain impression, rather than to inform or misinform.⁵⁵ It is this that the example above successfully achieves; it gives an impression of a programme note whilst imparting very little information. In so doing, it suggests that programme notes that rely heavily on technical terminology and formative influences have the same ‘bullshit’ quality: they appear to tell us a lot about the work whilst in fact telling us very little.

My study of Adès’s music, has lead me to see programmatic description in a different light. Though Adès’s commentaries do at times fit into the tropes identified above, they differ in that they openly develop sophisticated cross-domain (mapping between separate conceptual domains, in this case between music and domains that lie outside music, eg music and language) conceptual metaphors which are sustained

⁵³ <http://wiww.therestisnoise.com/2011/12/misc.html> (accessed 15/07/2015) There have been other approaches to subverting programmatic description. For instance, Tom Green suggests writings oulippo for his works.

⁵⁴ Irving, op. cit.

⁵⁵ Treitler, op. cit., p 35.

within the title, illustrations programme notes for the piece, and in interviews about the piece. These metaphors shape a reading of the piece by drawing attention to aspects of the music that conform with the discourse, whilst casting those that do not into relative obscurity. Therefore Adès's programmatic commentaries, rather than acting as an explanation of the work, can be understood as an element of his compositional process; they shape a reading of his works and enrich our experience of the music. These metaphors are often sustained and developed not just in the programme notes, but in his titles, images, and interviews about the piece, forming a network. I propose an approach to programmatic discourse that accounts for this variety of forums, and acknowledges its role as an integral part of the compositional process and consequently, as part of the musical work.

CONCEPTUAL METAPHOR

In order to examine the role of programmatic discourse in both these case studies I will be drawing upon Lakoff and Johnson's theory of conceptual metaphor⁵⁶ and Fauconnier and Turner's theory of Conceptual Blending⁵⁷. Interest in topics surrounding musical meaning and metaphor has swelled in recent decades.⁵⁸ Marion Guck, reacting to Babbitt's rejection of 'incorrigible personal statements' in discourse about musical works, has explored the intimate relationship between music and metaphor, noting how the latter can usefully describe the former.⁵⁹ Guck goes on to argue that the 'abstract' technical language of music is rife with metaphor. Taking this observation as a starting point, Naomi Cumming presents an analysis of metaphors of musical space and motion,⁶⁰ in which she states that the relation of one pitch to another depends on the non-metaphorical concept of musical space, one that does not involve a metaphorical transfer from the visual realm.⁶¹ The versions of musical space, supported by Schenker or Meyer, are higher order interpretations of musical structure and are therefore susceptible to culturally embedded notions of space. Cumming concludes that the reliance of music theory on these concepts demonstrates

⁵⁶ George Lakoff and Mark Johnson, *Metaphors We Live By* (Chicago and London: University of Chicago Press, 2003).

⁵⁷ Gilles Fauconnier and Mark Turner, *The Way We Think: Conceptual Blending and the Mind's Hidden Complexities* (New York: Basic Books, 2002).

⁵⁸ See Robert Hatten, *Musical Meaning in Beethoven: Markedness, Correlation, and Interpretation* (Bloomington IN: Indiana University Press 1994); Anthony Pople (ed.), *Theory, Analysis & Meaning in Music* (Cambridge: Cambridge University Press, 1994) Nicholas Cook, *Analyzing Multimedia* (Cambridge, Cambridge University Press, 1998); Lawrence Zbikowski, *Conceptualizing Music* (New York: Oxford University Press, 2002); Michael Spitzer, *Music and Metaphorical Thought* (Chicago: University of Chicago Press, 2004); Holly Watkins, *Metaphors of Depth in German Musical Thought* (Cambridge: Cambridge University Press, 2011).

⁵⁹ Marion Guck, 'Two Types of Metaphoric Transfer', Jamie Kassler (ed.), *Metaphor a Musical Dimension* (Sydney: Currency Press, 1991).

⁶⁰ Naomi Cumming, 'Metaphor in Roger Scruton's Aesthetic of Music' in Pople (ed.), *Theory, Analysis and Meaning in Music* pp. 3 – 28.

⁶¹ This view conflicts with Lawrence Zbikowski's study of musical metaphor in which he cites various examples of the ways in which different cultures conceptualise pitch relationships; not just high and low, but sharp and blunt, young and old, and in terms of the movement of water. Lawrence Zbikowski, op. cit. p 27.

a projection of aspects of our own mentality and throws into question the notion of absolute music.

Edward Venn's study of music and discourse in *Asyla* makes use of Nicholas Cook's model for analysing multimedia. This model is based upon Lakoff and Johnson's theory of linguistic metaphor in which they argue that metaphors are not merely figural but reflect a basic structure of understanding. Conceptual metaphors, according to Lakoff and Johnson refer to the understanding of one idea in terms of another. The essential condition for metaphor is an enabling similarity between the source domain and the target domain. One of the examples that Lakoff and Johnson discuss is LOVE IS WAR (the capitalisation is part of Lakoff and Johnson's nomenclature).⁶² This metaphor is viable because love and war have attributes in common: both involve two (or more) parties, and both may feature conquest, planning, strategic retreats and so forth. The meaning of the metaphor, however, does not lie in the enabling similarity; it lies in what the similarity enables, which is to say, the transfer of attributes from one term to another.⁶³ In other words, the metaphor gives love a new meaning. Rather than simply representing or reproducing an existing meaning it participates in the creation of a new one.

These conceptual metaphors are grounded in what Mark Johnson has called image schemas,⁶⁴ an abstract structure that applies to and connects together a vast range of different experiences that manifest this same recruiting structure. An example of an image schema is the verticality schema that structures the way we characterise pitches as low and high. Low notes, when sung, resonate in one's chest whilst high notes typically resonate higher, nearer our head. Therefore, the up and

⁶² Lakoff and Johnson, op. cit. p 157.

⁶³ Cook, op cit. p 86.

⁶⁴ Mark Johnson, *The Body in the Mind: The Bodily Basis of Meaning, Imagination and Reason* (Chicago and London: University of Chicago Press, 1987).

down of musical pitch correlates with up-down spatial orientation.⁶⁵ A degree of invariance is necessary between the two aspects of the metaphor for its formation. For instance, the metaphor PITCHES ARE FRUIT is not often formed as there is insufficient commonality between the source and the target domain.⁶⁶

However, the application of Lakoff and Johnson's theory raises several problems when applied to Adès's music. First, its framework is unidirectional, emphasising how one domain is imposed upon another. Secondly, this model fails to account for the interaction between two media and also fails to treat the particular 'Instance of Multimedia' (to use Cook's terminology) as a separate entity.

A bi-directional model of music and metaphor is given by Michael Spitzer, who combining the cognitive linguistic approach of Lakoff and Johnson with Paul Ricoeur's poetic conception of metaphor,⁶⁷ suggests that music can act as a target domain in metaphorical mappings, but also as a source domain, projecting onto elements outside of music. Spitzer proposes a process of 'hearing as' which he illustrates by proposing four different ways of hearing an F moving down to the E a semitone below it, with either the F or the E as tonic, as two parts of a symmetrical system, or with the F leading onto the E.⁶⁸ We can switch between these three interpretations, which in turn, brings a different interpretive framework.⁶⁹ This notion of 'hearing as' is compared with Wittgenstein's well-known rabbit/duck illusion in which a viewer can understand a particular illustration to be a rabbit or a duck. This process is linked with metaphorical comparison. Citing Shakespeare's metaphor of time 'time hath, my lord, a wallet at his back wherein he puts alms for oblivion',

⁶⁵ Zbikowski, op. cit., p 69.

⁶⁶ *ibid.*, p 70.

⁶⁷ Michael Spitzer, *Metaphor and Musical Thought* (London: University of Chicago Press, 2004)

⁶⁸ *ibid.*, p 7-8.

⁶⁹ *ibid.*, p 8.

which engages our cognitive ability to switch between two conceptualisations of time, physical time, and the image of time as a beggar.⁷⁰

There is a historical dimension to Spitzer argument; he advances three universals, found throughout the history of western music: harmony, rhythm and melody.⁷¹ Citing metaphors found in contemporary theoretical literature, he argues that there is a congruence between these universals and the dominant metaphors for music from the Baroque, Classical and Romantic eras: harmony as painting; rhythm as language; and melody as life respectively. These categories generate three different ways of listening to music, which, he argues, align with dominant metaphors from each era.⁷²

Neither of these models prioritise instances where the source domain does not map onto the target domain directly. Amy Bauer points out (pace Facounnier and Turner) that the metaphor ‘digging your own grave’ represents such an instance; this well-known warning suggests that activities that lead to failure are equated with grave-digging, whilst failure itself is equated with death.⁷³ However, this causal structure of the source domain is inverted in the target domain; foolish actions, may lead to death but digging a grave is usually the result of someone’s death. Consequently, a structure emerges from the blending of the source and the target domain that cannot be found in either domain alone.

Facounnier and Turner’s theory of conceptual blending in linguistic expressions deals with such instances, referring to these as conceptual blends. This model describes the method by which structures are imported from one or more domains to organise a more elaborate or complex target domain. Only in the blending

⁷⁰ *ibid.*, p 9.

⁷¹ Cumming, *op. cit.*, p 15.

⁷² *ibid.*, p 65-66.

⁷³ Bauer, *op cit.*, p135.

of these two domains does the structure in which digging your own grave causes death emerge. This discordant structure does not interfere with the blend. It does indicate that conceptual blends are not arbitrary and must have considerable concordant structure – in this case activity pursued towards an irreversible goal – to be successful

Their work has extended beyond linguistics to many other disciplines including philosophy and mathematics.⁷⁴ Zbikowski has applied Facounnier and Turner's model to music, particularly to conceptual integration between text and song.⁷⁵ Amy Bauer has utilised it to analyse the combination of Ligeti's metaphors in his commentary on *Lontano*.⁷⁶ However, Bauer does not provide any blending of the metaphors with the music. As a result, it is not clear how an emergent structure is formed between the music and the text. Additionally, she combines her conceptual blend diagrams with features of Lakoff and Johnson's conceptual metaphors; despite stating that each of the input spaces combines to form an emergent structure, she treats one of her input spaces as a source domain and the other as a target domain thus projecting a unidirectional mapping from one space to another, rather than a blending of the two spaces to form an emergent structure.

Nevertheless, this is far more useful model for analysing Adès's programmatic commentaries as he tends to form extended metaphors that draw on many source domains creating network possible interpretations. Adès's metaphors do not transfer concepts from one area to another; they import structure from a natural domain to the artificial realm of new music. In the case of *Polaris*, if the pitches can be mapped onto stars, then the movement of these pitches could correspond to circular movements.

⁷⁴ See for instance Lakoff and Nunez, *Where Mathematics Comes From* (New York: Basic Books, 2000).

⁷⁵ Zbikowski, op. cit.

⁷⁶ Bauer, op. cit.

Similarly, the relationship between these pitches could be understood in terms of a gravitational relationship. Consequently, Adès's programmatic commentaries enable a particular reading of a piece and act as another layer to be interpreted. One does not need to be aware of the commentary to be able to interact with his music on some level, but as Helen Cao points out with Adès's use of allusions, being aware of his commentary adds a further critical dimension to the work.

Since Adès's metaphors cross several types of media including images, video, programme notes and interview extracts it would be worth briefly examining how metaphor might function these different types of medium. Heffernan states that In order for a visual metaphor to function it must simultaneously signify two different things for the eye or make us feel that we are suppressing one meaning for the sake of another.⁷⁷ Heffernan finds two examples of truly pictorial metaphors: graphic hybrids in which two heterogeneous forms are combined into one form one example.⁷⁸ For instance, the caricature of Churchill with the body of a bulldog is a metaphorical statement of Churchill as a bulldog. The second, more subtle kind of pictorial metaphor, is 'a homogenous image which realistically represents the whole of one object yet does so in such a way as to elicit visual resemblance to another.' Heffernan cites Constable's *Brighton – Stormy Evening* as an example of this second type in which a thick band of white across the centre of the image can be simultaneously thought to represent both the surf and the clouds.⁷⁹ These he distinguishes from visual metaphors which rely on their titles as 'it is obvious that a title can be used to declare any picture metaphorical.' I would argue that it is in the combination with Adès's titles and commentaries that the images and videos in Adès's work acquire their

⁷⁷ James Heffernan, 'Resemblance, Signification and Metaphor in the Visual Arts', *The Journal of Aesthetics and Art Criticism* Vol. 44 no. 2 (Winter, 1985), pp. 171-80, p 175.

⁷⁸ *ibid.* p 175.

⁷⁹ *ibid.* p 176.

metaphorical meaning. For instance, in the painting *Moonlight on the Adirondacks*, discussed below, we are encouraged to view a circular body, which is almost certainly as a depiction of the moon, as a representation of the pole star due to Adès's title 'Polaris' (see Image One below, p 28). It is this title that enables this image to signify two things at once.

A number of interview extracts are examined within this thesis in which Adès constructs several elaborate metaphors for processes within his pieces.⁸⁰ It has been noted that the use of metaphor in interview describing life events is commonplace. In particular, metaphors centred around entrapment and momentum are used frequently in clinical interviews centring on patient histories.⁸¹ These metaphors serve as a way of seeing their own lives, and more importantly, patients often acted within the boundaries established by these metaphors. Similarly, we might consider the metaphors that Adès used within the context of his interview with Tom Service as representative of the way he conceives of his pieces, and the compositional processes that gave rise to them.

The following chapters shall focus on two case studies in detail, examining how Adès's programmatic discourse contribute to a reading of the work. The first of my case studies considers the relationship between Adès's discourse and the pitch processes within *Polaris*.⁸² Making use of a variety of analytical frameworks, I shall present an analysis that takes Adès's descriptions as a starting point and shows how the concepts introduced in his commentary, particularly magnetism and the lodestar, can inform an analysis of the pitch processes in the work. I will then focus on

⁸⁰ Service, op. cit. p ix.

⁸¹ Trudy Mallinson, Gary Kielhofner & Cheryl Mattingly, 'Metaphor and Meaning in a Clinical Interview', *American Journal of Occupational Therapy*, May 1996, Vol. 50, 338-346, p 344

⁸² Thomas Adès, *Polaris* (London; Faber and Faber, 2010) A recording of the UK premiere of the work is available to download here <http://5against4.com/2012/02/17/thomas-ades-polaris-uk-premiere/#more-1417> (accessed 26/06/2013).

elements of its formal structure that depart from Adès's writings. In so doing, it will be clear that Adès's discourse is responsible for shaping a reading of the pitch processes in the work, rather than reproducing them. The second seeks to examine the music and the discourse of *Living Toys*. As well as shaping a reading of the work, Adès's commentary draws in a number of different elements that facilitates a critical engagement with musical analytical discourse.

POLARIS

In *Polaris*, Adès's commentary develops several metaphors that can be blended with the pitch organisation of the work in order to form an emergent structure that conceptualises the music in terms of Adès's metaphors. Here are a few typical examples of Adès's accounts of *Polaris* drawn from a variety of forums including CD-liner notes and interviews:

1) *Polaris* explores the use of star constellations for naval navigation and the emotional navigation between the absent sailors and what they leave behind. ... [The Brass] melody, like all the music in this work, is derived from a magnetic series, a musical device heard here for the first time, in which all 12 notes are gradually presented, but persistently return to an anchoring pitch, as if magnetized [sic]. With the first appearance of the twelfth note, marked clearly with the first entrance of the timpani, the poles are reversed. At the start of the third and final section, a third pole is discovered, which establishes a stable equilibrium with the first.⁸³

2) The title refers to the pole star, which traditionally was seen as the fixed point in the sky for purposes of navigation. And I wanted to write a piece which revolves around essentially one note in a way, ... I actually used a thing I call magnetic series, which is simply a series of twelve notes, but in which you return all the time to the first and then to the second and then to the third and they actually have a magnetic property ... rather than tonal [sic] it's a question of relative magnetism of intervals.⁸⁴

3) But *Polaris* for example, is very simple, it's a much simpler structure than *Tevot* and it does have a beginning, middle and an end, clearly functioning as those three things. And yet *Polaris* ends with a complete splaying, an explosion of its material.⁸⁵

4) That's really what one is dealing with all the time, magnetism: understanding the magnetic pull of the notes put in a given disposition, their shifting relative weights... I think the only way to understand these things is that they are the result of magnetic forces within the notes, which create a magnetic tension, an attraction or repulsion. The two notes in an interval, or

⁸³ Alan Gilbert, *Thomas Adès, Mahler* Digital Booklet (New York Philharmonic, NYP 20120104, 2011), p 9.

⁸⁴ Adès interview with BBC Radio 3 28/01/2010 available to download here <http://5against4.com/2012/02/17/thomas-ades-polaris-uk-premiere/#more-1417> (accessed 26/06/2013).

⁸⁵ Service, op. cit., p.173.

any number of chords, have a magnetic relationship of attraction or repulsion which creates movement in one direction or another. A composer, whether of a symphony or a pop song, is arranging these magnetic objects in a certain disposition. That means that sometimes, in order to understand the weight of one note and the next note to it, you might have to transfer meaning from one to another. In *Polaris*, I had to transfer meaning from the C-Sharp to the A in order to do that...⁸⁶

Throughout the passages there are four central metaphors that are supported by a number of entailing metaphors.⁸⁷ Erecting these separate conceptual blends enriches the music, indeed these multiple mappings would be more directly understood than models that draw from only one source domain.⁸⁸ These metaphors project different imagery upon the piece. The first of these metaphors is ‘POLARIS IS A JOURNEY’ which is manifest in the subtitle, ‘a voyage for orchestra’ and Adès’s descriptions that allude to navigation (passages 1 & 2) and exploration (passage 1). The second metaphor is more complicated, stating that ‘POLARIS IS A SPACE’ that contains pitches which form circular arrangements around a central note. Also arising from these passages is the metaphor ‘PITCHES ARE STARS’ which originates in the work’s title and the reference to constellations throughout Adès’s commentary (especially passage 1 & 2). Finally, Adès states that ‘PITCHES ARE OBJECTS WITH MAGNETIC PROPERTIES’ resulting in differing levels of magnetic tension in various pitch class intervals (passages 2&4). His descriptions form a rich structure in their own right that set up intriguing possibilities when paired with the music.

These metaphors are supported by other media distributed with *Polaris*.⁸⁹ For instance, the cover image of the score features the painting *Moonlight in the*

⁸⁶ *ibid.*, p. 3.

⁸⁷ There are other metaphors in these passages as well. Most notably, *Polaris* is an agent and *Polaris* is a piece of serial music. However, these are not developed as much as the two central metaphors.

⁸⁸ Bauer, *op. cit.* p 139.

⁸⁹ My primary concern in this essay is the relationship between Adès’s discourse and the pitch structure of *Polaris*. As a result the accompanying video element of the work is not explored in depth in this essay.

Adirondacks by Rockwell Kent, which features a large celestial body (the implication being that this is a representation of the polestar, though given the painting's title, it is certainly the moon) ringed by concentric circles (see Image One).⁹⁰ Additionally, the Australian Broadcasting Company recordings of the work are distributed with covers that show a star surrounded by wispy spiral formations (see Image Two), and a time-lapse photo centred on Polaris (see Image Three) that shows the star trails that (due to the rotation of the Earth) trace a number of concentric circles around the pole star. Furthermore, the video⁹¹ designed to accompany the performance of *Polaris* consists of circular windows moving in circular orbits that reveal a video image of two women on a rocky coastal landscape looking out to sea. These images change in a manner that corroborates with the structural divisions of the piece. For instance, at the moment where Adès says the poles are reversed (passage one) the imagery becomes more abstract, dramatically changing to many smaller white circles moving in quicker circular orbits against a black background. Once the music settles down, the imagery returns to the transparent circles which move in circular orbits and reveal the same coastal landscape as before. The video and the cover image reinforce both the 'PITCHES ARE STARS' metaphor, and the '*POLARIS IS A JOURNEY*' metaphor that Adès elaborates in his commentaries.

⁹⁰ Adès, *Polaris* score (London: Faber and Faber 2012).

⁹¹ A short extract of the video is available online at <https://www.facebook.com/video/video.php?v=717702810705> (accessed 01/06/13).



IMAGE ONE⁹²

Rockwell Kent's *Moonlight on the Adirondacks*, cover image on the score of *Polaris*

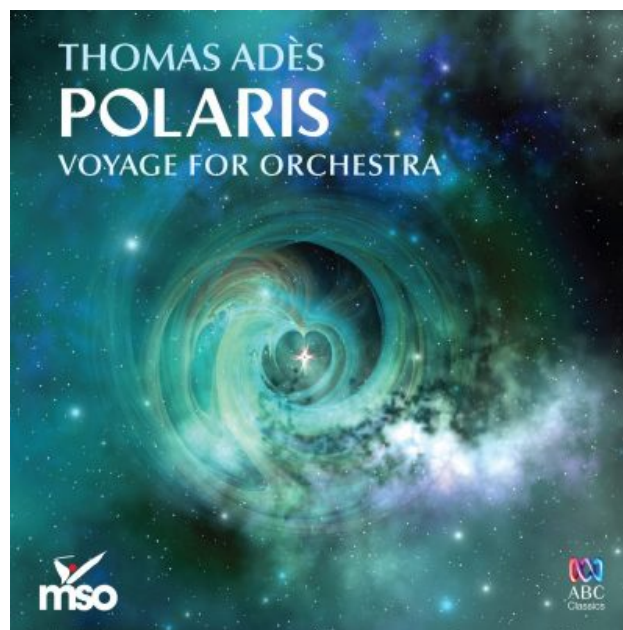


IMAGE TWO⁹³

Cd Cover image on the Australian Broadcasting recording of the work.

⁹² Thomas Adès, *Polaris* (London: Faber and Faber 2012).

⁹³ CD cover image made available here: <https://abcmusic-production-au.s3-ap-southeast-2.amazonaws.com/s3fs-public/Polaris.jpg> (accessed 29/01/2016)



IMAGE THREE⁹⁴

CD cover for a live recording of *Polaris* by the Melbourne Symphony Orchestra featuring a time-lapse photo centred on Polaris

In the following section I provide a reading of *Polaris* that suggests how structures in the commentary map onto the musical work. I will be drawing upon several analytical methodologies within this section that can inform some of the conceptual blends suggested between the music and the texts. In addition, I will look at aspects of the music that resist Adès's commentary, thus demonstrating that Adès shapes, rather than reproduces, the pitch structure of the work in his writings.

⁹⁴ CD cover image made available here: http://i.prs.to/t_200/28948108626.jpg (Accessed 29/01/2016)

ANALYSIS

Polaris can be broadly divided into three principal sections and a coda (see table one). Each principal section is based around a single central pitch against which the rest of the pitch material is situated symmetrically. Two inversionally related melodic lines stem from the central pitch and move in opposite directions which initially state pentatonic collections before becoming more chromatic. They are built up gradually, consistently returning to the starting note before each new pitch class is revealed. These melodic lines are the same in each section though transposed to have different starting points. The chromatic aggregate is completed over the course of each section deployed in a symmetrical pitch field formed by these unfurling inversionally related melodic lines. The coda is structured differently; an ascending melodic line is stated in the strings but is frequently interrupted by a chromatic chord. It is also far more chromatic in pitch structure. This section culminates in a symmetrical aggregate chord that is framed by pitch class A.

TABLE ONE

Polaris Structure			
Section	Fig.	Pitch Centre	Pentatonic Scale
I	A	C#	C# and A Pentatonic
II	H	G	G Pentatonic and E-flat Pentatonic
	N	G	G pentatonic. Return of the opening brass melody transposed up a tritone.
III	O	A	A Pentatonic
	Q	C#/A	A Pentatonic. Ascending melodic line centred around A. Descending melodic line centred around C#. Complement Eb and F.
	T	A	A and F pentatonic. Ascending melodic line in A pentatonic, descending melodic line in F pentatonic. Complement: Eb
Coda	U	A	A pentatonic interspersed with Chromatic chords.

The opening section begins with a descending melodic line focussed on C#5 and based on an A major pentatonic scale stated in the second violins. An embellished version of this line also appears in the piano part. The descending melodic line travels down to A4 before returning to the initial C#5 at the outset of bar 3. It then reaches the F#4 in bar 5 before returning again to C#5 in bar 6. This process continues, gradually accumulating new pitch classes until bar 13 where a D4 is reached. At figure B⁹⁵ the descending melodic line begins again, collecting the same pitch classes until it reaches a C4 in bar 28. At figure C the process is repeated once more in the piano, this time reaching Bb3, the lowest pitch thus far.

The ascending melodic line begins at figure C in the trumpets and strings. This is also centred around C#5, but is constructed from a C# pentatonic scale and is stated in far longer note values, but accumulates pitches in the same manner as the descending melodic line. The ascending melodic line is an exact inversion of the pitches of the descending melodic line around C#5. D#5 is reached in bar 32 before returning to C#5 in bar 36. E#5 is then stated in the following bar before the line proceeds to collect pitches in the same manner as the descending melodic line, reaching G#5 in bar 44 and A#5 in bar 52 before returning to C#5 at bar 65. This process is then restated in the horns at figure D, the trombones at Figure E and in a lower register in the horns at figure F. As a result, an inversionally symmetrical structure is built up over the course of the first section that accumulates pitches until it completes the chromatic aggregate (see Music Example One).⁹⁶

⁹⁵ The figures in this passage refer to figures in the score rather than Figures (ie examples) in the thesis.

⁹⁶ Pitches that would appear had the pattern been continued appear under the 'projected' bracket in the example.



MUSIC EXAMPLE ONE – Pitch Content in *Polaris* figs. A – G

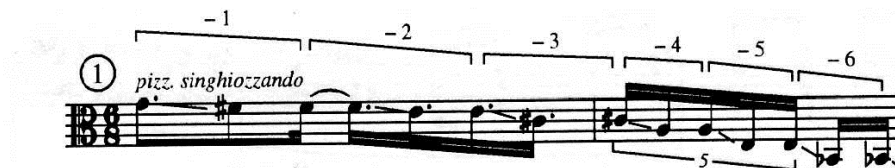
Examining the opening section of the work in relation to Adès’s descriptions we can see that the pitch material can indeed be described in terms of circular constructions on a number of levels. If we treat the *C#5* as a centre point in this section we can view the process of travelling increasing distances away from the central pitch in the accumulation of new pitches as tracing a series of concentric circles around the centre pitch (see Figure Four p. 21). Similarly these gradually expanding concentric circles are evident on a structural level: in repeating this pitch process three times at figure A, B and C a set of larger concentric circles is formed. Finally, these circular constructions are evident on a local level. The decorative melodic line in the piano portrays these circular constructions on a local level (See Music Example Two) in its persistent circling around *C#5*.

Descending melodic line decorated in the piano

The musical score consists of four staves of music. The first staff is labeled with a box containing the letter 'B'. It begins with a treble clef, a key signature of one sharp (F#), and a 6/8 time signature. The melody is a descending line of eighth notes: C#5, B4, A4, G4, F#4, E4, D4, C#4, B3, A3, G3, F#3, E3, D3, C#3, B2, A2, G2, F#2, E2, D2, C#2, B1, A1, G1, F#1, E1, D1, C#1, B0, A0, G0, F#0, E0, D0, C#0, B-1, A-1, G-1, F#-1, E-1, D-1, C#-1, B-2, A-2, G-2, F#-2, E-2, D-2, C#-2, B-3, A-3, G-3, F#-3, E-3, D-3, C#-3, B-4, A-4, G-4, F#-4, E-4, D-4, C#-4, B-5, A-5, G-5, F#-5, E-5, D-5, C#-5, B-6, A-6, G-6, F#-6, E-6, D-6, C#-6, B-7, A-7, G-7, F#-7, E-7, D-7, C#-7, B-8, A-8, G-8, F#-8, E-8, D-8, C#-8, B-9, A-9, G-9, F#-9, E-9, D-9, C#-9, B-10, A-10, G-10, F#-10, E-10, D-10, C#-10, B-11, A-11, G-11, F#-11, E-11, D-11, C#-11, B-12, A-12, G-12, F#-12, E-12, D-12, C#-12, B-13, A-13, G-13, F#-13, E-13, D-13, C#-13, B-14, A-14, G-14, F#-14, E-14, D-14, C#-14, B-15, A-15, G-15, F#-15, E-15, D-15, C#-15, B-16, A-16, G-16, F#-16, E-16, D-16, C#-16, B-17, A-17, G-17, F#-17, E-17, D-17, C#-17, B-18, A-18, G-18, F#-18, E-18, D-18, C#-18, B-19, A-19, G-19, F#-19, E-19, D-19, C#-19, B-20, A-20, G-20, F#-20, E-20, D-20, C#-20, B-21, A-21, G-21, F#-21, E-21, D-21, C#-21, B-22, A-22, G-22, F#-22, E-22, D-22, C#-22, B-23, A-23, G-23, F#-23, E-23, D-23, C#-23, B-24, A-24, G-24, F#-24, E-24, D-24, C#-24, B-25, A-25, G-25, F#-25, E-25, D-25, C#-25, B-26, A-26, G-26, F#-26, E-26, D-26, C#-26, B-27, A-27, G-27, F#-27, E-27, D-27, C#-27, B-28, A-28, G-28, F#-28, E-28, D-28, C#-28, B-29, A-29, G-29, F#-29, E-29, D-29, C#-29, B-30, A-30, G-30, F#-30, E-30, D-30, C#-30, B-31, A-31, G-31, F#-31, E-31, D-31, C#-31, B-32, A-32, G-32, F#-32, E-32, D-32, C#-32, B-33, A-33, G-33, F#-33, E-33, D-33, C#-33, B-34, A-34, G-34, F#-34, E-34, D-34, C#-34, B-35, A-35, G-35, F#-35, E-35, D-35, C#-35, B-36, A-36, G-36, F#-36, E-36, D-36, C#-36, B-37, A-37, G-37, F#-37, E-37, D-37, C#-37, B-38, A-38, G-38, F#-38, E-38, D-38, C#-38, B-39, A-39, G-39, F#-39, E-39, D-39, C#-39, B-40, A-40, G-40, F#-40, E-40, D-40, C#-40, B-41, A-41, G-41, F#-41, E-41, D-41, C#-41, B-42, A-42, G-42, F#-42, E-42, D-42, C#-42, B-43, 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G-266, F#-266, E-266, D-266, C#-266, B-267, A-267, G-267, F#-267, E-267, D-267, C#-267, B-268, A-268, G-268, F#-268, E-268, D-268, C#-268, B-269, A-269, G-269, F#-269, E-269, D-269, C#-269, B-270, A-270, G-270, F#-270, E-270, D-270, C#-270, B-271, A-271, G-271, F#-271, E-271, D-271, C#-271, B-272, A-272, G-272, F#-272, E-272, D-272, C#-272, B-273, A-273, G-273, F#-273, E-273, D-273, C#-273, B-274, A-274, G-274, F#-274, E-274, D-274, C#-274, B-275, A-275, G-275, F#-275, E-275, D-275, C#-275, B-276, A-276, G-276, F#-276, E-276, D-276, C#-276, B-277, A-277, G-277, F#-277, E-277, D-277, C#-277, B-278, A-278, G-278, F#-278, E-278, D-278, C#-278, B-279, A-279, G-279, F#-279, E-279, D-279, C#-279, B-280, A-280, G-280, F#-280, E-280, D-280, C#-280, B-281, A-281, G-281, F#-281, E-281, D-281, C#-281, B-282, A-282, G-282, F#-282, E-282, D-282, C#-282, B-283, A-283, G-283, F#-283, E-283, D-283, C#-283, B-284, A-284, G-284, F#-284, E-284, D-284, C#-284, B-285, A-285, G-285, F#-285, E-285, D-285, C#-285, B-286, A-286, G-286, F#-286, E-286, D-286, C#-286, B-287, A-287, G-287, F#-287, E-287, D-287, C#-287, B-288, A-288, G-288, F#-288, E-288, D-288, C#-288, B-289, A-289, G-289, F#-289, E-289, D-289, C#-289, B-290, A-290, G-290, F#-290, E-290, D-290, C#-290, B-291, A-291, G-291, F#-291, E-291, D-291, C#-291, B-292, A-292, G-292, F#-292, E-292, D-292, C#-292, B-29

the tonic appears, continuity is perceived between it and the preparatory pitch.⁹⁷

These continuities manifest themselves in Adès's music in sequences of successive pitches or in more abstract projections and realisations of duration. Thus a pitch or rhythmic pattern can be set up and realised, and then events could be brought in early or late in the 'wrong' register. Roeder cites several examples from Adès's oeuvre, including a passage from the third movement of *Arcadiana* (see Music Example Three)

The image shows a musical staff with a treble clef and a key signature of one sharp (F#). The time signature is 4/8. The notation begins with a circled '1' and the instruction 'pizz. singhiozzando'. There are six notes in the sequence, each connected to the next by a bracket. Above each bracket is a number: -1, -2, -3, -4, -5, and -6. A fifth bracket is shown below the staff, spanning the last two notes, with the number 5 below it.

MUSIC EXAMPLE THREE

Adès Arcadiana, Viola bars 1-2 as reproduced by John Roeder.

The numbers above the brackets above refer to the interval classes between successive pitches. These interval classes grow regularly as the extract progresses.

These patterns can also be undermined: describing a chord progression in *Living Toys*, Roeder shows that the chord sequence is constructed from three streams of regularly decreasing intervals that are undermined in the final chord as the middle voice moves up a perfect fourth instead of down a semitone and the projected pitch in the lowest voice is displaced up an octave (see Music Example Four).⁹⁸ The perceived projection has been altered, undermining the expectations of the listener. Furthermore, the presence of a projected pattern is paradoxically reinforced by it being undermined; there would not be a sense of dissatisfaction if a pattern did not exist in the first place.

⁹⁷ John Roeder, 'Cooperating Continuities in the Music of Thomas Adès', *Music Analysis* 25 i/ii (2006) pp 121-154 at p 122.

⁹⁸ *ibid.*, 130.



MUSIC EXAMPLE FOUR
Living Toys reduction of bars 541-2

This study provides a useful framework to describe the melodic motion in *Polaris* in relation to the concept of pitch magnetism as described by Adès. A sense of expectation is formed at the outset of each melodic line in that it will descend to a new pitch before returning to the focal pitch. For instance, the piano at the outset of the first section sets up a continuity as the melodic line descends down to a projected new pitch. Though, this projected pitch is not specific, the melodic line's consistent descent and the exclusive use of ordered interval classes 2 and 3 reduces the number of possible pitches to two. For instance, after the E4 in the piano in bar 12 the next projected pitch could be either a D4 or a C#4 (but we end up on D4).

Another continuity is set up on the return ascent to the centre pitch; a sense of expectation is set up for the centre pitch's return via the pitches that have been stated during the descent. This continuity is stronger as there is no doubt as to which pitch we are expecting to land on. In the first section, we expect to land on C#5 at the culmination of every ascent of the descending melodic line. Likewise, we expect to land on C#5 at the culmination of every descent of the ascending melodic line.

This pattern is also undermined for dramatic effect. At figure G the ascending melodic line in the trumpets reaches A#5 before beginning a descent down towards the focal pitch C#5. Two bars before Figure H the trumpet states an E#5 and D#5 at

fff which prepares our expectations for C#5. However, instead of the projected C#5 we get a G5, a pitch class that we have yet to hear within the movement thus far.⁹⁹ This pattern disruption is reinforced by the fact that the new pitch lies a major third (IC4) away (an interval class that is not characteristic of each melodic line) from the previous pitch and the melodic line ascends, rather than descends, at this point. G5 lies a tritone away from the projected pitch, (as far away as possible in interval class space) thus providing a maximum contrast. Furthermore, the return ascent of the descending melodic line descends down to G3 and G4 at this point counter to expectations. This descent is also by a major third (IC4), which is atypical of the descending melodic line. Additionally, the texture at this point changes; a bustling texture characterised by rapid semiquaver movement appears for the first time in the piece, setting up a contrast with the relatively relaxed texture of the opening.

This moment is described by Adès as the point at which “the poles are reversed.” At this point the focal pitch class becomes G (the ‘destination’ pitch class of the previous section) and the final pitch class C#, (which was the centre pitch of the previous section, see Music Example Five). It is therefore possible to describe this process as a reversal of the roles of these two pitch classes. At this point the process begins again: two melodic lines project out from a central G5 based initially around G pentatonic and E^b pentatonic before becoming more chromatic. The brass, who previously stated an ascending melodic line, now state a descending melodic line, whilst the piano and the percussion state an ascending melodic line as opposed to a descending melodic line in the opening section.

⁹⁹ Though C# is heard in the trombones, bassoons and oboes at this point, these pitches are part of subsidiary melodic lines and therefore are not part of the continuity being formed in the trumpet line.

MUSIC EXAMPLE FIVE

***Polaris* pitch content Fig. H – O (sounds one octave higher)
 The focal pitch of this passage is ‘G’ and we expect to reach C# as the
 passage continues.**

Adès states that in the final section of the piece a third pole is discovered that establishes a stable equilibrium with the first. Once again this maps well onto the music as can be observed at figure O where the music becomes focussed around A4. The music at this point consists of a single ascending melodic line that is based around A major pentatonic. At figure Q a descending melodic line based on C#5 enters. These two melodic lines are both based around A major pentatonic and consequently there is not the same sense of conflict between pentatonic collections that is evident in the previous two sections. They also differ in that they do not project towards a single pitch class. If this process were continued through we would reach an E in both voices, but this note has been stated in both ascending and descending melodic lines previously thus does not complete the chromatic aggregate, as do the ‘destination’ pitches of the previous sections: the complementary set for the collection built up over the course of this section is (F, G)

In sum, a sense of expectation is set up for a return to the focal pitch that maps very well onto the concept of magnetism that Adès describes in the movement. The circular movement between the central pitch and the destination pitches in one direction by restricted intervals to pitches that are by turns further away from the

centre pitch sets up a continuity in Roeder's sense. In this way, a sense of expectation for the return of the focal pitch is set up by the movement to a new pitch. This pattern formation is reinforced by its discernable disruption at Figure H in which a new pitch is substituted for the focal pitch, which undermines our expectation. This moment in the piece is described metaphorically as when "the poles are reversed," which maps onto the pitch processes well in that at this point as the central pitch class becomes G (the destination pitch of the previous section) and the destination pitch class C#, (the centre pitch of the previous section, see Music Example Five). It is therefore possible to describe this process as a literal reversal of the roles of the pitches. At this point the process begins again; two melodic lines based on the construction of the project out from G5 based around G pentatonic and Eb pentatonic.

Adès states that there is a transferral of meaning from C# to A over the course of *Polaris*.¹⁰⁰ We can clearly observe a progression from C# to A in the central pitches of the piece, and A as a pitch centre is reinforced in the coda, imbuing it with a sense of finality. There is some ambiguity as to how 'meaning' could be defined in this context. I have assumed that Adès is speaking of a functional progression in the manner of Hugo Riemann, who referred to modulation as an *Umdeutung* or a 'change in meaning.'¹⁰¹ In this case, Lendvai's theory of tonality in Bartok's music provides a useful lens through which to examine this progression of pitch centres.¹⁰² By means of his theoretical framework, we can begin to discern a functional progression in the central pitches over the course of the work that leads from C# to G to A. Though

¹⁰⁰ Service, op. cit., p 173.

¹⁰¹ Janna Saslaw, 'Forces, Containers and Paths': The role of body derived image schemas in the conceptualization of music', in *Journal of Music Theory* vol. 40 no. 2 (New Haven: Yale University Press, 1996), pp 217-43. 1.

¹⁰² Erno Lendvai, *Bela Bartok: An Analysis of his Music* (London: Kahn and Averill, 1971, reprinted 2011).

Lendvai's theory has been criticised in its application to Bartok's music,¹⁰³ there are several reasons why applying his system of tonality to Adès's music is feasible: first, the language and imagery that Lendvai uses to advocate his theory are similar to that which Adès uses in his writings on *Polaris*; Lendvai uses the term pole and counterpole to designate significant pitches¹⁰⁴ which corresponds to the central pitch and destination pitch in this reading. Furthermore, Lendvai describes the attraction between pitches in terms of magnetism, and he emphasises the pentatonic,¹⁰⁵ symmetrical pitch constructions,¹⁰⁶ and the tritone¹⁰⁷ in his theory, which are equally stressed in *Polaris*. Additionally, Adès has quoted Bartok's music in his own; the fourth movement of *Asyla* incorporates a quotation from *Bluebeard's Castle*.¹⁰⁸ Consequently, applying Lendvai's theory to Adès's music can yield significant results.

The axis system situates Bartok's tonality within the circle of fifths, dividing it into three sets of four roots a minor third apart, each of which have the same function: either tonic, dominant or subdominant (see Figure One).¹⁰⁹ Tones that are related to each other by an interval of a tritone are said to be part of the same branch, thus each of the axes contains two branches which are further categorised as a principal branch or a secondary branch. The pitch classes on the ends of each branch are known as the pole and the counterpole. As a result, the twelve pitch classes of the chromatic scale are each part of a four-note axis (tonic, dominant, or subdominant). Each tone is part of a branch within that axis that is either a principal branch or a secondary branch; and

¹⁰³ Paul Wilson, *The Music of Bela Bartok* (New Haven and London: Yale University Press, 1992) pp 203 – 210.

¹⁰⁴ Lendvai, op. cit., p 4-5.

¹⁰⁵ *ibid.*, p 48,50 and 64.

¹⁰⁶ *ibid.*, p 75.

¹⁰⁷ *ibid.*, 4-5.

¹⁰⁸ Within Lendvai's system C# and A have different functions, whereas in Schenkerian analysis (which the background structure of the piece arguably reflects) C# and A have the same tonic function.

¹⁰⁹ Lendvai op. cit., p 2-3.

each branch consists of a pole and counterpole. Each axes is not to be considered as a diminished seventh chord but rather as four closely related key areas. A further tenet of this theory is the substitutability of key areas on the same axes. Each pole has a strong affinity with its counterpole and a weaker affinity with poles on the secondary branch. Lendvai goes on to state that “a pole is always interchangeable with its counterpole without any change in function.”¹¹⁰ Therefore, in Figure One below, the A and the D# are equivalent in function due to their pole/counterpole relationship.

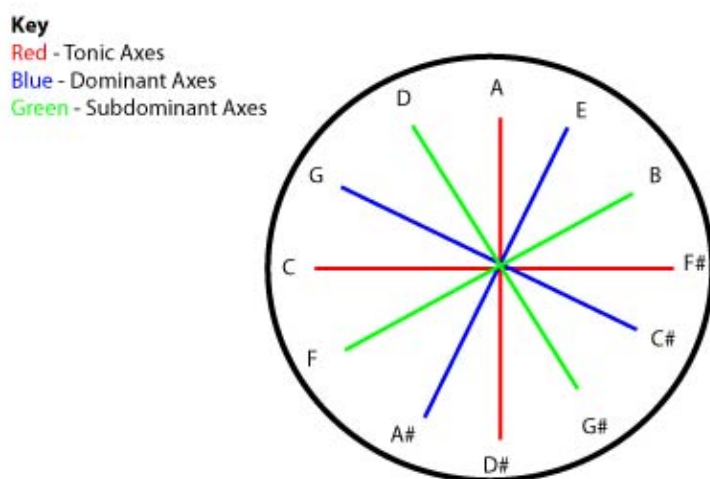


FIGURE ONE – Lendvai’s Axis Theory of Tonality

In a piece centred on A, as I argue that *Polaris* is, the pitch classes A, C, E^b and F# form the tonic axes; E, G, A# and C# comprise the dominant axes; and D, G#, B and F function as the subdominant axes (see Figure One). Therefore, within this framework, the C# and G poles both have a dominant function, and the A pole has a tonic function. As a result, the pitch structure of the work can be viewed as an extended perfect cadence, moving from the pole to the counterpole of the secondary branch of the dominant axes before landing on the principal branch of the tonic axis.

¹¹⁰ Lendvai, op. cit., p 4.

Since, as stated above, a pole is interchangeable with its counterpole without any change in function, this move from C# to G effectively sustains a ‘dominant’ function¹¹¹ throughout this passage. In this way we can observe an extended V-I cadence in the deep structure of the work (see Figure Two). Furthermore, a sense of functional ambiguity is evident at the opening of the work. It is only when the A pole is reached in the third section, that the dominant function of the first two poles is revealed. Until this point, C# and G might be considered part of the tonic axis.

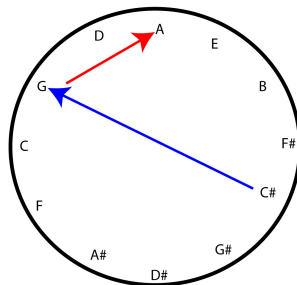


FIGURE TWO – *Polaris*, Deep Pitch Structure

The is a movement from C# to G to A which corresponds to a dominant tonic progressions within Lendvai’s theory.

There are however several apparent problems in applying Lendvai’s theory to *Polaris*. First, the C# and A poles appear simultaneously in the third section of the piece despite their different functions. Secondly, the move from C# to G from the first to the second section is treated with a sense of significance despite their identical functions within the system.¹¹² However, upon closer examination these two issues can be explained within the theoretical framework. First, the appearance of the C# and A poles together could be considered a manifestation of Lendvai’s alpha chord;

¹¹¹ By function here, I mean harmonic function within Lendvai’s theory of pitch organization in Bartok’s music. This theory is at odds with common usage. For instance, in the progression Bb – E – A, the Bb would typically be identified as a Neapolitan chord (flat IIb), whilst in Lendvai’s system the Bb and the E in the progression would both be treated as having a dominant function.

¹¹² This is also the main criticism the axis system receives (Wilson op. cit. p 50. and Ivan F. Walderbauer, ‘Analytical Responses to Bartok’s Music: Pitch Organisation’ in *the Cambridge Companion to Bartok*, (Cambridge: Cambridge University Press: 2011) pp. 215 – 230 p 218.), key centres a tritone away in Bartok’s music from each other often have a dominant-tonic relationship.

Lendvai argues that a harmonic function is most effective when combined with the pitches of its own dominant. A radical application of this precept is the statement of all the pitches in the tonic axis against all the pitches in its dominant axis to construct, what Lendvai calls, the alpha chord.¹¹³ Lendvai cites examples of this chord occurring in Bartok's *Music for Strings Percussion and Celesta* and the *Sonata for Two Pianos and Percussion*.¹¹⁴ The statement of the C# pole against part of the A pole can be understood in these terms, as a combination of tonic and dominant pitch collections analogous to Lendvai's alpha chord. Second, though a sense of arrival is created between the first and second section of the work, the distinction is undermined by the same treatment of the C# and G poles. Both sections have the same pitch structure and they both expand gradually through the section eventually culminating in a dense texture dominated by triplets in the woodwind and strings at Figures G and N respectively. This identical function is reinforced by the video imagery that accompanies the work. Though the video does become abstract at Figure H, where the G pole is introduced, this change is short lived and the imagery quickly returns to the coastal landscape that appeared alongside the music which elaborated the C# pole.¹¹⁵ Due to their identical structure and identical treatment, they could be considered equivalent in 'function'.

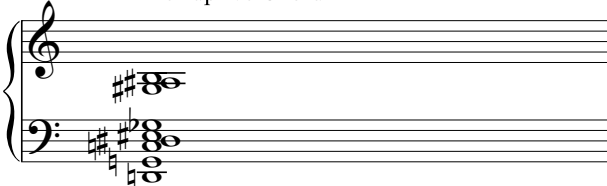
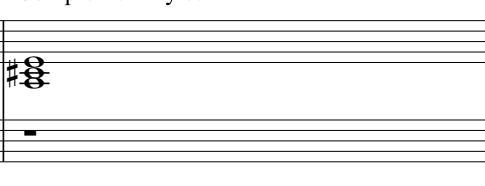
Adès refers to the coda as "a complete splaying, an explosion of its material." This aligns well with the pitch material in the coda in that it relies on an apparently completely different language to main body of the movement. At figure U, a statement of the ascending melodic line is found in the violins. Each iteration of the line is terminated by an 'A' unison over the entire orchestra and is punctuated by a

¹¹³ Wilson, op. cit., p 220.

¹¹⁴ Lendvai, op. cit., p 44-45.

¹¹⁵ <https://www.facebook.com/video/video.php?v=717702810705> (accessed 01/06/13).

chromatic chord, that accumulates pitches on each statement until it comprise of nine pitch classes. The complementary set of this nine-note chord is an A major triad (see Music Example Six). As a result, A major is being emphasised by its very absence.¹¹⁶¹¹⁷ This process culminates in the final sonority of the work, a twelve-tone chord that deploys the aggregate in a quasi-symmetrical manner, framed by A in the extreme upper and lower register as well as towards the centre of the chord. The pitch class A is stated five times within the chord and is the only pitch class stated with enough registral separation to be readily audible: the other pitch classes are stated in a closed, cluster-like formation that prevents any of them from being emphasised in a similar manner (see Music Example Seven). Consequently, ‘A’ is reinforced within this section using drastically different means.

Interruptive Chord	Complementary set
	

MUSIC EXAMPLE SIX
Reduction of Orchestral Chord at figure U and its complement.

¹¹⁶ Allen Forte treats a set and its complement as equivalent. “A set may be represented by its larger complement (and the reverse, of course)” Allen Forte *The Harmonic Organization of The Rite of Spring* (New Haven and London: Yale University Press, 1978) p 23.

¹¹⁷ A similar procedure is found in *Usk*, the third song from *Five Eliot Landscapes* where the opening melodic line is stated through the release of pitches rather than their sounding, in a manner similar to Kurtag’s *Kafke Fragments* or Schumann’s *Papillons*. See Markou, Stella Ioanna. *A Poetic Synthesis and Theoretical Analysis of Thomas Adès’s Five Eliot Landscapes*. (DMA Diss. University of Arizona, 2010) p 49.



Examining the music alongside Adès's writings can provide an illuminating and convincing reading of the piece. These dissections of the work represent more than a couple of hearings of *Polaris*; Adès's metaphors enrich our experience of the work. It is possible that an analyst could have imposed this circular parsing of the pitch material without the accompanying commentary.

MUSIC EXAMPLE SEVEN

Reduction of the aggregate chord

at the end of *Polaris*.

Nevertheless, it is significant that Adès suggests this reading through his title and his descriptions of the work. Figure Three consists of a Conceptual Integration Network (CIN) that illustrates the relationship between the text and the music discussed above. It consists of four spaces: a generic space, two input spaces, and a blended space. The double-headed arrows between elements in the input spaces indicate correlations. Guiding the process of mapping between the two input spaces is the generic space, which defines the topography for the CIN.¹¹⁸ This space contains contextual information such as *Polaris* is a piece of western art music and general information concerning stars, constellations, the lodestar, magnetism and navigation. Guided by the generic space, the two input spaces project their contents into the blended space, combining elements of the pitch material with the concepts in the text to produce 'conceptual blends' such as 'pitches have magnetic properties' in the piece. This blended space shapes our expectations of the piece. For instance,

¹¹⁸ Zbikowski, op. cit., p 79.

recruiting elements from both input spaces we might conceptualise the pitch structure of each melodic line in terms of a spiral or a series of concentric circles around a centre pitch (See Figure Four). Additionally, responding to Adès's comments concerning magnetism and the work's gradually unfolding symmetrical pitch structure, we might be prompted to conceptualise the pitch material as a tracing magnetic field lines around a centric pitch (as in Figure Five). Furthermore, this conceptual blend encourages us to elaborate upon the blend drawing upon common knowledge concerning stars and magnetism perhaps creating a narrative based around navigating a treacherous sea journey throughout the piece.

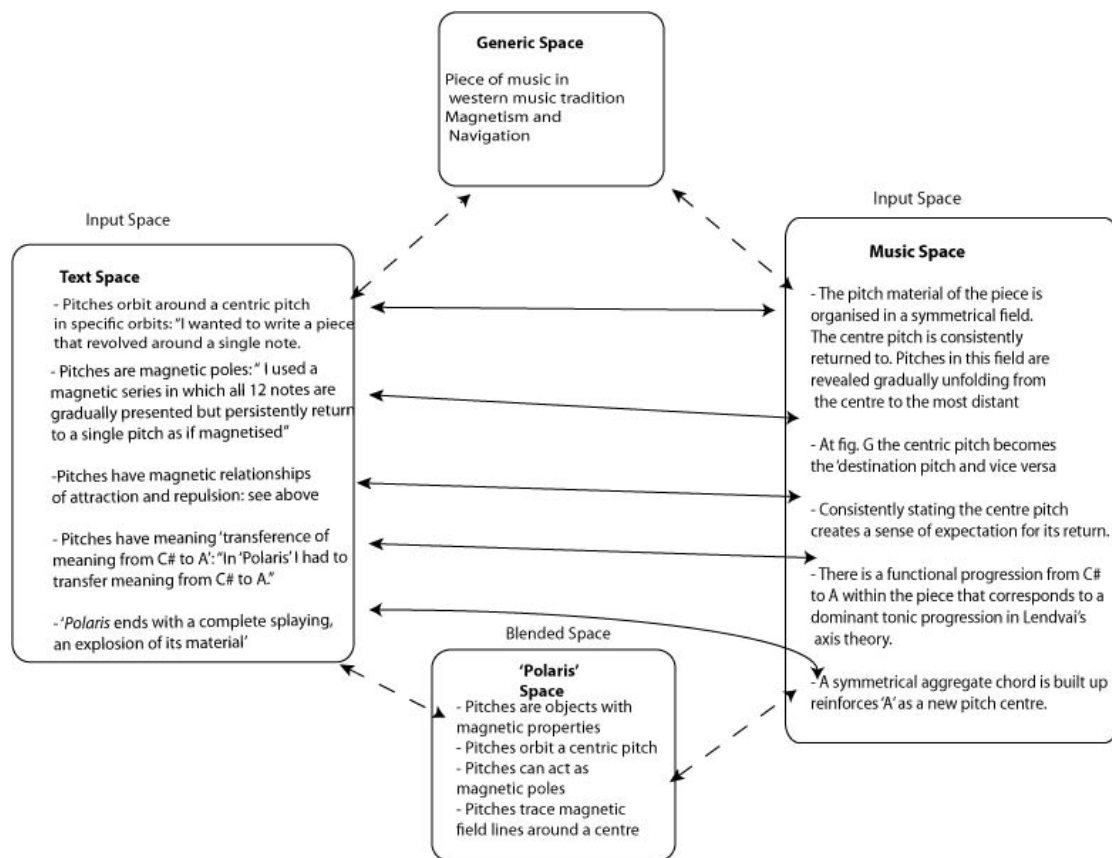


FIGURE THREE – Conceptual Blend Diagram for *Polaris*

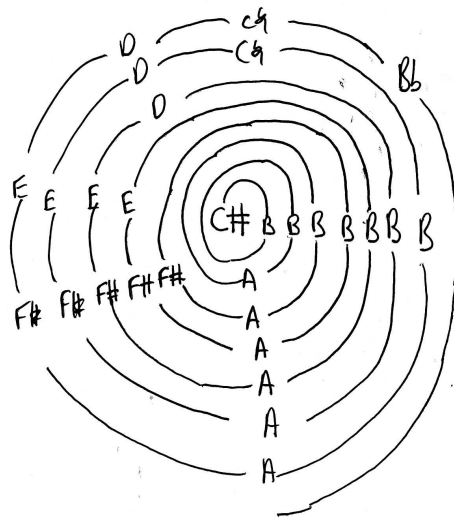


FIGURE FOUR
Pitch structure of descending melodic line conceptualised as a spiral.

Polaris Pitch Structure - Magnetic Field

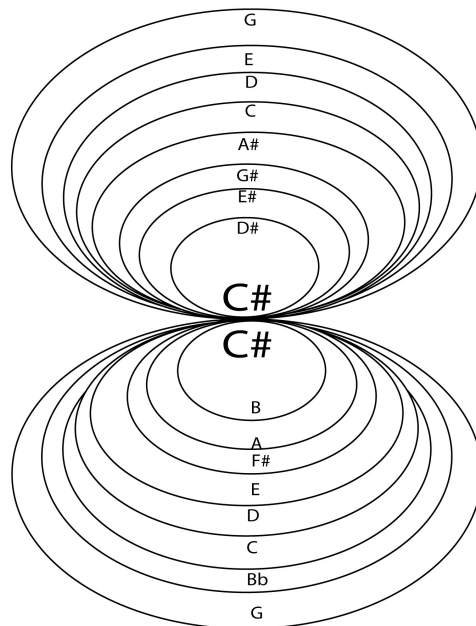


FIGURE FIVE
Polaris pitch structure, conceptualised as a magnetic field.

This conceptual blend highlights a number of features whilst obstructing others. For instance, strict inversion, a significant process within the work, does not feature in his descriptions. Rather, Adès's commentary implies a linear unfolding of

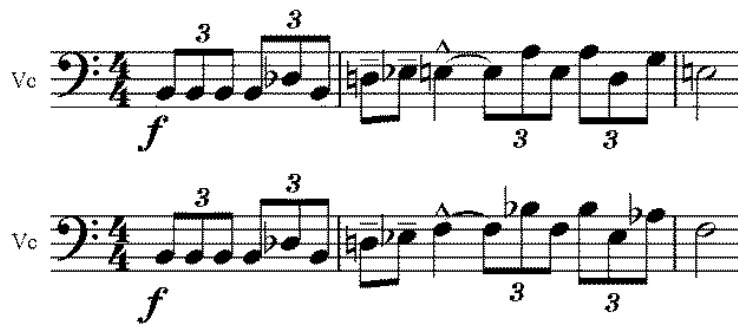
diminished octave away from where we would expect them in a typical Schenkerian *ursatz* (see Music Example Nine). The anomalies can be naturalised if we approach the pitch structure with the work of another Bartok theorist in mind. Karparti's theory of mistuning in Bartok's music demonstrates how the opening line of his fifth string quartet can be understood as a distorted version of an imaginary theme.¹¹⁹ Specifically he hears the second half of the theme a semitone lower than expected producing a tritone relationship instead of a perfect fifth (See Music Example Ten). Looking at the deep structure graph we can observe a tritone relationship between the A and Eb, that would be a tonic dominant relationship in a typical Schenkerian background structure. The G (instead of the B) in the upper voice at this point preserves the symmetrical pitch structure characteristic of the work.

Typical Schenkerian Ursatz

MUSIC EXAMPLE NINE

Polaris Quasi-Schenkerian background structure against the typical Schenkerian Ursatz

¹¹⁹ Walderbauer, op. cit.



MUSIC EXAMPLE TEN

Bartok's Melodic Line (above) against Karparti's imaginary melodic line without distortion.

Viewing the pitch structure of the work through a Schenkerian lens promotes a different reading that departs from Adès's descriptions in a number of ways. First, it attributes the same (tonic) function to the C# and the A poles in the first and third sections of the work, which directly contradicts Adès's programme notes which state that there is a transferral of meaning between these two pitch centres. Consequently, it articulates a teleological structure upon the work that departs from Adès's accounts. It shifts emphasis away from the centric pitches in each section and towards the tonic pitches of each pentatonic collection. Viewing the piece through a Schenkerian lens neglects the emphasis on the interaction of circular constructions in the pitch material and in Adès's description, promoting instead a global directional and linear conception of the work.

An examination of this Schenkerian chart reveals a conflict between pentatonic sets that is only resolved in the third section where, though the two voices have different focal pitches, both the ascending and the descending voices are based around A major pentatonic. Furthermore, there is a sense of conflict between two pentatonic sets in the descending melodic line which can be understood as a driving force within the movement. Though conflict is arguably present in Adès's descriptions – in the

form of ‘magnetic tension’ between pitches – it plays very little part in his discourse, which primarily develops metaphors that map onto the symmetrical and circular pitch structures within the piece. As a result, the conflict between pentatonic collections evident in the work is masked by Adès’s commentary.

This struggle between pentatonic sets is suggested at the opening of the work. The ascending melodic line in the first section ascends up to C6, creating a pitch class set that consists of a combination of C# pentatonic and G# pentatonic. The first iteration of the descending melodic line unfolds up to D4: taking the pitches as that have been revealed up to this point we can observe a superset that consists of all the pitch classes for both A and D pentatonic (see Music Example Eleven). This conflict is expanded upon over the course of the first section of the work, indeed this conflict between A and D pentatonic acts as a driving force throughout the movement. From figure D onwards, the C# pole in the descending melodic line is frequently supplanted by F#6 (e.g. 1st violins bars 96-7, see Music Example Twelve). This F# is emphasised in several ways: it only supplants the C# focal pitch of this line; it is frequently approached from the ‘E’ below (E6) which functions as a leading note; and it typically occurs in a distinct register above the rest of the line. Replacing the C# with an F# replaces the one foreign pitch to D major pentatonic within this section of the melodic line (see Music Example Thirteen). Consequently, D major pentatonic is promoted at the expense of A major pentatonic within the descending melodic line. This competing pole thus destabilises the C# pole throughout this section.

Pentatonic Conflict

The image shows two staves of music. The top staff is labeled 'C# major pentatonic' and contains the notes C#, D#, E, F#, G, A. The bottom staff is labeled 'D major pentatonic' and contains the notes D, E, F#, G, A, B. Brackets indicate the pentatonic scales for both staves. The top staff also has a bracket labeled 'G# pentatonic' under the notes D#, E, F#, G, A.

MUSIC EXAMPLE ELEVEN

Pentatonic conflict between the ascending and descending melodic lines at Figures A – G

Polaris Competing Pole Fig. E

The image shows a single staff of music for Violin I. The music is in 3/4 time and consists of five measures. The notes are: C#, D, E, F#, G, A, B, C#, D, E, F#, G, A, B, C#. Brackets above the notes indicate projected pitches: (B - C#) above the B and C# notes, and (C#) above the C# note in the final measure.

MUSIC EXAMPLE TWELVE

First Violins, Fig. E, bars 93-98 Projected pitches are shown in brackets

The image shows a single staff of music. The notes are: A, B, C#, D, E, F#, G, A, B, C#, D, E, F#, G, A, B, C#. Brackets above the notes indicate projected pitches: (B - C#) above the B and C# notes, and (C#) above the C# note in the final measure. The staff is labeled 'A major pentatonic' and 'D major pentatonic'.

MUSIC EXAMPLE THIRTEEN

Change in pentatonic pitch structure in the first section of *Polaris*.

This competing pole returns in the third section at figure R, undermining the C# pole until Figure T where 'A' acts unequivocally as the central pitch. The effect of the F# on the descending melodic line is exacerbated through the omission of C# in the first violins until figure S: the melodic line works up to B before leaping down to another pitch within the line. This undermining of the C# pole continues through figure S until Figure T where the direction of the melodic lines is reversed creating a

pincer movement that is centred on A. The lower strings progress through a melodic line that asserts F major pentatonic, against the A major pentatonic in the upper strings (see Music Example Fourteen). These lines culminate at figure U, the beginning of the coda on a unison A. This unresolved conflict between the A major pentatonic and F major pentatonic, as well as the remaining conflict between A and D pentatonic in the descending line necessitates the final section of the work. The coda, consisting of an unequivocal reinforcement of ‘A’ as the pitch class centre, can be understood as the resolution of the tension between pentatonic sets that has persisted until this point.

The image shows two staves of musical notation. The upper staff is in treble clef and contains an ascending pentatonic scale starting on A3 (the first line) and ending on A4 (the second space). The notes are A, B, C#, D, and E. A bracket above the staff spans from the first A to the final E, with the label 'A major Pentatonic' centered above it. The lower staff is also in treble clef and contains a descending pentatonic scale starting on F4 (the first space) and ending on F3 (the first line). The notes are F, E, D, C, and B. A bracket below the staff spans from the first F to the final B, with the label 'F major pentatonic' centered below it.

MUSIC EXAMPLE FOURTEEN
Conflict between A major and F major pentatonic in the ascending and descending melodic line at bars 395-399

Describing the coda as an explosion of the previous material throughout the work highlights features that conform to that word such as the violent, stabbing chords and also (taking explosion to mean ‘an exploded view’ as in a technical drawing) the progression from closely clustered chords to more expansive sonorities. However, this description masks the similarities between the coda material and the rest of the work. As discussed above, the coda relies on material that completes the chromatic aggregate. An ascending pentatonic line based around A3 is unfolded and

is interspersed with a chromatic chord whose complementary set is an A major triad. This process culminates in the aggregate chord at the end of the work that is centred on 'A'. Although the other sections in the work have a noticeable pentatonic flavour each section builds up to the completion of the chromatic aggregate. The first section concludes with pitch class G and this sense of chromatic completion is undermined at the end of the second section where we might expect to land on 'C#', but instead we land on 'A'. With this in mind, we can see that despite the coda being audibly different from the rest of the work, relying more on vertical harmonies and less on the combination of inversionally related melodic lines, it is still based heavily on chromatic completion like the rest of the work. The differences within the coda are highlighted by Adès's commentary and therefore the similarities between these two sections are somewhat masked.

Examining Adès's writings alongside his music has revealed a sophisticated use of conceptual metaphor that prompts a specific reading of *Polaris*. This commentary, forms a reading of the pitch processes of the work based on conceptual metaphors based around magnetism, navigation, and circular constructions. This squares well with Janna Saslaw's (based on Mark Johnson's work)¹²⁰ exploration of bodily-derived image schemata in theoretical accounts of music¹²¹ and with Marion Guck who concludes that music can be understood as being expressive of other domains of experience due to similarities in conceptual structure.¹²² What I hope to have demonstrated is that Adès's discourse naturalises certain elements of the work at the expense of others. It creates a deeper experience of the music because of the effect of the imagery in the programme note upon the sound. However, like any analysis, these

¹²⁰ Mark Johnson *The Body in the Mind: The Bodily Basis of Meaning, Imagination and Reason* (Chicago and London: University of Chicago Press, 1987).

¹²¹ Saslaw, op. cit.

¹²² Marion Guck, 'Two Types of Metaphoric Transfer' in Jamie Kassler (ed.), *Metaphor a Musical Dimension* (Sydney: Currency Press, 1991).

metaphors highlight certain features of the work whilst suppressing others. In this way, Adès's metaphors are responsible for shaping our perception of the work rather than reproducing it.

LIVING TOYS

The following chapter will centre upon an exploration of the relationship between Adès's programmatic descriptions and the musical processes in *Living Toys*. Adès's commentaries in the previous case study focussed primarily on the harmonic language of *Polaris*. In the following case study Adès's commentary is based around a narrative that acts as a metaphor for an experience of listening to the piece. I argue that Adès's commentary draws in a number of elements that facilitates a reading which takes a critical stance to musical-analytical language.

Not only is *Living Toys* one of Adès's more frequently performed works (it has received 20 performances across Europe and the USA since 2007 and it appears on two cd recordings)¹²³ but Adès has provided a substantial amount of discourse to accompany the work: indeed Arnold Whittall marks out *Living Toys* as a work in which Adès's titles and programme notes are particularly imaginative¹²⁴ and Adès frequently discusses the work in interview with Tom Service.¹²⁵ However, despite this, there is little published scholarship that examines the music and its discourse in any depth. John Roeder provides a compelling analysis of a passage in *TABLET* to support his theory of projection and postmodern time in Adès's music.¹²⁶ Whilst, Roeder notes some alterations in the path of the interval cycles within this excerpt he does not examine them within the context of the entire work.¹²⁷ Huw Belling analyses examples of rhythmic distortion in 'Aurochs' and 'Militiamen' but does not touch

¹²³ <http://www.fabermusic.com/repertoire/living-toys-2373> (Accessed 18/04/2014).

¹²⁴ Whittall also mentions *Asyla* in the same sentence which was subsequently taken by Edward Venn as the subject for his article 'Asylum Gained' (Music Analysis 2006).

¹²⁵ Tom Service, *Full of Noises* (London: Faber and Faber, 2012).

¹²⁶ John Roeder, 'Coooperating Continuities in the Music of Thomas Adès' *Music Analysis* 25/i-ii pp. 121-54.

¹²⁷ In the example from *Living Toys* that he cites the alteration in the projected paths of the interval cycles occur at the point at which we would have a repeat of a chord that has already occurred within the same phrase. Furthermore, the chord that Adès substitutes has the same pitch content as a chord further along the cycle. Thus we can view this alteration as a 'jump' from one part of the cycle to another, rather than a replacement of an outside element into this interval cycle.

upon the rest of the piece.¹²⁸ Though Belling does mention the poem and suggests a connection between the titles, poem and the music he does not explore this relationship in depth. Susan Greenwood dedicates a chapter in her thesis to *Living Toys* which does provide a detailed analysis of the work, focussing on surreal nature of its narrative and the music (though her application of the term ‘surreal’ is at times inconsistent, sometimes referring to the visual arts and at others using the word in its colloquial sense, to mean bizarre) concluding that Adès provides a ‘convincing surreal representation of the dream-world of a child.’¹²⁹

Living Toys is a particularly interesting case; Adès creates a lot of discourse around the work: it is accompanied by a poem (it is the only one of Adès’s pieces to do so) imaginative movement titles and an extended programme note all of which support a programme for the work. This narrative, I argue, acts as a metaphor for the music in that it highlights certain features of the music whilst casting others in relative obscurity. These features consist of formal and technical aspects of the music as well as extramusical references to *2001: A Space Odyssey* and to topical allusions within the work. Adès’s discourse is puzzling at times: the reference to Kubrick’s film seems alien within the narrative that Adès constructs for the work; this is the only work for which Adès has written a poem which he has compared this poem with a Schenkerian analysis of the work.¹³⁰

This chapter will examine Adès’s discourse in relation to his music in *Living Toys* suggesting how the narrative metaphor that accompanies the piece the piece can act as an analytical parsing in that it brings to light certain features of the music whilst

¹²⁸ Huw Belling, ‘Thinking Irrational: Thomas Adès and the New Rhythms’ (Master dissertation, 2010 RCM), p 10-12.

¹²⁹ Susan Greenwood ‘Selected Vocal and Chamber works of Thomas Adès: Stylistic and Contextual issues’ PhD diss. (Kingston University, 2013) p 339. Though most of the time Greenwood uses the word ‘surreal’ to refer to the artistic movement there are instances where the word is used in a colloquial sense to mean strange or weird.

¹³⁰ Service, op. cit. ,p 72.

rendering others opaque. Furthermore, I argue that it is possible to synthesise these seemingly disparate elements to form a coherent, unified reading. In so doing, I will further demonstrate that Adès's titles and programmatic discourse can shape a reading of his work. I will also show that his allusions can be read as part of a conceptual network¹³¹ that enables a reading that develops a critical stance towards musical analytical issues.

ADÈS'S WRITING ON *LIVING TOYS*

It is my contention that Adès makes use of sophisticated conceptual metaphors in describing his works.¹³² In *Living Toys* Adès's poem and the programme notes for *Living Toys* trace a narrative in which the protagonist, a boy, dreams that he is whisked away to a dream world by angels and fights a bull, before encountering maniacal militiamen who pursue the hero-child. The hero-child then escapes by flitting into another dream in which he is in space. The militiamen catch up with him there and the hero-child is executed; a battle then follows between the hero child's allies and the militiamen. A funeral is held for the hero-child and Tablet is erected in his honour. This narrative is recounted in several ways: Adès accompanies the score with a poem which is elaborated upon in his programme note published on the Faber website. The movement titles in the work link key points in the narrative with the music. The poem, movement titles and programme note are given below:

¹³¹ See Zbikowski op. cit., and Gilles Fauconnier & Mark Turner *The Way We Think: Conceptual Blending and the Mind's Hidden Complexities* (New York: Basic Books, 2002) for an account of conceptual integration networks and their applications to music.

¹³² Service, op cit., p74 and p 5- 7.

Poem

“When the men asked him what he wanted to be, the child did not name any of their own occupations, as they had all hoped he would, but replied: ‘I am going to be a hero, and dance with angels and bulls, and fight with bulls and soldiers, and die a hero in outer space, and be buried a hero’. Seeing him standing there, the men felt small, understanding that they were not heroes, and that their lives were less substantial than the dreams which surrounded the child like toys.”

anon. (from the Spanish)¹³³

Living Toys Movement Titles¹³⁴

I Angels

II Aurochs

BALETT

III Militiamen

IV H.A.L’s Death

BATTLE

V Playing Funerals

TABLET

Extended Programme Note

“The child/hero’s dream-adventures form the five ‘figurative’ sections, offset by three more volatile, dynamic paragraphs: painting versus film, perhaps.

First Angels, a long horn solo haloed with gongs and little trumpets. Then, with a change in tempo and the first bass note (a B), into the ring charges an Aurochs (the extinct European bison). He is whipped and goaded by the

¹³³ Adès, op. cit. p vi.

¹³⁴ ibid. p v.

brutal, elegant matador-kid until his bellows of defeat (horn again) metamorphose into the first appearance of a ‘hero’s theme’. This rolling, square tune, makes three appearances, immediately preceding each of the three unnumbered sections (BALETT etc.). In these, there is a reordering of shared material (hence anagrammatical titles): three-voice descending chords, each voice restricted to a single interval. Recurring in BATTLE and dominating TABLET, this material is evolved in BALETT from a fragment of the bullfight out of which it flies: descending E-D-C (horn, inversion of the start of the hero’s theme), combined with the angelic horn solo (trombone, this time).

The BALETT cadences abruptly on a menacing octave ‘B’ where the hero has a bad dream – a grotesque army, led by a pair of virtuosi (one is a maniacal drummer, the other has a nightmarish talking bugle), advances on him to the point when – it being forbidden to dream one’s own death – he switches dreams. He is in a film, in deepest space, dismantling a great computer, whose vast intelligence dwindles to a wilting Vicwardian music-hall waltz (contrabassoon and double-bass). It is the gentlest of executions, and the little astronaut whistles his tune like the sweet fife of a tiny recorder.

There follows an unstoppable, suffocating BATTLE, in which the monstrous militiamen reappear and (E minor climax) finish their fell work. Our hero dreams himself a full military funeral, with muffled drums and tear-blurred mass humming of his tune; a TABLET is erected, and there is a three-gun salute, or three cheers, or three rockets, or three big puffs of dust as the story book is slammed shut and he drifts off to join his first adversaries”¹³⁵

The central metaphor erected throughout these passages is ‘*LIVING TOYS IS A JOURNEY*’. Adès’s poem successively makes reference to each movement’s title allowing the narrative to be followed alongside the work. Elaborating on the poem in the extended programme note Adès refers to several technical details (‘B’, ‘E minor climax’) that highlight structural points within the work. Furthermore, Adès parses the work into two interlocking sections the numbered sections and the ‘anagrammatical’¹³⁶ sections (“The child/hero’s dream-adventures form the five

¹³⁵ <http://www.fabermusic.com/repertoire/living-toys-2373> (accessed 29/04/2014)

¹³⁶ adj. relating to anagrams

‘figurative’ sections, offset by three more volatile, dynamic paragraphs”) encouraging us to understand the work in these terms. Elements of the work’s pitch structure are also highlighted within the commentary (‘three voice descending chords, each voice restricted to a single interval’; ‘inversion of the start of the hero’s theme’; ‘descending E-D-C) drawing attention to these features. Adès’s descriptions also point to a number of extramusical references within the work to *2001: A Space Odyssey*: the title ‘H.A.L.’s death’ refers to the computer controlling the ship in Kubrick’s film and Adès refers directly to the scene in the film where H.A.L is deactivated (“He is in a film, in deepest space, dismantling a great computer, whose vast intelligence dwindles to a wilting ‘Vicwardian’ music-hall waltz (contrabassoon and double-bass)”).

In *Living Toys* Adès’s conceptual metaphors take the form of a narrative account of the piece that can be blended with the music’s technical features and its extramusical references to form an emergent structure that conceptualises the work in terms of his narrative. In so doing, certain features of the work are highlighted whilst others are cast into relative obscurity, shaping a particular reading of the work. In what follows I will examine the role of Adès’s programmatic discourse in his work, exploring aspects of the music that align with his commentary and some that resist it. In so doing, I will demonstrate that Adès’s discourse shapes, rather than reproduces, a reading of the work.

ANALYSIS

Living Toys is divided into eight movements comprising of five numbered movements and three ‘anagrammatical’ movements whose titles form anagrams of each other. Adès’s commentary encourages us to understand the work in these terms, stating that “The child/hero’s dream-adventures form the five ‘figurative’ sections, offset by three

more volatile, dynamic paragraphs: painting versus film, perhaps.” This reading has fed into academic work on *Living Toys*, for instance, Susan Greenwood’s account of *Living Toys* considers the numbered movements before examining the anagrammatical movements in her account of the work.¹³⁷ Furthermore, Andy Hamilton focuses on the ‘five balletic movements’ of *Living Toys*, but does not comment on the three remaining movements.¹³⁸

Adès’s programme notes point to a number of topics within the piece. For instance, Adès makes use of a Spanish topic in the second movement of the work. The title ‘Aurochs’ alludes to the extinct type of bull and Adès’s poem and story make reference to bullfighting, a Spanish national sport. The Spanish reference is emphasised by the poem which is claimed to be ‘from the Spanish’ (though Adès has since claimed authorship himself). The score is published with *The agility and daring of Juanito Apinani in the bullring at Madrid*, an etching by Francisco Goya depicting a matador leaping over a bull, on its cover (see Image Four) and the music follows suit with the use of Phrygian mode/ harmonic minor, the use of castanets and clapping throughout this movement, and exaggerated dotted rhythms, reminiscent of the habanera, further support the Spanish topic in the music. The alternation between the fast flowing scalar material in the piccolo trumpet against dotted material in the strings and woodwinds maps well onto the image of a bullfight that Adès provides. A military topic is suggested in ‘Militiamen’ in the title of the movement and in Adès’s programme note and poem “a grotesque army, led by a pair of virtuosos (one is a maniacal drummer, the other has a nightmarish talking bugle), advances on him.” The music supports this topic in the pairing of the piccolo trumpet and the snare drum,

¹³⁷ Susan Greenwood, *Selected Vocal and Chamber Works of Thomas Adès: Stylistic and Contextual Issues*, (Phd dissertation, Kingston University, 2013) pp 283 – 339.

¹³⁸ Andy Hamilton, *Thomas Adès: List of Works*, (London: Faber and Faber, 2005) p 3.

...serving to establish a military feel. These topics, established in both the music and the text provide key signposts throughout the music and enable a listener to follow Adès's narrative through the work.

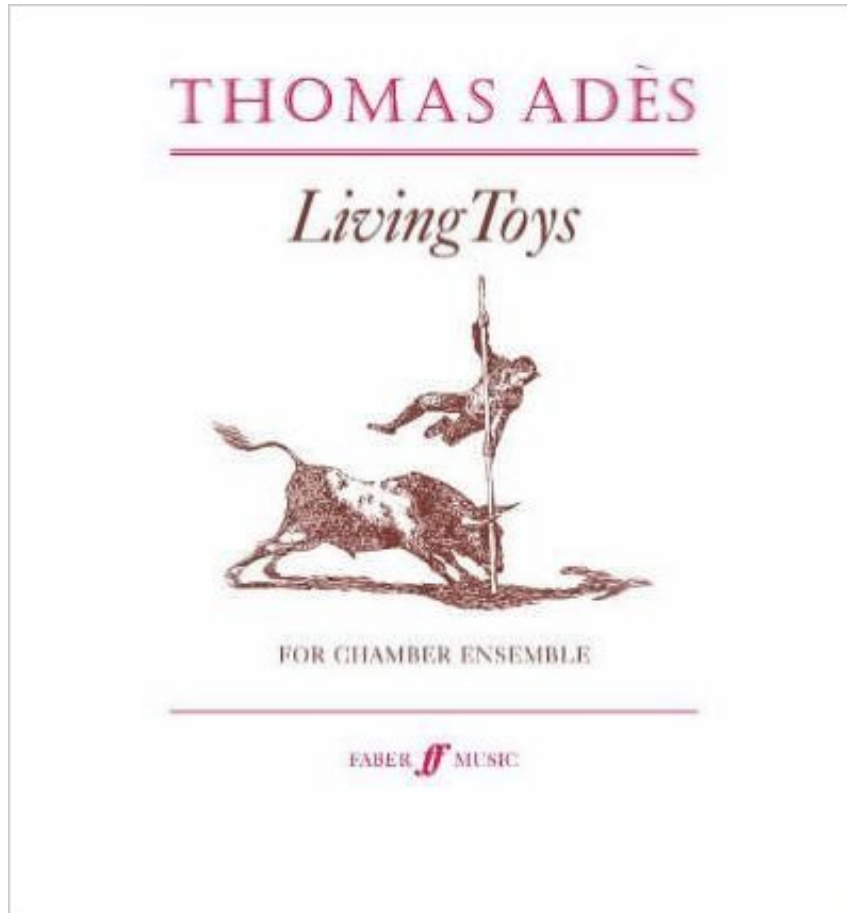


IMAGE FOUR

Cover image of the score of *Living Toys* including a reproduction of *The agility and daring of Juanito Apinani in the bullring at Madrid*, an etching by Francisco Goya

There is a conflict evident between the talking trumpet and ensemble in 'Aurochs', 'Militiamen' and 'BATTLE'. In each of these sections the trumpet strives upwards towards a target pitch against the rest of the ensemble. In 'Aurochs', this pitch is B5, which is reached in bar 151 and sustained until bar 170. There are then flourishes around this pitch through bars 194 – 217 until the first occurrence of the hero's theme. This material is pitted against, largely descending material over the rest

of the ensemble based on interval cycles. This culminates in a persistent E – D – C descent (which the commentary points to as representing the defeat of the bull) at bars 200 – 224 whilst the trumpet material becomes more fragmented. In ‘Militiamen’, the target note of the trumpet is E6 which is eventually reached via Bb6, C6 and Eb6 at the end of bar 325. The trumpet then has flourishes around E6 until bar 336 where a statement of the twelve-tone row brings a close to the section. In ‘BATTLE’, the goal appears to be the same top E natural. However after many failed ascents, a cadenza and a ‘struggle’ around Eb6, suggested by the trumpet the pitch a semitone below, the trumpet descends chromatically right down to its bottom B apparently defeated in bar 500 – 504. Then in bars 506-7 the trumpet glissandos up to F6 a semitone above the target top E6. Adès titles (i.e. ‘BATTLE’ and ‘Militiamen’) and programme notes (‘there follows an unstoppable, suffocating ‘BATTLE’’) point to this conflict in the pitch structure of these sections.

Adès’s narrative can act as a metaphor for more global structural features of the work. The conflict in the pitch structure of the above sections feeds into the whole work. The narrative recounts a tale that pits the hero-child against several adversaries, first an aurochs and then later the militiamen. This aspect of the narrative maps well onto the division of pitch material within the work: pitch material constructed from broadly pentatonic and whole-tone collections is juxtaposed with pitch material derived from interval cycles. This division is evident from the outset of the work; the first section consists of three movements that move from pentatonic material to formations based on interval cycles. The opening movement, ‘Angels’ is principally constructed from pentatonic material. The opening horn call is based predominantly on Gb pentatonic and then moves to C pentatonic in bar 51, then E pentatonic in bar 64, D pentatonic in bars 74-5, and Eb minor pentatonic in bars 82, before landing on a

Bb pedal in bar 98 (Fig. K). In the second movement ‘Aurochs’, Adès adopts a Spanish-like topic, consisting of harmonic minor/ Phrygian mode material and castanets. However, also evident in this movement are prototypical interval cycles¹³⁹ that appear in the piccolo trumpet line and scattered in the accompanying ensemble. A prototype interval cycle is stated at the end of horn figures in bar 139 and bars 198-9 (see Music Example Fifteen). This movement culminates in the first statement of the hero’s theme, a tune based mostly on whole tone and triadic harmonies. The final movement of this section, ‘BALETT’, consists mainly of interval cycle constructions, but also revisits the tonal and pentatonic constructions of the opening movement. Within the first three movements we can observe an alternation between tonal and pentatonic pitch constructions against those constructed around interval cycles.

Piccolo Trumpet

Bar 139

Bar 198 - 9

The image shows two musical staves for Piccolo Trumpet. The first staff, labeled 'Bar 139', contains a sequence of notes: G4, A4, B4, A4, G4, F4, E4, D4. There are two triplets: the first triplet (G4, A4, B4) is bracketed with '(1)' above and '(2)' below; the second triplet (A4, G4, F4) is bracketed with '(1)' above and '(2)' below. The second staff, labeled 'Bar 198 - 9', contains a sequence of notes: G4, A4, B4, A4, G4, F4, E4, D4. There are two triplets: the first triplet (G4, A4, B4) is bracketed with '(2)' above and '(3)' below; the second triplet (A4, G4, F4) is bracketed with '(2)' above and '(3)' below.

MUSIC EXAMPLE FIFTEEN
Prototypical interval cycles in the piccolo trumpet. The bracketed numbers refer to the interval classes in each voice.

Adès’s commentary highlights the use of interval cycles in a number of ways: it speaks directly about their construction in the extended programme note stating that the anagrammatical sections (BATTLE, TABLET AND BALETT) share the same pitch material, three voiced descending chords in which each voice is restricted to a single interval class. The anagrammatical titles allude to the use of the same (but reordered) material in these three movements.

¹³⁹ These interval cycles are prototypical in that they are fragmentary and not as fully developed as those later on in the piece.

It will be useful to briefly examine the general properties of interval cycles.¹⁴⁰ An interval cycle is the movement of one voice by a single recurring interval. These interval cycles can be combined with others to form a harmonic language. In *Living Toys*, Adès mostly constructs <1,2,2> and <1,1,2> aligned cycles (The numbers refer to the interval classes in each voice from highest to lowest whilst ‘aligned’ means the voices move at the same rate). These are typically set up so that there is an interval of a perfect fourth (ic5) between the lower two voices (see Figure Six). Since these two voices move together in the same direction by the same interval, the intervallic distance between them does not alter. In Figure Six I have positioned a minor third between the top voice and the next lowest voice at ‘12’, however, as the cycles progresses the intervallic distance between these two voices expands and contracts between 0 and 6. In this formation a number of tonal pitch collections and pentatonic pitch collections are formed i.e. ([0,3,7], [0,4,7], [0,2,7], [0,2,5]). A high proportion of interval class 5 is evident in this cycle.¹⁴¹

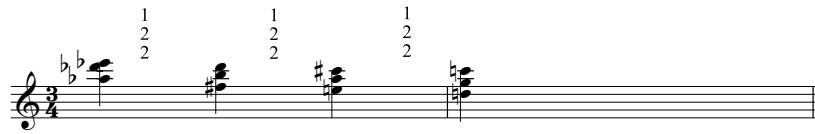
Stoecker notes that Adès will alter these aligned interval cycles by moving one of the voices whilst keeping the other two voices stationary.¹⁴² This also occurs in *Living Toys* in BATTLE. The interval cycle at the opening of this section (fig. R1 Woodwind. (see Music Example Sixteen and Figure Six) is altered so that the top voice moves one place clockwise whilst the lower two voices remain stationary (figure Y1, see Music Example Seventeen and Figure Seven). This does not have much of an effect on the pitch class set content of the cycle; it is exactly the same

¹⁴⁰ Philip Stoecker investigated the interval cycles present in Adès’s Piano Quintet, exploring not only the theoretical possibilities of these cycles but also revealing how Adès employs these cycles to structure harmonic, melodic and motivic elements within the piece.¹⁴⁰ Furthermore, he demonstrates how these cycles can be employed to mimic a sonata form model that Adès promotes in this work. Also of value in Stoecker’s paper is a readily comprehensible nomenclature for describing interval cycles.

¹⁴¹ An interval class that Adès has a noted propensity for. See Service, op cit., p 51 and Wells, op. cit. p 10.

¹⁴² Stoecker, op. cit., p 5.

Figure Y1
Piccolo



MUSIC EXAMPLE SEVENTEEN

The manifestation of Figure Six in the music at Figure Y1 in the score.

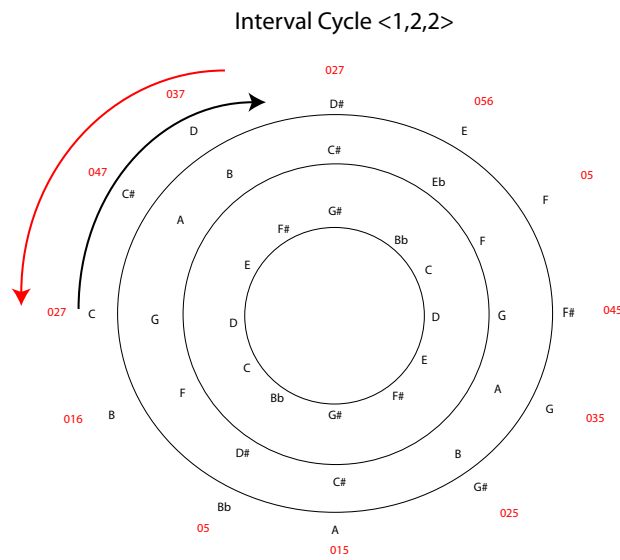
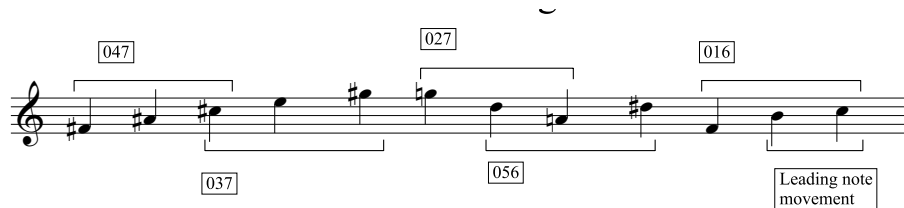


FIGURE SEVEN

The arrows in this interval cycle diagram refer to the movement of the pitches on the outer ring (black) and the movement of the resultant pitch class sets (red) relative to Figure Six

Examining the interval cycles in this way can shed light on the pitch construction of other aspects the work. For example, the interval cycles that Adès uses link significantly with the twelve-tone series that appears in the work; the pitch class sets that the interval cycles traverse through can be observed in the twelve tone row that appears throughout the work (see Music Example Eighteen).



MUSIC EXAMPLE EIGHTEEN¹⁴⁴
A segmentation of the twelve tone row in *Living Toys*.

In this parsing of the row we observe that the series progresses through pc-sets in the interval cycle in BATTLE, moving clockwise from 047 through to 056. Since 056 contains a statement of 05 we can see the row as stating these two pc-sets of the interval cycle before it moves directly across to state 016 (a closely related set) on the opposite side of the cycle (see Figure Eight). In doing this, Adès avoids the more uniform pc-sets (in that they are all framed by ic5) in the ‘southern hemisphere’ of the interval cycle.

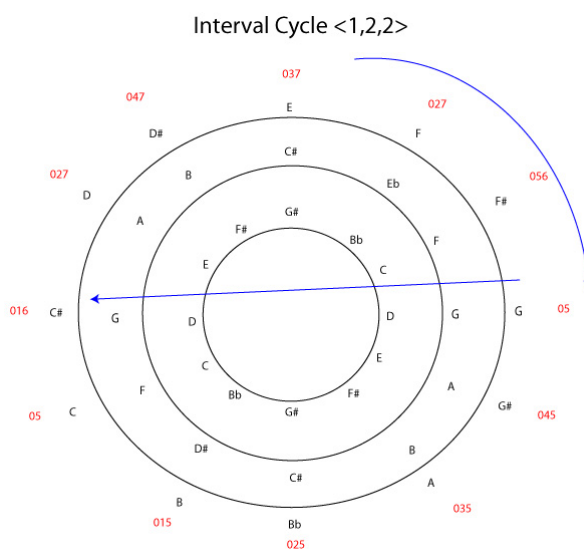


FIGURE EIGHT
The blue arrow in the diagram traces the movement of the harmony clockwise and then directly across the interval cycle.

¹⁴⁴ This is, of course, not the only way we can segment this row. This parsing has been selected as it demonstrates how successive elements in the row can be parsed into pc-sets that occur in the same order in the interval cycles in the work.

One pc-set that is conspicuously absent from both the twelve tone row and the interval cycles (in that it cannot be formed by adjacent elements in any of its rotations) is the pentatonic set [0,2,4,7,9]. This creates a division between the interval cycle material, and the pentatonic material in terms of its formal construction, which maps onto the opposition between the hero-child and his adversaries in the narrative that Adès supplies. This division is evident in the structure of the work, the first three movements consist primarily of tonal/pentatonic pitch constructions whilst the following three movements predominantly consist of more chromatic material and those derived from interval cycles.

The story Adès sets out alongside *Living Toys* has a circular ending. Adès's extended programme note ends by saying, '...and there is a three-gun salute, or three cheers, or three rockets, or three big puffs of dust as the story book is slammed shut and he drifts off to join his first adversaries.' In the story, we have come full circle; the hero child awakes from his dream and begins his adventures in full consciousness. This suggests that we have come full circle; the challenges that the hero has encountered in his dream are a rehearsal for the challenges he is about to face. This maps onto the music as the work's ending could be understood as a varied repetition of its beginning. The very last bars of the work consist of three flourishes based on an F minor chord in bars 549, 551 and 553 which are pointed out by Adès's repetition of the word 'three' throughout the end of the extended programme note quoted above (page 45-6). Chromatic and whole tone interval cycles emerge from these chords. This relates well to the three flourishes at the work's opening at bars 2-4, 8-9 and 14-15. Additionally, the beginning of the opening horn solo (bars 16-19) recurs in the last bars, juxtaposed against the three F minor flourishes mentioned earlier. Additionally, the harmonic language of both this ending passage and the opening are similar, based

heavily on the tritone. At the beginning, this is evident in the progression from the first flourish and opening horn solo, which are based upon F#/Gb to the eventual landing on C pentatonic. This progression is present in a compressed form in the final bars of the piece; the F minor flourishes alternate with a B minor chord in the lower strings (bars 549 and 552). Consequently, we can observe that Adès's narrative points out the recurrence of the opening material at the end of *Living Toys*.

Adès's commentary consistently points to the note 'B' throughout his extended programme note and his music. The first appearance of this 'B' is in the bass at the outset of 'Aurochs', Adès points to this B in his description "the first bass note (B)..." It is similarly emphasised at the end of BALETT, the next movement in which a 'B' is stated across the ensemble in bars 298-99. Adès refers to this moment in his programmes notes, stating The BALETT cadences abruptly on a menacing octave 'B'. Finally, B is emphasised at the end of BATTLE: the twelve-tone series that is stated at bars 501-3 pauses on B, that is stated across the ensemble in a similar manner to BALETT, before progressing to 'C', the final pitch of the series. In pointing out this 'B' Adès's discourse highlights a number of structural markers within the work.

An allusion to *2001: A Space Odyssey* plays a prominent part in Adès's commentary: the title H.A.L.'s death refers directly to the artificial intelligence system running the spaceship in Kubrick's film, and alludes to the scene in the film in which H.A.L. is deactivated. This reference is supported by both Adès's poem and extended programme note: the hero-child wishes to "die a hero in outer space" and in the extended programme note the child is 'in a film, in deepest space, dismantling a great computer, whose vast intelligence dwindles to a wilting Vicwardian music-hall waltz...' These references in the programme note point to allusions within the music.

There is a quotation of the chorus of *Daisy Daisy* the song that H.A.L intones as it is being deactivated. This quotation appears very low, in the double bass and contrabassoon, is very slow and is fragmented rhythmically and between the two instruments. Furthermore, the pitches in the quotation are processed, they slip down incrementally by semitone from the trajectory of the song until they reach a distance of ic7. In the music example below the numbers above Adès's version show the intervallic distance between the trajectory of the original melody (see Music Example Nineteen). As is evident in the example there is a gradual slipping process evident in the quote: the tune starts, being stated in F# major but slips downwards incrementally by semitone until it is a perfect fourth below where the melody should be. At the final pitch C#, Adès's melody slips down a tone further to a perfect fourth below the untransposed melody (F#, the tonic note of the beginning of the melody). It is here that the Hero's theme begins on the same pitch class in the soprano recorder. The low timbre of this melodic statement and the gradually slipping away mimics H.A.L's rendition of this melody in the film which is low and becomes more distorted as Bowman proceeds to deactivate his memory, nevertheless H.A.L. does quote the complete tune (though the final phrase is barely recognisable). In sum, the quotation is very well disguised and would be much more difficult to identify had it not been supported in Adès's commentary.

Daisy (Bicycle Built for Two) Quotation
bars 353 - 369
Contrabassoon and Double Bass

Original

Adès's Version

11

20

26

MUSIC EXAMPLE NINETEEN

The numbers at the top of the second staff (Adès’s version) correspond to the intervallic distance in semitones between the original melody and Adès’s version. The rhythm of Adès’s version has been altered to facilitate a comparison with the original melody.

Examining the music alongside Adès’s commentary can provide an illuminating reading of the piece. Adès effectively encourages us to conceive of *Living Toys* in terms of this narrative. It is possible that an analyst could potentially identify these features within the music without the aid of Adès’s commentary. Nevertheless, it is significant that Adès suggests this reading through his title and his descriptions of the work. Figure Nine consists of a Conceptual Integration Network

(CIN) that illustrates the relationship between the text and the music discussed above. As before, it consists of four spaces: a generic space, two input spaces, and a blended space. The double-headed arrows between elements in the input spaces indicate correlations. Guiding the process of mapping between the two input spaces is the generic space, which defines the topography for the CIN.¹⁴⁵ This space contains contextual information such as *Living Toys* is a piece of western art music and general information concerning aspects touched on by the narrative, such as Spain, outer space, the military, and angels. Guided by the generic space, the two input spaces project their contents into the blended space, combining elements of the pitch material with the concepts in the text to produce ‘conceptual blends’ such as ‘pitches have magnetic properties’ in the piece. This blended space shapes our expectations of the piece. For instance, recruiting elements from both input spaces we might understand the pitch structure of the work as begin divided between constructions based on interval cycles and those based on pentatonicism (see Figure Nine). Additionally, responding to Adès’s comments concerning the ending of his tale, we may conceptualise the ending as a return to the beginning of the piece, and as such privilege features of the music that conform to this interpretation such as the presence of flourishes and tritone based pitch structures at both the beginning and the end of the work. Furthermore, this conceptual blend encourages us to elaborate upon the blend perhaps interpreting the octave interjections in *Militiamen*, at the end of *BATTLE* and *TABLET* to be gunshots or the division between material in the second movement as a competition between the matador and the bull.

¹⁴⁵ Zbikowski, op. cit., p 79.

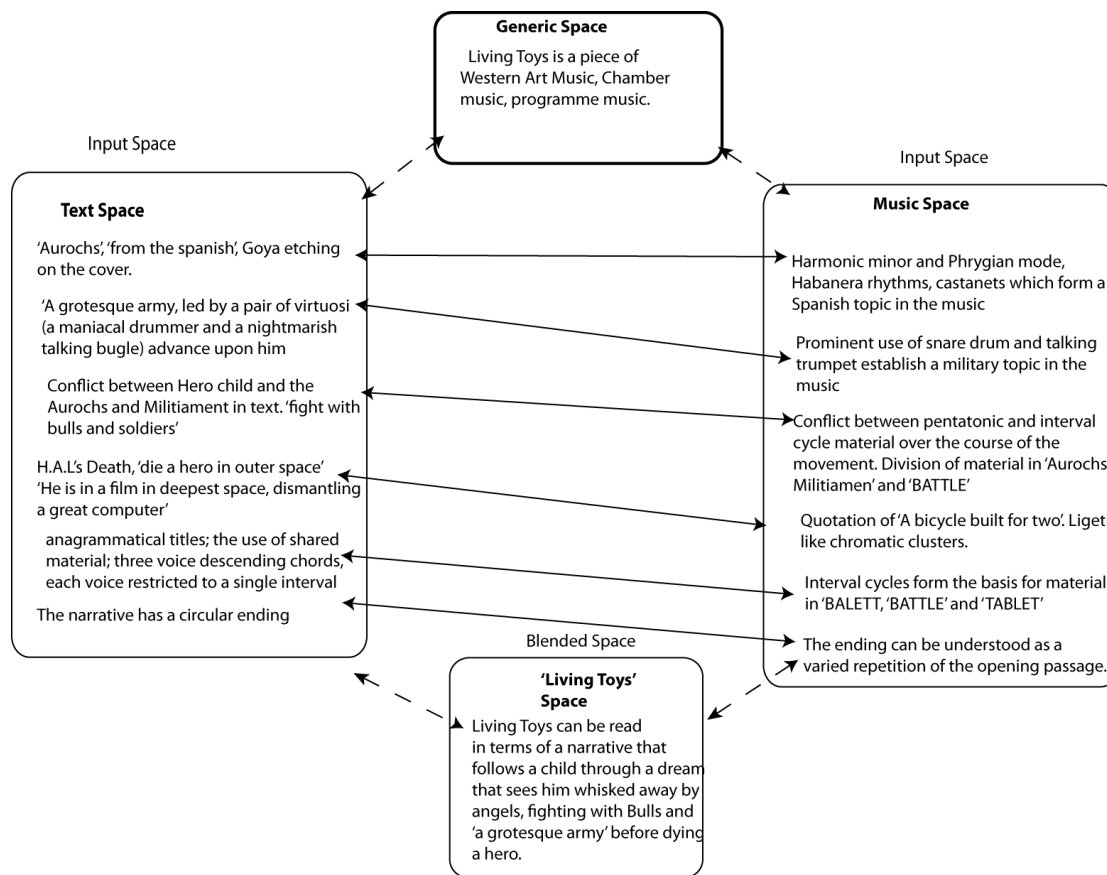


FIGURE NINE
A conceptual blend diagram showing how different elements of the music and the commentary can be combined to form a reading of *Living Toys*.

However, there are features of the music that resist Adès's commentary and are therefore comparatively masked by Adès's writings. For instance, the structure of the work is parsed in a particular way in the commentary, drawing attention to the opposition between numbered sections and anagrammatical sections. However, we could feasibly understand the structure of the work in another way grouping together the movements to form three sections (see Table Two). The first three movements have been grouped together due to the presence of the gongs in all of them and the cadential 'B' at the end of the work. The second section comprises of 'Militiamen'

and 'BATTLE', the two movements to contain the talking trumpet and the twelve tone row, which frame the fifth movement, H.A.L.'s death. The final two sections are unified through their use of minor sonorities and blurred textures. In this reading, the Hero's theme hails the end of each section. Understanding the work in this way could produce a vastly different reading to one that interprets the structure in terms of the commentary. For instance, we might prioritise the global-directional features of the work rather than an interleaving of two types of material in numbered and anagrammatical movements. Consequently, the commentary plays a significant part in the way we interpret *Living Toys*.

TABLE TWO

LIVING TOYS
ALTERNATIVE STRUCTURE
SECTION ONE
I- Angels
II - Aurochs
BALETT
SECTION TWO
III - Militiamen
IV - HAL's Death
BATTLE
SECTION THREE
V - Playing Funerals
TABLET

Additionally, the commentary makes no mention of the distortion that the interval cycles undergo in the final movement. In TABLET, there is a <1,1,2> interval cycle progresses which progresses regularly anticlockwise from '12' on the clock-face in the diagram until it reaches '8'. At this point instead of G3, E4, and C#5 as expected, what occurs is G4 Bb4 and C#5. Examining the voice leading in the passage reveals that the A3 goes up (instead of down) to a G4, the D5 moves to a C#5 and the

F4 moves up to Bb4. Examining the interval cycle that Adès draws upon can shed light upon what is happening here. The bottom two voices are being switched for the pitches directly opposite them in the interval cycle at ‘2’ (see Music Example Twenty and Figure Ten) whilst the top voice remains fixed. This would account for the move from F – Bb, but also the appearance of the G in the ‘wrong register’ (G4 instead of G3): the G opposite is two steps up from the starting Eb, whilst the G we expect would be four tones below.¹⁴⁶ A potential reason for this distortion occurring here is that the C#, E, G chord we expect has already occurred in the cycle thus far (in bar 541 beat 2), and the pitch class sets after this point in the cycle become more uniform (all of them are framed by ic5).

MUSIC EXAMPLE TWENTY¹⁴⁷

A reduction of the music at Tablet in bars 541-2. The ‘Expected’ bar shows where the music is expected to land whilst the ‘Actual’ bar shows what occurs at bar 542 in *Living Toys*.

¹⁴⁶ This manoeuvre could suggest that Adès was aware of this aspect of his material when composing the work and that he had conceptualized this in terms of an interval cycle.

¹⁴⁷ John Roeder also cites this passage as an example of Adès’s alterations in projected patterns though does not explore how it relates to the construction of the interval cycles. op. cit., p 130.

cycles of BALETT and BATTLE. We can also observe the presence of a short expanding interval cycle that beginning on G, move through F and landing on D.¹⁴⁹ The second pitch (F) of this cycle is subject to octave displacement, appearing an octave below expected. The music example below displays the pitch content of the passage below with each interval cycle isolated on a separate system for clarity (see Music Example Twenty-one).

Bars 545 - 6. Fig. I2

MUSIC EXAMPLE TWENTY-ONE¹⁵⁰

A reading of bars 545-6 in terms of expanding and contracting interval cycles. Each line in the above example is split between different instruments. For instance the top line alternates between the trumpet and the horn in the score.

This passages leads to an alternation between B minor and F minor chords, B minor appearing in the strings bars 547 and 552 and F minor appearing in bars 549, 551 and 553. The pitch class ‘B’ appears is emphasised several times through the work and in Adès’s writings. The first appearance of this ‘B’ is in the bass at the outset of ‘Aurochs’, Adès points to this B in his description “the first bass note (B)...” It is similarly emphasised at the end of BALETT, the next movement in which a B is

¹⁴⁹ For more on expanding and contracting interval cycles see John Roeder, ‘Cooperating Continuities in the Music of Thomas Adès’, *Music Analysis* vol. 25/i-ii (Blackwell: Oxford, 2006) pp 121-154 and Stella Markou ‘A Poetic Synthesis and Theoretical Analysis of Thomas Adès’ *Five Eliot Landscapes* (DMA dissertation: University of Arizona 2010) p25- 29.

¹⁵⁰ Expanding and contracting interval cycles play a major role over the work as a whole. For instance, observe the piccolo trumpet, trombone and horn in BATTLE Figure V1, bars 425-6. Two voices are staggered in each instrument, and each voice descends by a regularly increasing interval.

stated across the ensemble in bars 298-99. Adès also points to this moment in his programmatic description, calling this a ‘menacing octave B’. Finally, B is emphasised at the end of BATTLE: the twelve-tone series that is stated at bars 501-3 pauses on B, that is stated across the ensemble in a similar manner to BALETT, before progressing to ‘C’, the final pitch of the series. The progression B – F is also prevalent through the work as well. The final note of Militiamen is an ‘F’ and though C natural appears immediately after the octave B in BATTLE, it is an F6 that appears as the final pitch of the movement two bars later, which is equally emphasised. ‘This B, and also the B – F progression is arguably aligned with the hero’s adversaries through the work; it is emphasised in ‘Aurochs’, just before ‘Militiamen’ and in BATTLE, sections that focus on the hero’s adversaries. Adès also characterises this B as ‘menacing’ and a threat to the Hero-child in the work. Consequently, the alternation between B minor and F minor at the end of the work could suggest the presence of the hero’s adversaries at the end of the work.

This is an important omission as considering these distortions in the interval cycles alongside Adès’s narrative could produce a different reading of the work. For instance, observing these distortions within the division between pentatonic and interval cycle material could result in a reading that understands this moment as the succumbing of the interval cycle material to the pentatonic material (which sees a resurgence in the following bars). This in turn could bear upon the narrative, perhaps suggesting the eventual defeat of the hero’s adversaries. It is clear therefore that Adès’s programmatic descriptions shape a reading of the work by highlighting certain features whilst obscuring others.

There remain elements of the work that appear incongruous within the conceptual scheme above. The movement ‘H.A.L.’s death’ acts as an interruption to

the music around it. The musical language changes completely at this point, the tempo slows, and sustained gestures creating a texture similar to Ligeti's micropolyphonic pieces. The final high F of 'Militiamen' is sustained through the opening of 'H.A.L.'s Death', shared between the different instruments in the ensemble, until the opening of the 'Daisy' quotation at bar 353. The end of 'Militiamen' and the beginning of 'BATTLE' could dovetail together; the high F across the ensemble at the end of 'Militiamen' could feasibly continue straight onto the high F-sharp at the opening of 'BATTLE'. This episode in Adès's story appears out of place; the rest of the story is based in what we assume to be a non-specific, Spanish landscape whereas this element transports the story to a scene in an identified film.

Of course, these disparate elements could be symptomatic of a rejection of musical unity, but this would be uncharacteristic within Adès's oeuvre. None of his work before or after this piece appears to reject musical unity; where Adès does make extramusical references they tend to be linked by a common theme. For instance, Adès's allusions to *Bluebeard's Castle* in the fourth movement of *Asyla* plays on the meaning of the word *Asylum*.¹⁵¹ His allusion to house music in the third movement of the same work updates the use of dance forms in the third movement of the symphony.¹⁵² Furthermore Adès's movement titles in *Arcadiana*, all allude to water imagery and to specific places.¹⁵³ The musical allusions within this work follow suit: the quotation to *Auf dem Wasser zu Singen* in the third movement relates to the water imagery¹⁵⁴ and the allusion to Elgar's *Nimrod* and the title 'O Albion' alludes to Great

¹⁵¹ Venn, op cit., p 100.

¹⁵² *ibid.*, p 105.

¹⁵³ Thomas Adès, *Arcadiana*, (London: Faber and Faber, 1994) p 3.

¹⁵⁴ Roeder, op. cit., p 148.

Britain.¹⁵⁵ The reference to Stanley Kubrick's film seems to appear out of place not only within the work but within Adès's oeuvre.

One possible reading of this is to understand the reference to *2001: A Space Odyssey* as a reference to Ligeti whose music had been used (without his permission) in Kubrick's film. The music at this point changes completely to one that imitates Ligeti's micropolyphonic musical pieces. The tempo slows and the music becomes relatively static. The opening of 'H.A.L.'s Death' accumulates chromatic clusters in a similar manner to Ligeti's micropolyphonic pieces such as *Atmospheres*, or his *Requiem*, which play a prominent role in the film. Additionally, the process by which Adès treats his *Daisy* quotation can be directly attributed to Ligeti: it is the same process that appears in his first piano etude. In *Desordre* Ligeti states the simple melody, which forms the subject of his etude, in both hands simultaneously but gradually adds a quaver to each left hand statement so that both hands eventually fall out of sync. This bears relation to the process described above where the *Daisy* quotation falls incrementally by semitone until it is a perfect fifth below its original trajectory. In the music example above, the numbers above the second line refer to the intervallic distance between Adès's version of the *Daisy* quotation and the original melodic line. As becomes clear, Adès's version slips down incrementally by semitone until it reaches a perfect fifth below the melody's original trajectory. This distortion of the *Daisy* quotation not only by stating it in an extremely low register, but also by a process of gradual distortion is very reminiscent of Ligeti's music.

The language that Adès uses to describe his music bears relation to Ligeti's writings. *Living Toys* is no exception; in an interview with Tom Service Adès says the following:

¹⁵⁵ Whittall, op. cit., p 29.

TS: But the story you write in *Living Toys* is in a way a kind of truth-telling, because it's about the experience of the piece as sound, transformed into metaphor.

TA: Seen generously, it was a truthful way of describing the piece. It was my version of a Schenkerian analysis, to do it that way, as a fiction. In fact, the last part of the piece, the funeral part, I'd already written; it came from an exercise I wrote for a student course, which was the first time I had the experience of writing something and then, when it was played, finding it turned into something completely other. I wrote what was a combination of two things and in practice, a third quite unexpected thing happened, in the harmony, that I hadn't anticipated. Not just another chord: it created a new direction.¹⁵⁶

Comparing the above with Ligeti's statement on *Lontano* reveals some interesting correlations.

I composed an extensively branching and yet strictly refined polyphony which, however, veers suddenly into something else. . . I don't have a name for it and I don't want to create a term for it. A kind of complex of tone-color, movement, changing harmonic planes. The polyphonic structure does not actually come through, you cannot hear it; it remains hidden in a microscopic underwater world, to us inaudible . . . I have retained melodic lines in the process of composition, they are governed by rules as strict as Palestrina's or those of the Flemish school, but the rules of polyphony are worked out by me. . . the polyphony is dissolved, like the harmony and the tone-color – to such an extent that it does not manifest itself, and yet it is there, just beneath the threshold.¹⁵⁷

Both composers speak of writing something that turns into more than the sum of its parts. Ligeti speaks of his adherence to 'rules as strict as Palestrina's' that produces a polyphony that is 'dissolved' and which does not manifest itself. Likewise, Adès describes the process of writing 'an exercise' that turned into 'something completely other'.

¹⁵⁶ Service, op. cit., p 73-74.

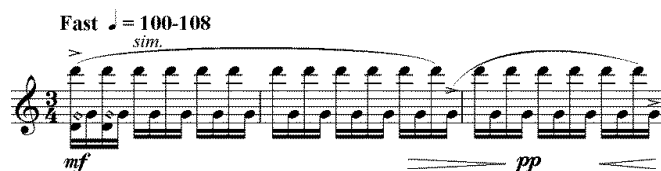
¹⁵⁷ quoted in Amy Bauer, "Tone-color, movement, changing harmonic planes": Cognition, Constraints and Conceptual Blends in Modernist Music', in Arved Ashby (ed.), *The Pleasure of Modernism: Intention, Meaning, and the Compositional Avant-Garde*, (Rochester: University of Rochester Press, 2004), pp. 121–152, p 121.

Furthermore, other allusions to Ligeti have been noted in Adès's work: Vellianitis has observed a quotation of Ligeti's Violin Concerto at the opening of Adès's Violin Concerto (2005) (see Music Example Twenty-Two)¹⁵⁸ and Dominic Wells has also observed similarities between the opening of *Arcadiana* (1994) and the same violin concerto.¹⁵⁹ Edward Venn has compared Adès's uses of triadic harmonies stating that in the music of both composers triadic harmonies are given new meanings by virtue of the linear contexts in which they occur.¹⁶⁰

Ligeti's Violin Concerto



Adès's Violin Concerto



MUSIC EXAMPLE TWENTY-TWO

A comparison between the opening of Ligeti's and Adès's Violin Concerto. Both begin with an alternation of A and D.

Though this allusion to Ligeti is indirect, the consistent references to Ligeti in Adès's writings and music, as well as the similarities between Adès's and Ligeti's music means that we could interpret H.A.L's Death as an allusion to Ligeti as well as a reference to *2001: A Space Odyssey*.

If we do read this moment in the work as an allusion to Ligeti, how can this be

¹⁵⁸ Vellianitis, op. cit., p 24.

¹⁵⁹ Dominic Wells, 'Plural Styles, Personal Style: The Music of Thomas Adès', in *Tempo* vol. 66 (April 2012), pp 2-14, p 7-8.

¹⁶⁰ Venn, op. cit., p 118 notes 19 and 25.

interpreted within the wider framework of *Living Toys* as a whole? Susan Greenwood understands this allusion to Ligeti as supporting the surreal character of the work¹⁶¹ which manifests itself via “use of extremes, as contrasting sonic-layers, identified and intensified through rhythmic signifiers, tessitura and harmonic and timbral colours compete for our attention.”¹⁶² Andy Hamilton also supports this view, stating that “dream world of the piece reflects a surrealist tendency that often informs Adès’ music, though it is put to less savage ends than that great 20th century surrealist, Gyorgy Ligeti.”¹⁶³ Richard Taruskin also identifies Adès as a surrealist composer drawing comparisons between Adès’s sonorities and the painting of Dali¹⁶⁴ (Adès’s mother, Dawn Adès is an academic with a particular interest in the Surrealist movement).

A second element that appears out of place in the context of Adès’s oeuvre is his poem that accompanies *Living Toys*: this is the only work for which Adès has written a poem. In the extract above, Adès likens his poem to a Schenkerian analysis. This comparison opens up another interpretive reading that critiques musical-analytical language. Translations and applications of Schenker’s work have been characterised by a neutral quasi-scientific language at the expense of his elaborate organic and procreation metaphors.¹⁶⁵ Robert Snarrenberg has noted a transformation in American post-war applications of Schenker’s writings that reject the organic and procreation metaphors for a more objective, quasi-scientific language. In particular he identifies that Babbitt and Forte draw upon rhetoric associated with the natural

¹⁶¹ Greenwood, op. cit., p 283.

¹⁶² *ibid.*, p 339.

¹⁶³ Hamilton, ‘Introduction to the Music of Thomas Adès’ in *Thomas Adès: List of Works* (Faber Music: London, 2005).

¹⁶⁴ Richard Taruskin, ‘A Surrealist Composer Comes to the Rescue of Modernism’, in *The Danger of Music and other anti-utopian essays*, (Berkley and Los Angeles, California: University of California Press, 2008).

¹⁶⁵ Snarrenberg, op. cit., p 49.

sciences, using terms such as axiomatic, assertion, principle, structural and element as well as phrases such as ‘point of structural origin.’¹⁶⁶ Snarrenberg concludes that in Schenker’s myth, it is the work that takes centre stage whilst in Forte/Babbitt’s myth of the natural scientist the composer is given a marginal role and the musical work is relatively passive and the analyst. Adès’s comparison draws in his ostensibly fictional poem and the quasi-scientific myth evident in the applications of Schenker’s writing in English into the same conceptual blend which potentially calls into question the ‘objective’ prose that characterises Schenker’s writings by making the fictional nature of the Schenker myth more explicit. The allusion to Ligeti via *2001: A Space Odyssey* can be integrated within this context as it could be read as an invitation to engage with the work and its discourse in a critical manner due to Ligeti’s reputation as a constantly questioning, scrutinising composer,¹⁶⁷ which Adès has demonstrated an awareness of.¹⁶⁸ As a result, this allusion could be read in a way that sets up a critical distance between the reader and the work.

This network potentially leads to an interpretation that centres on the futility of attempting to formalize or objectify musical analytical writings; in even the most technical prose language that conveys a personal involvement is present. As such Adès’s piece squares well with Marion Guck’s article ‘Analytical Fictions’ which examines technical accounts of three analysts and reveals ‘the stories of the analyst’s involvement with the work she or he analyses.’¹⁶⁹ Marion Guck states that such stories could be overlooked by analysts and readers both because attention may be directed at the structural aspects of the music and because fictions depend heavily on

¹⁶⁶ *ibid.*, p 50.

¹⁶⁷ Mike Searby, ‘Ligeti the Postmodernist?’, *Tempo, New Series* 199 (January, 1997), 9-14 at 9. Arnold Whittall, *Exploring Twentieth Century Music* (Cambridge: Cambridge University Press, 2003), p 204-205.

¹⁶⁸ see Tom Service, *op. cit.*, p 81.

¹⁶⁹ Marion Guck, *op. cit.*, p 218.

conventional resources used by habit and training for their expression. They construct a background of beliefs for a musico-structural foreground of attention.¹⁷⁰ Analytical accounts typically make explicit their technical language and implicit the stories within their analytical work. Adès seemingly does the opposite by making the fictional account explicit and the technical analysis implicit. By explicitly reversing the focus from the analytical to the fictional Adès makes clear his ‘story of involvement’ and the subjective nature of music analysis.

Due to this multitude of references in *Living Toys*, there are far more elements to this conceptual blend than in *Polaris*. In order to chart these several conceptual domains it is necessary to expand the model that we used for *Polaris* so that it includes multiple input spaces. Amy Bauer introduces the idea of a multi space model and applies it to Ligeti’s music. Within this model, Bauer shows that one piece of music can map onto another. Specifically, she suggests that a listener encountering Ligeti’s work *Lontano* for the first time would draw on structures associated with a ‘Familiar Work’ to inform his/her approach to inform the New Work (*Lontano*) in order to comprehend the work. She states:

‘Our hypothetical listener recruits structure from each input space to compose the blend, exploiting counterpart connections (such as the role of harmony) between input spaces. For instance, the musical surface of the Familiar Work is capable of being parsed into a sequence of discrete events, whereas in *Lontano*, the musical surface is opaque, and blurs distinctions between events. Nevertheless, the ample concordant structure (those common elements that compose the generic space) encourages the construction of a blended space. The listener combines aspects of Source and Target in order to

¹⁷⁰ *ibid.*, p 218.

comprehend *Lontano* as he or she might comprehend a Familiar Work: as exhibiting audible form and structure within a closed aesthetic framework. Emergent structure in the form of a "complex of tone color, movement, changing harmonic planes" develops in the blended space, and is then available as an input space when the next New Work is encountered. This account of one possible way in which cross-domain mapping may represent the cognition of new music is necessarily tentative and ill-defined.'

It is this multi-space model that I shall apply to *Living Toys* which is particularly useful as it can display clearly and concisely how Adès's programme descriptions, allusions and quotations that are incorporated within *Living Toys* can construct a coherent meaning. Figure Eleven is a multi-space conceptual blend diagram similar to the ones above. Within this model there is a generic space, a music space, a text space and a blended space as before. However, the model below also includes a Schenkerian space and a Ligeti space in addition to the input spaces in the previous diagram, each of which is brought into play by features of both Adès's commentary and music (see Figure Eleven). The references to the film *2001: A Space Odyssey* in the text are corroborated in the music by an imitation of the pitch language in Ligeti's *Atmospheres* in 'H.A.L.'s Death' and the use of processes similar to Ligeti's in his treatment of the song quotation. Ligeti was also characterised as a consistently questioning scrutinising and critical composer working within the avant-garde modernist tradition so perhaps an allusion to him here is an invitation to be critical ourselves. Finally, Adès states that his poem is (a metaphor for) a Schenkerian analysis and in so doing conflates his poem that is evidently Adès's

personal reading of the piece with an analytical methodology that locates a reading of the music within the work itself. Nevertheless, Scott Burnham notes that even Schenkerian accounts of the first movement of Beethoven's 'Eroica' Symphony have been infiltrated by a version of the hero's journey.

This reading falls in line with Edward Venn's who suggests that the interaction of musical and cultural forces give rise to a critique of the role of listening and the listening subject in 'Ectasio', the third movement of *Asyla*.¹⁷¹ In a later article, Venn suggests that 'the significance of *Brahms* lies in its capacity simultaneously to evoke and critique the dominant discourses surrounding both Brahms the composer and musical tradition considered more broadly.'¹⁷² Venn's readings draw upon Adès's music, but also his titles, commentaries and also programme notes devised by others.¹⁷³ My reading of *Living Toys* as a critical subversion of 'objectivist' musical analytical discourse stands alongside these. There is very little evidence that Adès himself has/had an interest in this subject, yet this reading is still facilitated by his music and commentaries.

¹⁷¹ Edward Venn, "Thomas Adès's 'Freaky, Funky Rave'.", *Music Analysis*. 33.1 (2014), pp. 65-98, p 66.

¹⁷² Edward Venn 'Thomas Adès and the Spectres of Brahms' in *Journal of the Royal Musical Association*. 140.1 (2015) pp163-212 p 169.

¹⁷³ *ibid.*, p 169.

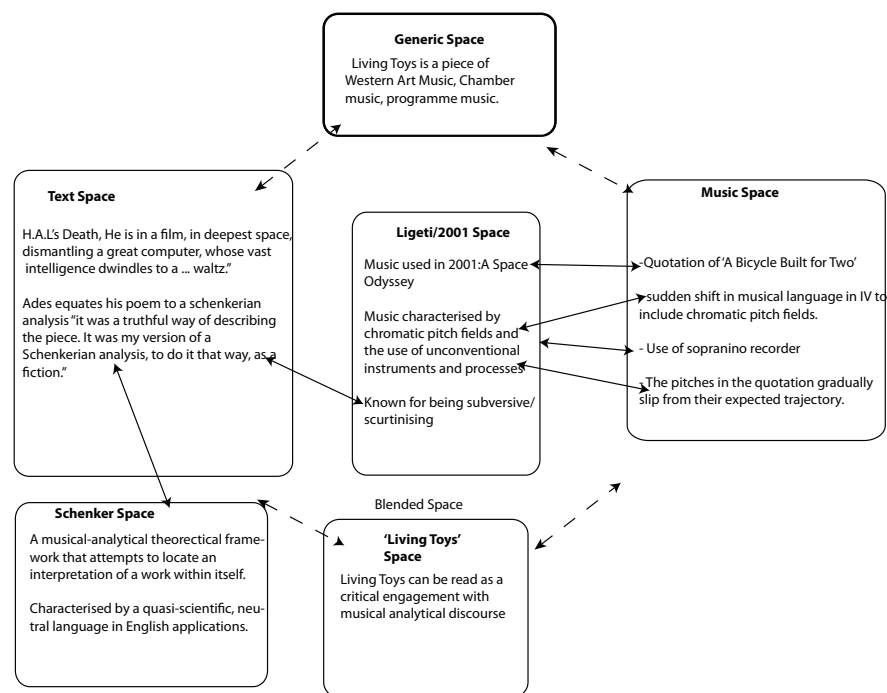


FIGURE ELEVEN

Multi-space conceptual integration network of *Living Toys* including the 'Ligeti Space' showing how the references to Ligeti and Schenker in the commentaries could combine with the music and text to produce a reading of *Living Toys* which engages with musical analytical discourse.

Over the course of this chapter I have shown that Adès's programme notes, interview extracts, cover image and his music can be combined to form a narrative reading that can be traced throughout the piece. This narrative reading acts as an analytical reading of the work, highlighting certain features of the music, whilst obscuring others. This commentary, in promoting some aspects of the work above others, shapes a reading of the pitch processes of the work, rather than reproducing them. Furthermore, I have shown that examining his references and allusions to other works in his music and discourse can enable a reading that sees *Living Toys* as taking a critical stance against the perceived objectivity of musico-analytical language that was symptomatic of musicology in the early 1990's: Adès effectively replaces one myth, based on the objectivity and neutrality of musical language, with his own that

offers an understanding of the work in terms of a fictional story. In short, the piece is not about what I have set out here but rather, the readings above are about a particular experience of the music. I have actively avoided suggested is that this reading is necessarily Adès's own. Nevertheless, it is significant that Adès's commentary facilitates these readings: without it the references to '2001: A Space Odyssey' and Ligeti, and the conflict between pentatonic and aligned cycle material would be relatively obscured. Consequently, Adès's commentaries are a significant part of his compositional process.

COMPOSITION PORTFOLIO

Over the course of this thesis I have suggested that Adès's commentaries, form part of his compositional process and can contribute to a reading of his work. Sometimes these commentaries can prompt a particular analytical account of the work, as in *Polaris*, and at other times they can encourage a more outward orientated reading that takes a critical stance to ostensibly extramusical phenomenon, as in *Living Toys*. It is therefore worth examining Adès's commentaries alongside his music as they can facilitate a more nuanced understanding of his work. My own approach to composition has responded to Adès's: the titles and programme notes have been devised in order to draw out and comment upon coexisting processes within the pieces. Had space permitted I would have included accounts of all the pieces in my portfolio. Instead, I have chosen to focus in detail on *Round Trips*. I have chosen this piece, as it is a large-scale work (over thirty minutes in length) and one in which the programmatic discourse plays the greatest role.

Round Trips

These pieces for oboe and cello explore tensions in the ambiguities of their titles which encourage the development of two separate readings that draw upon two separate image schema, Music as a Journey (Source, Path, Goal) and Music in Space (Container Schema/ Centre periphery schema). This does not constitute a contradiction; each metaphorical schema highlights different aspects of the piece at the expense of others. Thus the different conceptualisations of this set of pieces that arise from their ambiguous titles encourage two distinct readings that conflict with

each other.¹⁷⁴ The effect that I am aiming for is similar to Spitzer's 'hearing as' effect cited in the chapter on conceptual metaphor.¹⁷⁵

This differs from the Adès case studies above in that the commentaries and music draw on more source domains that form two possible, disparate meanings within the work. Though Adès does make use of ambiguous titles in his work e.g. *Asyla* and *Tevot* that tend to have ambivalent meanings. However, the titles of the pieces in 'Circular Constructions' bring together relatively disconnected meanings through the use of homonymic titles, rather than enriching a reading based either on a single reading, or one based on the tension of two or more different meanings. This bears similarity to Spitzer's (pace Wittgenstein) of hearing & hearing as. Consequently, there is a choice to be made between two separate conceptualisations of each of these pieces.

For instance the title of the first piece PR_CESSION is an incomplete word that could either be completed with an 'E' as Precession, meaning the change in orientation of the rotational axis of a moving body. Or it could be completed with an 'O' forming 'Procession', a number of people moving together in an orderly fashion. The meanings of both words are played upon in this piece. The meaning of precession can be located in the music: the pitch structure is based symmetrically around 'A' but the A on which it is based is consistently changing: sometimes it's the A above middle C (A440), sometime an octave above, sometimes an octave below. Each section unfolds symmetrically around a central , 'A' which progress from A440, to A220, then to A440 and A880 before finally returning to A440 at the very end of the movement. Music Example Twenty-Three demonstrates this in the first section in

¹⁷⁴ Janna Saslaw, 'Forces Containers, and Paths: the role of bodily-derived in the Conceptualization of Music' in *Journal of Music Theory* vol, 40 no. 2 (Autumn, 1996), pp. 217-43 p 235.

¹⁷⁵ Spitzer, op. cit., p 24.

which the melody gradually departs from the A440 at the start of bar 49. The intervals around the centre get larger culminating in a perfect 5 above and below the centre at the end of the extract.

As if marching slowly but strictly together
cantabile
40
Ob. *pp* *express.*

+M3 +m3 -M3 -m3 +M2 -M2 +P4 -P4 +m2 -m2 +Aug4 -Aug4 +P5 -P5

MUSIC EXAMPLE TWENTY-THREE

Tracing the symmetrical expansion of the melodic line from the A above middle C.

The central pitch changes in each section from A440 to A880 and A220. As a result we might understand the piece as a procession through these centric pitches as in Figure Twelve below.

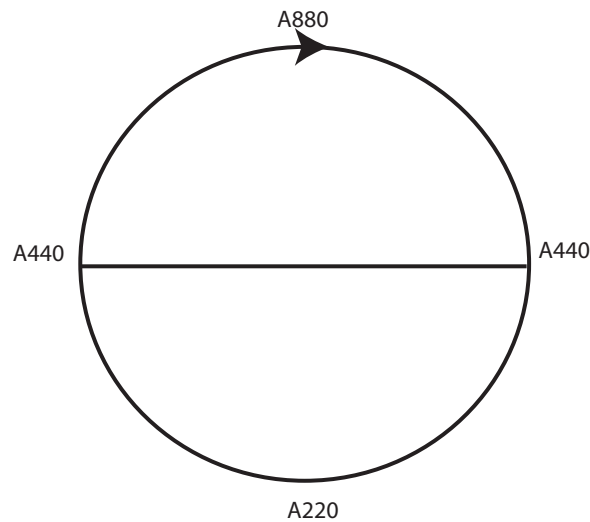


FIGURE TWELVE

An illustration of a possible way to conceptualise the progression of pitch centres through the piece.

However, this movement also builds upon the second word alluded to in the title, 'procession'. This meaning is reinforced by the structure of the piece: the alternating static and active parts of the piece mimic the movement of the Easter

processions in Spain through the cities (see Figure Thirteen). There is also material based on the brass march figures that can be heard at this time (see for instance bars 49-60). A distorted quotation of the Spanish national anthem can be heard at the close of this movement (bars 140-end). Additionally each movement section is preceded by a ‘trumpet call’ in the oboe (e.g. bars 34-39), which mimics the call to attention during the Easter processions. Though these elements could be discovered in the music without this title, it is significant that the title points to them.

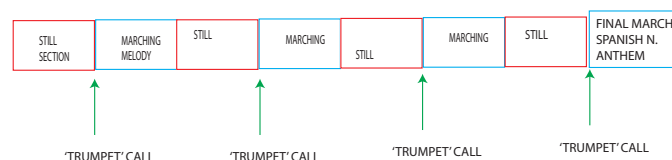


FIGURE THIRTEEN
Structural diagram of ‘PR_CESSION’ highlighting the episodic structure of the piece.

Consequently, there are two separate conceptualisations for this piece. We might choose a reading that privileges the procession metaphor or one that privileges the precession metaphor. As a result, in this piece one can recognise the presence of two readings and choose to hear either one or the other. Though it would be possible to create a reading that would merge the two separate reading together (a ‘procession’ through the ‘precession’ of the pitch-axis perhaps) I argue that there is not enough congruence between the two metaphors in the piece for such a reading to be likely.

The second movement ‘Eccentricity’ plays upon the two meanings of its title: a measure of the deviation of a line from a true circle, circles have an eccentricity of 0 whilst parabolas have an eccentricity of greater than 1, and straight lines have an eccentricity that tends towards infinity. It can also refer to strange or unconventional behaviour, as it is understood in common parlance. These meanings are played upon

in the music. Firstly, eccentricity as a mathematical term informs the long-range structure of the piece. Both the oboe and the cello move through the same tempo relationships but the oboe is always 1.6 times faster. So that, for instance at the opening, the oboe and cello begin together at the same tempo (Minum = 50) before the oboe gradually speeds up to Minum = 80, 1.6 x the cello's tempo, a ratio of 5:8, the same at the ratio between twice the diameter and the circumference of a circle. The two instruments do come together twice during the piece, at the beginning and during the climax of the piece, where the diameter meets the edge of the circle. Consequently we might conceptualise this structure in terms of the following illustration shows two paths through a circle, one around the circumference and the other across and back its diameter (see Figure Fourteen below).

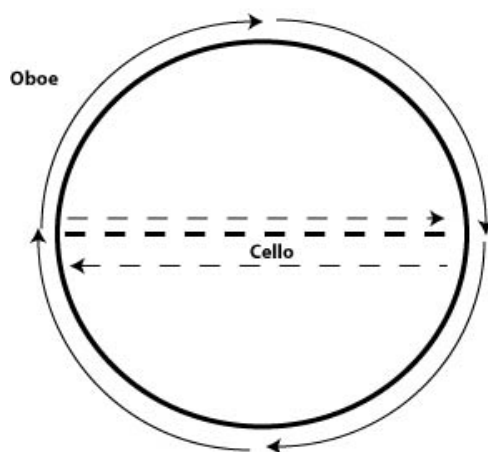


FIGURE FOURTEEN
Structural diagram of ‘Eccentricity’ highlighting the differing routes taken by the oboe and cello

The music also plays upon the other meaning of Eccentricity. There is a timbral division between the instruments; the oboe plays conventionally whilst the cello plays unpitched material, tapping against the body of the instrument. The oboe joins the cello in playing noise like material twice in the movement, at the opening and in the middle of the work, where the oboe and the cello lines come together. It is

only at the end where the cello joins the oboe in playing pitched material, (a low C, which segues into 'ARX'). This division in material might lead to a reading of the piece that understands the oboe and cello as performing 'normal' vs. 'eccentric' behaviour. It would be tempting to understand the oboe as a 'normal' character and the cello as the 'eccentric' one, however it would be much richer to consider this division with either the cello or the oboe in the eccentric position and as such interrogate the idea of 'conventional performance.' After all, extended performance techniques are becoming more commonplace that the absence of them could be considered an irregularity.

Nevertheless the first reading, with the oboe having an eccentricity of zero and the cello being eccentric is supported if we consider the two separate meanings of the word with the music: the faster tempos of the oboe make it clear that it is tracing the longer path of the circle. It is possible to reconcile the readings above here into a single one: two separate characters travelling two separate paths one that happens to be a straight line (eccentric) and the other which is circular (not eccentric). An analogy for this structure might be that the two characters (voiced by the oboe and the cello) are travelling along two separate routes to the same destination, the oboe's route is significantly longer, so in order to arrive at the same time as the cello it needs to move faster. In this combined reading the 'eccentric-ness' of the cello is supported as the tempo relationships between the two suggest that the oboe is travelling on a circular path in relation to the cello: the tempo relations between the two instruments mean that the oboe is consistently at a faster tempo than the cello in the ratio 8:5.

The third piece 'ARX' plays on the homonyms arc and ark. In Euclidean geometry an arc is a closed segment of a differential curve, whilst an 'ark' refers to a vessel in the biblical sense, i.e. Noah's Ark or the Ark of the Covenant or relatedly, a

place of safety. The music plays upon these two definitions. The idea of a differential of an arc of a circle is played upon, which start off with a rate of change that tends to infinity and then moves finally to a rate of change of zero (i.e. everything uniform). Consequently, this movement begins incredibly erratically before becoming much more uniform at the end. The piece progresses through material characterised by a very high rate of change through to material characterized by almost no change at all. Picking upon this definition of the word ‘arc’ and this characteristic of the music it might be possible to conceptualise the piece in terms of the following diagram (see - Figure Fifteen)

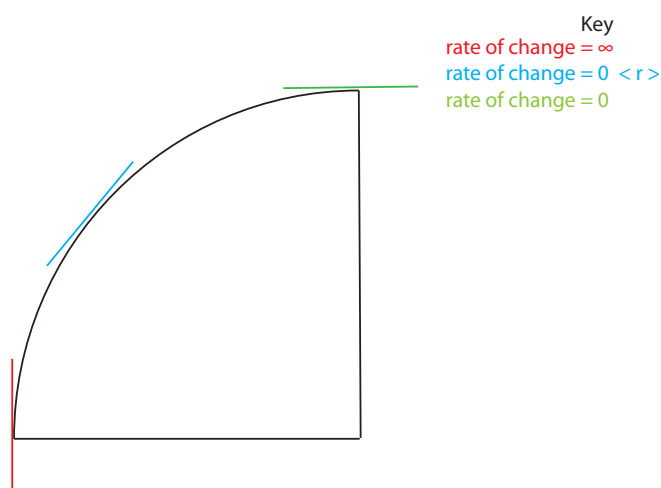


FIGURE FIFTEEN
Structural diagram of ‘Arx’ highlighting the differing rates of change throughout the piece

Or we might conceptualise ARX differently, based around the word ‘ark’. The sections in which the rate of change gradually diminishes are alternated with sections dominated by a cantabile melody. These two kinds of material are self-contained from each other. This model could lead to a conceptualisation of the work as a narrative in which a character, (portrayed by the melody in the static sections) is travelling from a position of relative danger to relative safety. Or perhaps the piece could be

conceptualised as an encounter of a storm at sea, which gradually, over the course of the piece, dissipates (see Figure Sixteen).



FIGURE SIXTEEN

Structural diagram of 'ARX' emphasising the episodic structure of the piece

Again it may be possible to blend these two conceptualisations into a single reading (a journey that follows the arc trajectory or figure fifteen). Though there is very little congruence between these two separate conceptualisations, which makes such a reading unlikely.

In each of the three movements the ambiguous titles prompt a tension between two different readings of the work, one based on a circular construction and another based on a journey of some kind. Sometimes these readings are contradictory (as in 'PR_CESSION or ARX) and at other times it is possible to reconcile them into a single reading (as in 'Eccentricity'). It is unlikely that these conceptualisations could be reached without the titles, commentaries or images, and, even if they could be reached independently of them, it is significant that the programmatic discourse can lead to these conflicting programmatic readings. Therefore, one can argue that the titles and the programme notes for these pieces are as much a part of the work as the notes are.

FINAL THOUGHTS

Over the course of this thesis I have examined Adès's music and his commentaries, with a particular focus on how they interact with his music. In *Polaris* Adès constructs a series of elaborate metaphors which prompt a reading of the pitch processes in the work in terms of magnetism, and stars. This allows us to conceptualise them in terms of a number of circular constructions, which square well with Saslaw's assertion that the structures we obtain from analysing music are the result of a projection from one of more bodily-derived image schemata.¹⁷⁶ This reading exploited a number of similarities between Adès's comments and Lendvai's theory of tonality in Bartok's music to support this circular meaning, and to offer a reading of the global progression of the work. However, whilst elements of this work were foregrounded by the commentaries, other readings were not so privileged. I offered a reading of the piece in terms of a pentatonic conflict that was not supported in the commentaries. Since a particular reading of the work is supported by Adès's commentaries and media distributed with the work, I have argued that they are an important part of his compositional process and should be understood as an integral part of *Polaris*.

Whilst my reading of *Polaris* was relatively inward looking, my reading of *Living Toys* draws in elements outside the work. Adès creates a narrative, which acts as a metaphor for the experience of the work. Adès compares his story to a Schenkerian analysis of the piece and as such, possibly offers a critical stance towards music analysis. Analytical accounts of music often seek to minimise the role of the analyst in the account. On the other hand, Adès's story foregrounds his involvement

¹⁷⁶ Saslaw, op. cit., p 236.

in his reading of the piece. By directly comparing his story to a Schenkerian analysis of the work, Adès also makes explicit the analyst's role in Schenkerian readings (and possibly, by extension, other types of analytical readings) of music. An allusion to Ligeti, through Kubrick's *2001: A Space Odyssey* in the music and commentary support this reading.¹⁷⁷

My findings have wider implications for programmatic discourse, which composers tend to approach with a degree of scepticism. This stems from an understanding of programmatic description as a translation or an explanation of the music, something that I feel is wrong-footed. Rather, a more beneficial way to understand programme notes is as an assimilated part of the compositional process. Consequently, I propose a model in which programmatic discourse is considered during the compositional process, and not as a retrospective explanation of a piece.

My composition portfolio attempts to put this model into practice. My three pieces for oboe and cello draw upon my findings in Adès's music, making use of a circular metaphor and ambiguous titles to point to elements in the music. I have chosen titles and programmatic discourse which draw upon several distantly related source domains. Two common threads run through the piece, one based on a journey schema, the other based upon a circular schema (music in space) source-path-goal conceptualisation. In so doing the discourse and music lead to one of two conceptualisations, with the aim that, drawing upon Spitzer's (pace Scruton and Wittgenstein) concept of 'hearing as', these pieces can be heard in two different ways.

This thesis has done two things. First it provides a thorough examination of the relationship between Adès's music and his writings; to have examined the

¹⁷⁷ If space permitted I could potentially have explored how the music can act as a source domain as well as a target domain. In this second reading, I would have explored how the Adès's music can shape our understanding of the pole star, constellations and magnetism, or in *Living Toys*, how the music shapes our understanding of narratives, myths, hero tales.

metaphors that Adès constructs and the way they can be applied to his music. Secondly, and more generally, I hope to have shown that programmatic discourse can be an incredibly powerful tool when utilised effectively. One need not treat programmatic discourse as an explanation for the music; this is arguably ineffective. Understanding programmatic discourse as a contributing part of the compositional process, whether this is as a metaphor for the experience of a piece, or as a prompt towards a particular reading, is a far more rewarding approach to writing about one's music.

If space had permitted it would have been exciting to examine *Polaris* alongside *In Seven Days* which also blends music and video, and (at least superficially) appears to employ a similar musical language to *Polaris*.¹⁷⁸ Similarly, the metaphors that Adès constructs for this work are based around organicism and, the 'magnetic series' that played a major role in my first case study. It would also have been exciting to examine how this metaphorical model might work with music functioning as a source domain, as well as a target domain. Could the music of *Polaris* shape our understanding of the pole star, or navigation, or voyages? Could *Living Toys* contribute to our Hero's Journey trope? And if so, how might it do so?

¹⁷⁸ Service, op cit., (2012) p 56.

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