

**University of London**

**TECHNOLOGIES OF  
DEFAMILIARISATION:**

**ON THE RE-ENCHANTMENT  
OF SOUND**

by

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## **STRUCTURE OF THE THESIS**

This exploration of musical thought focuses narrowly on the production and structuring of sound. It traces the links between my own musical conception and several key influences that inform it. It is complementary to the submitted set of musical scores and recordings, and explores theoretical ideas that have informed my quest to demolish taboos and engage with a more immediate intensity of sound, while at the same time avoiding reified games with meaning and the alienation of subjectivity in music. The defamiliarisation of material in order to achieve a heightened efficacy of expression is the link that connects the three influences and forms of sound organisation I discuss, appearing in different guises in each one.

The thesis essay is divided into three chapters, each dealing with one of these themes. The first chapter looks at how Janáček considered mimesis of speech-melodies to be a way of creating natural, realistic art. Yet, paradoxically, it was in his stylisation of language that Janáček achieves a heightened mode of expression. In my compositions *Galliambics* and *Headless butterfly* (among others) I use comparable techniques of defamiliarising speech patterns as a means of reenergizing expression.

The second chapter explores how similar methods of alienation and deconstruction are used, in my music, in dealing with material derived from folk music. Here the tension lies more consistently with the dialectic between musical technique and folk material. Folk music is undoubtedly used for the sense of naturalism and power and difference that it evokes, both in the direct use of folk material and in the integration of lessons learned from it into the framework of my own music. This is informed by an awareness of the dangers of ransacking such material for ephemeral exoticism and the reducing of a valid means of expression to an invalid and regressive one.

The final chapter deals with means of directly organising sound through subjecting isolated sound-objects to architectonic forces derived from the works of Varèse, Xenakis and Ligeti. It discusses the way in which the conception of music or sound as the physical interaction of sound-masses can be applied to the means of defamiliarisation of material by energizing different phenomena (i.e. sound-objects) which can be taken from music outside my own and exploited for the particular things they evoke.

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# **INTRODUCTION**

## **MARXIST DISENCHANTMENTS AND THE MIS- SION OF NEW MUSIC: CONTENT VS. FORM, MATERIAL VS. TECHNIQUE**

In a 1998 interview, Helmut Lachenmann stated his position as he saw it:

“As an artist I have not the least influence on political events; but I have the possibility—and the duty—to fight that anti-intellectuality, and to contribute to the sensitisation, including the clarity of hearing, which stand in opposition to the cheaper forms of magic with which our cultural landscapes are polluted. I speak here of a contribution through the arts; that is, through [...] provoking our ears in new ways, to prevent what they hear becoming homogenized [...] in this sense freedom is being practised, and the idea of music is being constantly renewed. This was exactly what Nono did: the political significance of his music lies not in the ideological message of a committed Marxist and communist, any more than the transcendental power of Bach’s music can be explained by its Protestant origins.” (Ryan 1998:20).

Art has been seen by Marxist thinkers as a revolutionary activity, capable of motivating to action and banishing apathy: all music is political in a sense. Lachenmann draws a necessary distinction between music with a “message” and music in which the political thought is somehow embodied. Despite an awareness that music’s entirely non-referential grammar makes the analysis or explanation of exactly how this can be embodied particularly challenging or even problematic, it is the second of type of music that I explore here. Thus, in my own compositions, I have sought to eschew a readily obvious message or political overtones for a more profound search for expression that is engaging, provocative, unexpected. This essay is written as a complement to the scores submitted in the portfolio, exploring both the creative processes

that informed their production and the theoretical strands that inform them—both within musical tradition and within Western philosophy and art.

In his book *The Critique of Cynical Reason*, Sloterdijk, a Marxist literary theorist, observes that Nietzsche, having dealt metaphysics its death blow by uttering ‘God is dead’, simultaneously initiated a novel form of cynicism characterised by a fundamental distrust of all knowledge, due to the realisation that no knowledge was power neutral. This “universal, diffuse cynicism” (Sloterdijk 1987: 3), based on a fundamental distrust and disenchantment, has become increasingly prevalent in Western societies following the failure of the great ideological experiments of the 20<sup>th</sup> century, Fascism and Communism. Unlike the cynicism of the ancients (i.e. Diogenes), which was a tool for moral improvement and social engagement, Sloterdijk argues that the modern form of cynicism is a novel and crippling phenomenon. It is characterised by a persistent attitude of latent and diffuse suspicion towards the world, ideologies and institutions, which fosters disengagement, apathy and withdrawal. This diffuse form of discontent undermines the critique of ideology which would (in Sloterdijk’s view) offer a way out of the impasse by allowing us to re-appropriate the positive, liberating promise of the enlightenment.

“Cynicism is *enlightened false consciousness*. It is that modernized, unhappy consciousness, on which enlightenment has laboured both successfully and in vain. It has learned its lessons in enlightenment, but it has not, and probably was not able to, put them into practice. Well-off and miserable and the same time, this consciousness no longer feels affected by any critique of ideology; its falseness is already reflexively buffered [...]” (Sloterdijk 1987:5).

I would suggest that a similar disenchantment has been at work within music. Adorno, Lachenmann, Ligeti (though not from a Marxist standpoint) and others have all observed that post-war New Music seemed to be losing its critical impulse. In the history of Western music, important innovations emerged in response to earlier such crises, but such once-novel forms of expressions have now become routinised and ingrained. This renders them less effective as means to resist the ‘commodification’ and habitualisation of expression. There is a need to find new ways of reconnecting with sound, musical structure and material.

Frustration with stereotyped means of expression surfaced in a number of seminal essays concerning the evolution of New Music. “Though it obviously was un-

just to those in the line of fire at the time”, (Lachenmann 1980: 21) Adorno’s 1955 essay “On the Aging of New Music” seems now astonishingly prescient. At a point when the post-war European avant-garde was at its peak, he articulated doubts about the avant-garde’s ability to sustain its critical impulse and prophesied the disenchantment and apathy that would set in later. His essay was written in the context of serialism’s then-dominant position and critiques what he describes as “Music Festival music”, a standardised, moderate, avant-garde that uses the language of serialism without its critical impulse. This criticism, I would suggest, is even more relevant now, when movements that emerged in response to serialism—fluxus, minimalism, the ‘textural’ music of the 60s and so forth – have petrified into languages that:

“feed essentially off the discoveries of New Music, while at the same time treating it arbitrarily, indifferently, thinning it out, bending it out of shape. The sound remains the same, but the anxiety that gave shape to the great founding works has been repressed. Perhaps that anxiety has become so overwhelming that its undisguised image would scarcely be bearable: to recognise the aging of the New Music does not mean to misjudge this aging as something accidental. But art that unconsciously obeys such repression and makes itself a game... renounces the truth, which is its only *raison d’être*. [...] When this art asserts the superiority of its exalted spirit over the confusions of mere existence it achieves nothing more than an alibi for its own bad conscience. [...] Kierkegaard, speaking as a theologian, said that where once a dreadful abyss yawned a railroad bridge now stretches, from which passengers can look down into the depths. [...] Even if the historical force behind this development were so overpowering that it made all resistance vain, it would at the very least be worth destroying the illusion that such art is still what it claims to be, or is held to be, in a trade whose standard in conformity” (Adorno 2002: 183).

These pressing issues have been trivialised into oppositions: ‘tonality’ versus ‘atonality’, ‘emotion’ versus ‘scholasticism’, ‘postmodernism’ versus ‘modernism’, supposed ‘accessibility’ against a supposed ‘ivory tower’. These set up unacceptable choices for creative artists. For instance, the issue of *Tempo* in which the English translation of *The ‘Beautiful’ in Music Today* first appeared also contained, in opposition to this, a dismal article by Ladislav Kupkovič in which this choice is laid out in terms of the supposed necessity of a return to tonality (when tonality is something that needs to be reckoned with, transcended, conquered, not slavishly adhered to). What is needed is an analytical way of seeing the problem that circumvents these debilitating,

unattractive oppositions that only suggest that the path of real integrity is to remain silent.

From my point of view, it appears as a choice between continuing, in some form, the project of musical modernism, which would imply writing with conventions that have now lost their original historical function (originally that of expressing the ethos of the modern era) or regressing into the past in the fashion of the various ‘neo’-schools, to write, supposedly, like Mahler or Bach or Sibelius, which in itself means writing with yet another set of historically displaced conventions. Lachenmann stresses that it is important to take the historicity of music in account and that it would be pointless to return to earlier musical conventions as we could never ignore the technological and epistemological advances that inform the music of today, and thus could never recreate the historical moment that informed the creation of an earlier form of music, the conditions which dialectically provoked those forms of expression into being (see also Habermas 1987).

As Lachenmann puts it in *The ‘Beautiful’ in Music Today*:

“There is a need today for investigations into the music of Bach, Beethoven, Mozart, Schubert, aimed at showing that the degree of individuation, of intensity and of truthfulness, achieved was inseparable from the process of grappling with the aesthetic apparatus at each stage in its historical and social development. [...] The elements of compositional individuation are directly apprehensible as rejections of the usual; as latent or open cause of scandal, as expressive redefinition of the means of composition” (Lachenmann 1980: 23).

The process of “grappling with the aesthetic apparatus” and the idea of “rejections of the usual” bring me to a concept that has become fundamental to my way of organising musical material: the concept of ‘defamiliarisation’. In employing techniques that defamiliarise, it becomes possible to circumvent the ‘[...] powerlessness that always sets in as soon as musical material is no longer broadened by an inner compulsion but is instead ransacked in the interest of turning up new sensory stimulation’ (Adorno 2002: 196).

From a Marxist point of view, awkwardness and defamiliarisation are essential tools that prevent the process of habitualisation, indifference and commodification of a work of art. This is inevitable if one wishes to be reflexive as well as innovative. All the techniques I use are forms of defamiliarisation. I see defamiliarisation as an effect-

ive way of tackling the dilemma described above, of renewing music at this historical juncture.

### **Content versus Form, Material versus Technique**

A quote from the Russian formalist Shklovsky introduces several themes that are at the heart of this essay.

“Habitualization devours works, clothes, furniture, one’s wife, and the fear of war. [...] And art exists that one may recover the sensation of life; it exists to make one feel things, to make the stone *stony*. The purpose of art is to impart the sensation of things as they are perceived and not as they are known. The technique of art is to make objects ‘unfamiliar’, to make forms difficult, to increase the difficulty and length of perception because the process of perception is an aesthetic end in itself and must be prolonged. *Art is a way of experiencing the artfulness of an object; the object itself is not important.*” (Shklovsky 2007: 778).

Russian formalism asserted the primacy of form over content, of technique as something that distinguishes the art of different cultures, different ages, and different artists. For Shklovsky,

“[...] poetic imagery is a means of creating the strongest possible impression. As a method it is, depending upon its purpose, neither more nor less effective than other poetic techniques; it is neither more nor less effective than... the commonly accepted rhetorical figures, and all those methods which emphasize the emotional effect of an expression” (Shklovsky 2007: 776).

In other words, all techniques fulfil the same function and all techniques are equally effective, none being more important than the other. This was historically important in establishing the theoretical basis of formalism and it is of singular importance as a tool for discussing the works presented here.

Shklovsky’s claim that the object is ‘not important’, echoes Wilde’s contention that “[...] to art’s subject-matter we should be more or less indifferent” (Wilde 2007: 484), whilst not being wilfully hermetic in the manner of ‘art for art’s sake.’ I consider the object itself to be not so much “not important”, but that the uniqueness and success of a work does not so much depend on the uniqueness, or intrinsic value in the material that would set it off against any other art work as new or radical in its own right. If content were not subordinate to form, then artistic creation would be

merely a form of bricolage. Were such bricolage to become a substitute for genuine artistic creation, the result would be a race to hunt out every possible new area of culture until every cultural artifact available had been used up, all cultural space had been penetrated, a process that can be discerned for example in the notion of fusion music endemic in ‘world’ music.

### **Defamiliarisation “for its own sake”?**

Equally dangerous is the opposite extreme: —the idea of art merely being a play of conventions and techniques— “Defamiliarisation of sound for its own sake represents no more than a sort of surreal, exotic, expressionistic affection. I despise the playing of these games for fun’ (Lachenmann in Ryan 1999: 21).

Whilst Lachenmann’s criticism refers specifically, I think, to composers who uncritically import ready-made formulae into their own music, for example the imitation of the very original use of extended techniques and sculpting of noise found in Lachenmann’s music without understanding its critical impulse, I also think that there is an element of taboo to defamiliarisation “for its own sake”. New Music can often seem to work precisely by denying itself the possibility of saying things outright, by rejecting material not because of inherent validity, but because they are in a sense considered ‘forbidden’. This is exemplified by the irrational self-imposed taboo that some composers still have of excluding elements that might overly suggested ‘traditional’ music, such as octaves and triadic harmony, a legacy left over from serialism, which codified practices that arose in the free atonal period of the Second Viennese School in response to the needs of liquidating the conventions of musical expression as embodied in the tonal system.

It also appears to manifest itself in a shyness of direct engagement with expression. I tentatively suggest the example of Thomas Adès’ Piano Quintet, Op.20 (2000). A work of great rhythmic complexity, which takes its cue from the ‘irrational’ rhythmic structures in Nancarrow’s player piano studies, my discomfort with the work lies not so much with the means employed in themselves (i.e. this unnecessary complexity) and the actual sound of the music—a rhapsodic, quasi-improvisational flow. This tension arguably enhances the work, rather than detracting from it. What is more concerning is the constant negation, “for its own sake” of things the composer clearly would like to do, have climaxes, be ‘emotional’, lyrical, to write a strongly teleological form that is in some sense symphonic. The complexity of the rhythmic structure,

which defamiliarises what would otherwise be a relatively conventional sonata movement is partly to blame for this, but at every step there seems to be a deliberate, self-imposed frustration, a taboo on saying things directly that muzzles the potential power of the work and represses its chances of confronting the real problems of musical expression. The defamiliarisation denies the music the right to be itself, to no apparent expressive end that might justify the means.

### **What is defamiliarisation?**

My choice of defamiliarisation as a key creative technique is not arbitrary. Techniques of defamiliarisation have been used throughout the history of Western art, but how is this strategy best understood, and how is it linked to signification, the production of meaning and, ultimately, thought processes? The work of Ferdinand de Saussure (see Saussure 2007) is a useful starting point for a brief exploration of these questions. Saussure's method of analysing language involves breaking down words into smaller linguistic units (phonemes) which do not possess any meaning in themselves. He points out that these then derive their meaning from their relation to other surrounding phonemes. In my use of 'sound-objects', discussed in Chapter 3, the isolation of musical units from their original context works in this way. However, sound-objects are not meaning-neutral, as Saussure's phonemes are, but rather work precisely because of the culturally-informed connotations they evoke in the listeners' minds. How then is meaning produced, and why are certain representations more meaningful and fascinating than others?

Here it is interesting to turn to the work of Dan Sperber (1985), a French cognitive scientist—although these theories about cognitive processes remain in the realm of speculation, they do shed light on the differences between signs and symbols in terms of meaning, and on the nature of symbolic communication. Sperber observes that symbols are different from signs in that they are not paired with their interpretations in a code structure—their interpretations are multiple and varied. What is striking about symbolic practices is that they only have value for those who can recognise them. Symbols are not explicit, but must themselves be symbolically interpreted. Sperber argues that symbolic knowledge is the product of a particular part of the brain, which deals with knowledge that is not fully understood on the basis of our experience and accumulated encyclopaedic knowledge. In other words, symbols are rep-

resentations that are highly salient because they are puzzling—the fact that they remain elusive and open to interpretation makes them highly memorable.

Defamiliarisation, I would argue, works in a similar way: sound-objects torn from a familiar context and placed in a new light are both familiar and unfamiliar and hence puzzling. They are also good to think with since, like symbols, they elude a definitive interpretation and remain open to new meanings. I discuss methods of reenergizing, of giving salience and memorability to material that could otherwise be considered kitsch, as cliché, as material that has become completely habitualised and representative of ‘commodified’ music.

The use of such devices in my own music creates a tension between material and technique that is not to be ‘resolved’, covered over or repressed. I actively seek material that resists integration into conventional musical structures in order to stimulate this fracture. Writing on the contradiction between freedom and strictness in Schoenberg, Adorno (2005: 205) attributed a dialectical meaning to this rift. I distinguish between technique and material in a similar way to Adorno’s distinction between subject and object—the object, in this case, corresponding to technique and the subject to musical material. The tension between the material and the musical technique and the creative will to reconcile the fracture makes the auditor perceive the material freshly. The emotive naturalism is alienated and held in check by the techniques employed.

The eclectic rag-bag of techniques and musical materials found in my own music is not an arbitrary feature, but rather one that, akin to these defamiliarisation techniques, aims to create a more tactile approach to the organisation of sound and musical material. The body of this thesis is divided into three chapters that discuss ways in which these techniques have been applied in my music. The mimesis of speech patterns, the use of folk music, and so forth, are not ‘techniques’ themselves, but rather forms of material that demand certain treatment and an expansion and questioning of technique.

Chapter 1 discusses mimesis of speech patterns with reference to role they play in Janáček’s late works. Although Janáček used these ‘speech-melodies’ in order to create a form of musical realism, through his stylisation of Czech vernacular, he paradoxically achieves the defamiliarisation that the Russian formalists considered to be the principal task of art. This culminates in the originality and expressive power of Janáček’s late operas. I draw parallels with the way my own music employs compar-

able techniques of defamiliarisation of speech patterns in order to create a similar aura of strangeness and stylisation where the flow of the original speech is at once familiar and strange.

Whilst Chapter 1 deals with defamiliarisation as applied to mimetic techniques in music, Chapter 2 builds upon this by drawing attention to the way that the works of mine that take their material directly from folk music employ similar techniques in order to control the material. Here the tension lies more consistently with the dialectic between musical technique and folk material. Folk music is undoubtedly used for the sense of naturalism, power and difference that it evokes, both in the direct use of folk material and in the integration of lessons learned from it into the framework of my own music. Coupled with an awareness of the dangers of ransacking such sound sources for ephemeral exoticism and the reduction of a perfectly valid means of expression to an invalid and regressive one, I discuss how techniques, such as the deconstructing of folk material and the reintegration of such raw elements into complex polyrhythmic structures, attempt to hold in check the emotive, exotic qualities of folk music.

Finally, Chapter 3 discusses the ways in which the conception of music as the physical interaction of ‘sound-masses’, an idea derived from Varèse, can be applied as a means defamiliarisation of material, by energising isolated phenomena—‘sound-objects’, which are often taken from music outside my own and exploited for the particular things they evoke—and reenergizing them by treating them as distinct physical entities which can interact with other sound-masses in the music. I also explore the ways in which the collision of monolithic, often highly teleological blocks of sound can throw up points of stylistic fracture, temporary awkwardnesses that contribute to the process of defamiliarisation.

# CHAPTER 1

## MIMESIS AS A BASIS FOR MUSICAL MATERIAL: SPEECH-MELODIES

“In the usual aesthetic of our time we speak of imitation as something negative [...] Thus the tendency towards abstraction is a reaction against a bourgeois art based on the representative... When this conflict of abstraction and imitation has lost its ideological force, the relationship of art to nature re-emerges [...] I think it is possible now [...] to develop a new relationship with nature... Music can imitate real sounds, but must do so in a way so that one hears the artifice [...] [*Il motivo degli oggetti in vetro*] places the listener in a situation where there is no awareness of time, all the events are dispersed in space rather than in time, like the elements of a landscape. Then there is a moment when this landscape is broken, one understands that it was artificial” (Sciarrino, qtd in Thomas 1993: 194).

Despite the fact that 19<sup>th</sup>-century realist ways of thinking and the use of mimetic techniques in music are today largely discredited, composing through mimesis can still be a valid technique and possibly one that is essential to the re-enchantment of sound. There are simply different ways in which one goes about it. Gavin Thomas contrasts Sciarrino and Lachenmann’s use of extended techniques that express “the music behind the music”. Instead of Lachenmann’s “destructive commentary on past models,” Sciarrino’s music reclaims mimesis (ibid). Through deliberate use of artifice and a “shattering of material” that he shares with Lachenmann, a quite different use of the ancient technique of mimesis can be arrived at, that confronts and transcends the dubious ideologies that crystallised around it in the 19<sup>th</sup> century.

In this chapter, I address the mimetic transformation of speech patterns in my own works and those of Janáček. My reason for discussing Janáček is that a similar transformation takes place in my own music, which began as a naïve quest for ‘natural’, direct, emotional content and which developed into a dialectic between structure and content. Seen in retrospective, there is a central paradox of Janáček’s use of the device of speech-melody in that although he had intended speech melodies to be an important vehicle for realism and for ‘truth’ in music, the result was far from realistic—in fact, he succeeded in creating a very effective technique of defamiliarisation. Thus, the vocal writing in his operas after *Jenůfa* seeks to imitate Czech vernacular, but we hear an expressionistic artifice and stylisation.

### **‘Speech-melody’:**

“Sounds, the intonation of human speech, indeed of every living being, have had for me the deepest truth”, wrote Janáček (1999: 121). Although he may not have read Chernishevsky and Belinsky, he possessed a large library of Russian realist literature. The obvious parallels with Mussorgsky’s musico-dramatic theorising come through secondary sources as he only became familiar with *Boris Godunov* towards the end of his life and never became familiar with *Marriage*. Czech realism took its lead from the Russians, basing its conception on such statements of Chernishevsky’s that: “beautiful is that being in which we see life as it should be according to our conceptions; beautiful is the object which expresses life, or reminds us of life” (Chernishevsky qtd Taruskin 1970: 440).

Janáček takes from the realists the idea that art should be mimetic and the idea that art should not only imitate, but that “the artist becomes a thinker, and works of art, while remaining in the sphere of art, acquire a scientific significance. [...] Let art not be ashamed to admit that its aim is to compensate man in case of absence of opportunity to enjoy the full aesthetic pleasure afforded by reality by, as far as possible, reproducing this precious reality, and by explaining it for the benefit of man” (Janáček 1999: 121). This conception of realism had much currency in the latter part of the 19<sup>th</sup> century and early 20<sup>th</sup>, when Janáček was forming his central theories of composition and musical aesthetics. For Janáček, the collection of speech-melodies seems to have been a scientific, empirical activity somewhat akin to botany. Whilst speech-melodies were to be collected and studied as research for possible musical material, they were not to be used directly in his compositions:

“Is it conceivable, however, that I could furtively take collected speech melodies, these cuttings from alien souls so sensitive that they hurt, and ‘compile’ my work out of them? How is it possible to spread such nonsense?” (Janáček qtd. Zemanova 1989: 91)

These “direct reflexes of life” reflect “both external ‘realities and truths’” (Wingfield 1992: 282), down to the speaker’s environment, the context in which it is said and to whom it is being said: “How many variations of melody could be found for the same word?” demands Janáček, rhetorically. (Janáček in Wingfield 1992: 284) Thus, setting an operatic libretto to speech melodies compiled to pre-existing texts does an act

of violence to the sensitive melody by forcing an alien text to a pitch pattern derived intimately from a completely different and complex environment.

Speech-melodies were acts of mimesis, informed by empirical observation that attempted to transpose the inflection, rhythm and pitch structure of human speech onto a musical plane. In an interview published in *Literarni svet* in 1928, Janáček described speech-melodies as the “window through which I look at the soul” (Janáček 1989: 121). His response to hearing Rabindranath Tagore lecture in Prague in 1921 demonstrates some aspects of this interest:

“My poet, the Hindoo, puts before me his poem [...] and he puts a stress on his rhyme by repeating it in his own native language. And suddenly, as if some transparent spiritual hand would noiselessly try to organize the syllables: unifying some of them, uniting them, separating others.

As if pale photographs of unreal, bygone, and only remembered things and happenings would shine and transpire through the texture of the melody. Their margins and silhouettes descend quietly on the mosaic of the syllables. The motionless miracle of the word is the product of emotional stress. The Indian poet’s speech was smooth, languid, from the beginning to its very end. Not a knot would interfere, no crevice, no splint, no sharper, no harsher sound. I heard a celestial flute playing, an instrument of love. The way he sang sounds familiar to me. Our songs from Makovo and Turzovka would sound similarly [...]

Rabindranath Tagore entered the hall quietly. It seemed to me as if a white sacred flame flared up suddenly over the thousands and thousands of heads of the men and women present [...] But Tagore did not speak. He sang- his voice sounded like a nightingale’s song- smooth, simple, without any clash of consonants...

There is no doubt that the famous Bengali poet has a deep inborn feeling for music.<sup>1</sup> Every syllable sounds as if with its tone wings expanded- very much like our own way of singing [...]

He spoke to us in his native language- we did not understand- but from the sounds of his words, from the melodies of his poetry I could recognize and feel the bitter pain of his soul. (Loewenbach 1961: 161-2)

Two factors emerge immediately: first, Janáček’s lack of knowledge of Bengali presumably heightened his receptivity to the speech-melody, allowing him to

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<sup>1</sup> Tagore was also a prolific song-writer, whose compositions (*Rabindrasangit*) number in the thousands.

concentrate on the innate ‘musicality’ of Tagore’s voice, and secondly that Janáček sees Tagore’s speech-melody as ‘musical’ principally on the grounds that it has a ‘flow’, a naturalness unimpeded by any “crevice”, “splint” or “harsher sound”. These aesthetic criteria give a clear idea of Janáček’s reasons for taking such a close interest in speech-melody, Janáček is able to use it to create something unique, something ‘natural’, because it is directly informed by ‘natural’ models.

There is a faith in all of Janáček’s writing on this subject that speech-melodies have an inherent ability to communicate: “I may [not have] grasped the words, but I grasped the rise and fall of the notes. I knew what the person was like: I knew how he or she felt” (Janáček 1989: 121). The faith in the ability of communication to take place through pure sound is particularly acute in the case of Janáček’s encounter with Tagore- hence his conviction that, despite his inability to understand anything the poet was actually saying, he was somehow able to recognise the “pain of his soul”.

Janáček espoused speech-rhythms primarily in vocal and dramatic music, a well fought-over arena in the quest of musical realism:

“The best way of becoming a good opera composer is to study analytically the melodic curves and contours of human speech... The melodic curves of speech, as used in song, give only a reflection of the spirit weakened by the heat of the music. But the melodic curves of speech as used in the spoken word, are a direct reflex of life” (Štědrón 1955: 93).

Evidently then, speech-melodies embody ‘emotional truth’, and the expression of ‘emotional truth’ through using speech-melodies in music makes the music ‘realist’. “What Janáček proposes for opera is a sort of nested tautology: the instrumental fabric reinforces the voice parts, which encapsulate speech melody, which embodies ‘emotion” (Wingfield 1992: 284).

There is a further, nationalist element: the ‘truth’ in spoken Czech will locate the truth of Czechness. This is bound up with attempts to establish Czechness in music. An open letter to *Moravski revue* in 1899 shows his nationalism (and, even after the creation of an independent Czechoslovakia, anti-Germanism) at its fiercest. Whilst he begins by writing specifically about spoken theatre, the essay quickly transposes these concerns to ‘truth’ in Czech opera:

“If we want to have a theatre with ‘ an individual character’, then we need to plunge to the depths to find the truth: even the tone of our actor’s language, in fact the speech melodies of actors’ language have to be *genuinely Czech, genuinely Moravian* [...]. this melody, however, is debased through our contact with the Germans [...] The actors need to go back to that rare and inexhaustible school, the life of the people, to regenerate and purify themselves. Until a time when we have completely purified our language, an actor must not intrude with a distinctive, individual tone of his or her own.” (Janáček qtd. Zemanova 1989: 83)

Robin Holloway makes a point that leads us to the paradox that these theories, when taken in conjunction with Janáček’s actual practice, set up. Speech-melodies are supposed to:

“[...] reach the auditor direct, circumventing formalist routines and play of conventions. Music’s innermost meaning lies ‘above’, ‘behind’, beyond the working-relationships of its notes that make its intrinsic, non-referential grammar” (Holloway 1999: 4).

The paradox of employing such methods of mimesis is that they inevitably lead to stylisation, a stylisation that can lead to a conception of realism that is much closer to formalist theory. Short of using electronic reproduction, one cannot replicate speech patterns or natural sounds exactly using instruments or by singing.

Without the nationalist and identity politics, (my use of speech patterns from Latin and Bengali obviously rules this out), some of these notions of ‘naturalism’, ‘dynamism’, ‘flow’ and, (especially slippery) ‘emotional truth’ informed my own interest in employing mimetic practices in music, whether with regard to speech-melody, folk music or other objects directly taken ‘from outside’. In my own music, defamiliarisation acts as a counterweight to these potentially slippery concepts. That Janáček’s actual use of his mimesis of speech succeeds through defamiliarisation processes is obvious—his operatic works in particular abound in uncomfortable dislocation, juxtaposition and disconnection that have been the hallmarks of musical modernism since Schoenberg’s presciently-titled *Peripetie*, in which the material is constantly ruptured, fractured to create an entirely new musical discourse based upon the extremes of classical art music.

Janáček was clearly aware that his form of mimesis would create a similar form of dislocation of ‘reality’. His music in this sense exposes his theoretical writing.

Whether ‘formalist routines’ are actually circumvented, arguably his actual, ‘formalist’ use of them allows them to reach the listener more directly (Shklovsky 2007). Janáček achieves a form of realism through, but almost despite any actual use of speech-melodies. The ‘realism’ simply heightens the strangeness of the note-to-note musical fabric, making it if anything more ‘unrealistic’ and as a national style, it in fact contributes as a major element towards asserting Janáček’s music as one of a kind—certainly, these elements of his music do not align him with Dvorak, Smetena, Suk, Martinu and others in terms of having any identifiable ‘Czech ethos,’ despite well-intentioned attempts by writers such as Beckermann (1986) to isolate “Czechness in Music” and despite the fact that each of these composers, at some point in their careers, professed similar aims.

Janáček applied this thinking to all his raw material, imbuing the simplest chords or phrases with often very specific affective power. His music develops in his own highly individual, personal idiom not only because of the process of defamiliarisation, but because each phrase, each statement is loaded with meaning, the music one vast interplay of signifiers imbued with affect. Although this would seem to belie the idea of music having a ‘non-referential grammar’, potentially tangling music up in a new series of *topoi* and formulae, it could, in Janáček’s case, also produce music of great originality, power and beauty. The deployment of ideas learned from studying the human and non-human sounds surrounding him allowed Janáček to achieve this, whether or not the web of ideology surrounding his espousal of speech-melody stands up to close scrutiny.

Speech-melody works in a similar way in the two compositions of my own that are based upon it. My original scheme was predicated on one hand on a deliberate integration of defamiliarised material, i.e speech-melodies, and, on the other hand, on a converse, naïve idea that the flow of natural speech, its ‘naturalness’ and ‘emotion’ would be imparted to the music composed from it. Founded upon empirical data gathered in day-to-day musical experience and expressed within a consistent theory of composition, this conviction gains weight as something based both upon the practical needs of the organisation of sound and upon a strong theoretical framework.

The materials upon which the two works that draw upon speech patterns, *Galliambics* and *Headless butterfly*, are based became defamiliarised on several levels. In the case of *Galliambics*, the poem by Catullus upon which it was based already contains an inbuilt tension between subject and object, which contributes towards making

it a poetic masterpiece. In *Headless butterfly*, an actual speech recording was electronically manipulated to yield a sound-world that obviously has its roots in speech-patterns but is, at the same time unfamiliar and jolting. Furthermore, the attempt to work this material into an instrumental musical structure in itself creates another level of defamiliarisation. The exclusion of the actual sound of the human voice means that it has to be imitated, stylised by the instruments. This level of stylisation is akin to the way in which the un-tuned and rapidly-changing intervals of the contours of speech are imitated in Janáček's operas. Furthermore, the material I employed has a technical, musical dimension that is more pertinent to the actual note-to-note construction of the music.

### ***Galliambics***

The model used for *Galliambics* can be seen as a highly stylised speech-melody- the complex metrical patterns Catullus' *Carmen LXIII*.<sup>2</sup> It was on hearing *Carmen LXIII* recited by a classicist that I was struck by the intensity of expression in both the poem's narrative and sound-world, a sound-world that affected me particularly in its very aura of strangeness, in its driving, asymmetrical metrical pulse and in its innate musicality. *Galliambics* was conceived as a piece constructed entirely from the raw sound of Catullus' poem—raw material that is then analysed and manipulated to function as the fundamental musical fabric of an extended piece of purely instrumental music. *Galliambics* is intended to act as a translation (if a loose one) of the poem's 'speech-melody' into musical sound.

*Carmen LXIII* is one of Catullus' small group of mini-epics which deal, unlike most of his output, with mythical subject matter and are written on a considerably larger scale than his lyric poetry. The poem deals with a myth connected to the cult of the goddess Cybele, one of the wilder of the many Asiatic cults that were absorbed into Roman theology as the Empire expanded. Catullus' poem replaces Cybele as the focal point of the poem with the all-too human figure of the hapless Greek youth, Attis, a name more commonly associated with the goddess' consort deity. In Catullus' poem, Attis is a mortal, apparently from a civilised, urban area in Greece, who, in a fit of religion-induced insanity, casts himself upon the wild shores of Phrygia (now in Northern Turkey) in order to serve and worship the goddess. His subsequent self-castration and madness is then depicted in a passage of intense Bacchanalian frenzy,

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<sup>2</sup> Gaius Valerius Catullus (c.82 BC-c.52 BC), Roman lyric poet, born in Verona.

which ends suddenly when Attis falls asleep and re-awakes to realise what he has done. There follows a long, moving lament in which he curses Cybele, who responds by sending a monstrous animal servant to subjugate and eternally enslave the mutilated Attis into savagery and insanity. The poem ends, incongruously to modern ears, with a cynical little invocation, presumably from the poet himself, to the goddess to “drive others mad, not me”. Despite the elegance and virtuosity of its construction, this extraordinary poem plumbs depths of insanity and hysteria that render it still deeply unsettling over two thousand years after its conception.

In antiquity Catullus was known to other writers as *doctus Catullus* (‘learned Catullus’), in reference to the sophistication of his style, which abounds in virtuosic metrical and rhetorical devices, mostly taken from Greek models. Although the attempt to force one language into the archaic and possibly highly-theorised structures of another can sometimes produce painful results- witness Tennyson’s ungainly efforts in English galliambics<sup>3</sup>- Catullus’ virtuosity was such that the tension between these often extraordinarily complex Greek metrical forms and the stresses of the Latin language (the two languages are by nature quite different in this respect) forms an in-built fracture in the basic material that seems to communicate something of its deliberate awkwardness even to someone relatively unfamiliar with Latin. *Carmen LXIII* appropriately takes the strange and hypnotic galliambic metre as its template, supposedly the metre in which hymns to Cybele were sung by the castrated priests (*Galloi*) that devoted themselves to the goddess. As no other poem employing the metre survives from antiquity, and the language of *LXIII* is classical Latin, it is impossible to know how it may have worked in Greek, how pitch and stress might have functioned, and how strictly the ‘laws’ of the metre may have been obeyed. Certainly, in *Carmen LXIII*, once the metre has been established, Catullus, like any great creator, frequently departs from the governing ‘rules’ when the expressive content of the poem demands it. The rhythmic pulse of galliambics is so distinctive and so compelling that the spell and the inexorable momentum are not once broken and irregularities in the metrical patterns seem only to reinforce the feverish, hypnotic quality of the internal rhythm.

Unlike English, Latin metre is quantitative- syllabic patterns function not in terms of weakly- or strongly-stressed syllables, but in syllables that are regarded as long or short. Galliambics is a driving, asymmetrical metre, with much of its character

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<sup>3</sup> In *Boädicea*, see also Meredith’s *Phaéthôn*.

coming from frenzied, bunched-up groups of short syllables towards the end of each line. When recited, the metre produces a highly rhythmicised, rushing effect, uncannily mirroring the constant, shocking images of debauchery, violence and insanity. It can be expressed technically as two groups of eight syllables separated by a diaeresis (| |). The spondee (— —) at the centre also contributes to the unusual character of the metre, unbalancing the rhythm further before the rush of fast syllables in the second half:

**Ex. 1**

*u u — u — u — — | | u u — u u u u x*

(where ‘*u*’ represents a short syllable, ‘—’ a long syllable, and ‘*x*’ a syllable that can be either long or short.)

Potentially highly restrictive, this scheme puts an effective check on the language’s exuberance, channelling Catullus’ linguistic invention into a devastatingly single-minded, relentless rhythmic edifice.

Ex. 2 (p. 23) gives an idea of how the rhythmic energy of the following lines, the opening of the poem, would sound:

“Super alta vectus Attis celeri rate maria,  
Phrygium ut nemus citato cupide pede tetigit  
Adiitque opaca silvis redimita loca daea,  
Stimulatus idi furenti rabie, vagus animus...” (Catullus 1998: 118)

For purposes of metre, words ending with a vowel or an *m*, which are followed by a word beginning with a vowel, elide their final consonant with the opening consonant of the next word, making one syllable from two. This happens twice in the above sample; in line two with “Phrygium ut...”, which would have perhaps sounded closer to ‘Phrygiu’ut...’ and in line three with “adiitque opaca” (perhaps ‘adiitqu’opaca’). Though it is unsure exactly how these may have been pronounced, the Romans probably slid lightly over the vowels, creating something close to a diphthong.

Ex. 2

Su - per al - ta vec - tus At - tis ce - le - ri ra - te ma - ri - a,  
 Phry - gi - 'ut ne - mus ci - ta - to cu - pi - de pe - de te - ti - git  
 a - di - it - que'o - pa - ca sil - vis re - di - mi - ta lo - ca de - ae,  
 sti - mu - la - tus i - bi fu - ren - ti ra - bie, va - gus a - ni - mis

Though compelled by the narrative itself, I found it at least as interesting to look at the poem in terms of speech-melody- as a raw sound that had rich musical potential. The complete *otherness* and strange beauty of the poetic sound-world suggested an equally compelling musical sound-world, especially given the further stylisation of an already stylised and obsolete poetic idiom that would be bound to occur in the process of making the kind of musical ‘translation’ I aimed to undertake. The asymmetry and drive of the metre furnished me with a technical means that was close enough to a musical rhythmic structure to need to make relatively few adjustments to its fundamental nature<sup>4</sup>. The metre, based as it was upon the human voice, suggested to me an inherent, natural ‘flow’ and the intimate link that these potentially abstract linguistic structures had with the poem’s content gave them an extra dimension- a direct expressive link to the poetic narrative. One did not necessarily need to subscribe to Janáček’s (in Zemanova 1989: 122) assertion that speech is a ‘window to the soul’ to feel the very tangible force of the poem’s sound-world, a force only pressed upon me more by my limited knowledge of Latin. The listener has the feeling that if one didn’t understand a word, one could still understand the poem. I feel that the resultant piece

<sup>4</sup> It will be seen that the above reduction of galliambic metre differs slightly from the rhythmic row used throughout most of *Galliambics*, which leaves out the second, short syllable after the diaeresis. Rather than being particularly intentional, this was simply a mistake, made at a very early stage. Once this had been discovered, there seemed little reason to re-write the piece for the sake of fidelity to classical scholarship. On a musical level, the rhythmic asymmetry and unbalanced drive that I was aiming for were effectively retained.

at least has a directness that may owe as much to the application of Janáček's concept of 'speech-melody' as to my classical model.

### **Rhythm and aesthetic in *Galliambics*:**

*Galliambics* was written extremely quickly towards the end of January 2003 but had a lengthy gestation period during which I was preoccupied with the no less complex rhythmic procedures in *Cracking up* (A Manson ensemble commission for chamber orchestra—most of the material relevant to the discussion here was used in *Shikar*, which subordinates it to its more dynamic structure) and *A rainy day on Bethnal Green* (for horn trio). These works laid most of the technical groundwork for the rhythmic language of *Galliambics*, *Cracking up* in particular being based on rhythmic material principally derived from the superimposition of pulse-rates of differing speed, in this case working with a layering of pulse-ratios 5,4 and 3 in the manner of Harrison Birtwistle's *Silbury air*. *Galliambics* shares with the two preceding works an absence of a strong melodic/lyrical presence that might 'soften' the harder edges of the musical discourse. In all three cases the musical interest and forward momentum rests upon large, strongly goal-orientated, slowly-morphing harmonic blocks, generally composed of close-knit contrapuntal textures, which will be discussed in more detail in Chapter 3.

The rhythmic scheme I had planned for the piece was simple- a rhythmic 'series' or metrical motif (ex. 3) could easily be extracted from the metre, which would then be developed by being constantly 'filtered' through changing pulse-groupings. *A rainy day on Bethnal Green* had achieved this 'filtering' by passing a single rhythmic row (ex. 4) through constant changes in polyrhythm (as shown by comparing the three principal instrumental lines from bar 11), whilst *Cracking up* had simply superimposed a complex of pulse-groups related by the ratio 5-4-3 (bars 1-24, percussion, lower strings, piano, harp) in a fashion reminiscent of certain Nancarrow player piano studies (the opening of *Study #20*, for instance). *Galliambics* was intended to further explore these devices, to be in essence a rhythmic study.

Ex. 3



Ex. 4



Elements of additive and divisive rhythm are represented in this scheme.<sup>5</sup> The former, which retains the integrity of a small rhythmic unit but changes the groupings into which it is organised, predominates in *Galliambics* due to the need for relative rhythmic clarity (it was originally intended to be performed uncondacted). This form of rhythmic development is particularly clear from the ‘dance’ section beginning at b. 83- the most equivalent passage to the long, frenzied central section of the poem. Here the speech-melody (first exposed in the isorhythmic solo viola line at b. 83) comes to the fore and is continually offset and wrong-footed in a fashion that was intended to act as a musical analogue to Catullus’ metrical fireworks. Ex. 3 is exposed in a harsh, sparse texture where the viola is taken grotesquely high and supported only by a few instruments, followed by a series of superimpositions of pulse-units of 4, 5 and 3 upon the line (respectively at bb. 83, 88 and 100). Constantly wrong-footed by these pulse-changes, the rhythm is not allowed to settle down until b. 125, where a compressed recapitulation of the piece’s opening takes place, this time superimposed upon a strong, unchanging motor pulse in four.

Although the idea of using pulse-units was, at the piece’s conception, a purely technical consideration taken from earlier pulse-experiments, I soon found a useful literary analogue to this sudden metrical sidestepping in Leigh Hunt’s 1818 English translation of *Carmen LXIII* (see *Catullus in English*). Hunt’s translation attempts to create an English analogue to Catullus’ metrical virtuosity by eschewing an attempt at galliambics and by using sudden shifts between more conventional, but quite unrelated metres to replicate the original’s asymmetry. The sudden gear-change between trochaic/iambic octameter and anapaestic dimeter at line 18 of his translation- just as

<sup>5</sup> See Kyle Gann on Nancarrow (Gann 1995:7)

Attis' madness begins to rage- gives Leigh's (occasionally slightly doggerel) English a similar impulsive, unbalanced quality similar to the effect of galliambics in the Latin original, a quality I was keen to imitate.

Divisive rhythm- where a constant, larger unit is subdivided into equal parts of various lengths- plays less of a role in *Galliambics. A rainy day on Bethnal Green* uses this means of rhythmic manipulation exclusively, exploiting a superimposition of complex polyrhythms whose relationship is often hard to discern purely by ear, an admission that is obvious in the passages involving parts of independent tempi in *Cracking up* and *Galliambics*, which were originally conceived as a continuation of this sort of polyrhythmic thinking. In *Galliambics*, greater drive and metrical clarity were desired and thus divisive rhythmic manipulation occurs only for short periods. The sudden dissolution of the musical texture at bb. 184-187 is one passage in which the rhythmic vagueness that can result from divisive rhythm is exploited- compare violins 1 and 5 and cello 1. The ending, in which a sudden collapse into diatonicism after a passage of harsh outbursts of noise and considerable dissonance was intended to create a further unsettling effect, another point where the vagueness of divisive rhythm is exploited. Elsewhere, this device is limited to brief outbursts or to a few lyrical points. The opening gesture of the piece (ex. 5), at first a fairly nondescript



figure, is typical of this, squeezing the first few values of the rhythmic 'row' into a quintuplet anacrusis, which function it retains throughout the piece, despite the motif itself undergoing a significant level of development. Ex. 5 also takes on a significant role in the manic central section of the piece. Superimposed upon the constant re-barring and metrical side-stepping that have become the essence of the musical fabric, this limpid opening gesture is transformed into a vicious, polyrhythmic punctuating figure ('erupting' variously at bb. 82, 103, 107, and heralding the condensed recapitulation at b. 125) that can set off its own new set of processes independently of what may have been going on previously. The long series of slowly-compressed chords

(derived from the opening) that are panned between the right and left banks of violins from b.103 are one example of this layering process, appearing to grow from the ‘eruption’ at b.102, whilst the first ‘explosion’ of this motif at b. 82 is of great structural importance, serving to violently ‘kick-start’ the entire fast central section into action.

*Galliambics* has a general circularity of argument, a sense that the music keeps returning to its starting-point, no matter how dramatic (or melodramatic) the intervening music may have been. This is at its most pronounced in the opening section, in which the driving force normally provided by the speech-rhythm is submerged in a dense knot of close polyphony in the three violas, the rhythmic row stated in lines that run simultaneously but unaligned with each other or the overall metre. Utilising a limited ‘free’ element in order to obtain this independence of line, the rhythmic character of the music here differs greatly from its dominant presence both in the poem and in the rest of the piece. The only pulse is provided by the (slightly hackneyed) bass and cello pizzicati, which support the listless, constantly repeating viola line, presenting firstly ex. 6, a plain melodic fragment, then a ticking accompanying figure based on the speech-rhythm. These are passed around the violas in a lacklustre fashion that could repeat more or less indefinitely were it not cut off at b. 53.

Ex. 6



*Galliambics*’ aesthetic was intended to be awkward. The piece abounds in odd juxtapositions, sudden reversals of fortune and sudden inexplicable projections of alien material onto the musical discourse. This general oddness becomes so much the norm as the piece progresses that even a relatively conventional element such as the C# phrygian scale at the piece’s final cadence (onto A major) begins to seem unusual

in context, defamiliarised by the general heterogeneity of the musical language. The sense of strained sanity was intended to stem directly from the adoption of the poem's speech-rhythm, a technical device so perfectly linked to the poem's narrative content that the obvious dramatic elements in the narrative- the madness, the both effete and violent dance-like frenzy, the slashing motions (possibly referring to both the self-emasculatation at the opening and the slashing of the furies at the end) become a natural part of the musical language. The rhythmic language seemed in this case to be a natural vehicle for the achievement of the required sense of alienation. The diverse elements in *Galliambics* don't always sit easily together- to my mind the circularity of the opening can become *too* meandering and there is a definite, unintended lull in musical tension and momentum at the transition into b. 142 that creates an integral flaw at a crucial point in the piece. Nonetheless, the piece goes some way towards capturing the sheer strangeness that the two thousand-year-old product of Catullus' inspiration presents to a modern reader and it does it to a great extent by carrying the original concept through to its conclusion without significantly straying from its path.

### ***Headless butterfly***

The material for *Headless butterfly* was also poetic, based on the 20<sup>th</sup>-century Bengali poet Jibanananda Das's *Shundorbonergolpo*, ('A tale of the Sundarban jungles'), a voluptuous, tense poem describing a moonlit chase sequence between a cheetah and a deer. Unlike *Galliambics*, the subject of the poem does not seriously impinge upon the piece; the poem itself is of importance primarily as sound, in particular the pitch of the voice used during recitation and the mimetic defamiliarisation of speech that takes place on the levels of the electronic manipulation of the original speech and on this material's own stylisation through instrumental technique. Having originally intended to set *Shundorboner golpo* to music as part of a different project, I had recorded a Bengali friend reciting it and began to try to transcribe it by ear. After I had decided to incorporate this material into the composition I began to think that the piece might eventually focus upon the complex microtonal inflections the spoken word, and so I faithfully attempted to represent every little shift in tuning. I came up with the unpromising material shown in ex. 7, material with which at this point I could think of nothing to do. When played back, it simply sounded grey and ugly, whilst also possibly unplayable in any fashion that could still relate back to language on acoustic instruments. The material would have been hard to develop and appeared

to be a trivialisation and pointless transposition from one type of experience to another- not a transcendence or a critique.

Up to this point, I had had the vague intention of extracting motifs from ex. 7 or attempting to use the rhythm as a sort of motor to drive the music onwards. This approach failed to stimulate me, although I did in the end abstract some of the more melodic passages from the opening five bars of the transcription, achieving usable musical material by disregarding most of the inflections I had earlier been at such pains to transcribe. The opening motif of the work is a derivation of this, although with highly altered rhythmic and registral values. The sinuous viola solo beginning at b. 168 is a more strict derivation, the simplified version paradoxically sounding closer to the recorded speech (see the accompanying CD) than the microtonal transcription. The experience reinforced my feeling that microtones have an effectiveness inversely proportional to the frequency of their use, and that an over-saturation and over-complexity can lead to an all-pervading greyness rather than a rich, innovative microtonal sound-world that might be desired.

Whilst the original, 'motivic' conception of speech-melodies failed to produce results, another method of analysis yielded far more interesting material. This was the decision to analyse the waveform with IRCAM software, at first purely an experiment, inspired by interest in certain works by Grisey and Murail, that was not expected to produce particularly musical results. Having selected two passages of speech and converted the recordings into WAV files, these were imported into *AudioSculpt*, a program that then subjected the waveform to a spectrum analysis, producing a read-out of the separate harmonics present in each sample in the file. The data was then exported to another program that was able to convert these results into actual pitches that could be notated and played back via MIDI. The result was a complex and bewildering series of fast-moving block chords, which, in order to make more manageable, were subjected to filtering that cut off notes above a certain pitch and which forced the pitches into equal-tempered scale degrees. Thus

Ex. 7 - original transcription of *Shundorboner Golpo*

Bho-rer no - dir jo - le ho-rin nam - lo.

6

9

13

16

20

24

28

32

36

39

42

45

The musical score consists of 11 staves of music. The first staff includes the lyrics 'Bho-rer no - dir jo - le ho-rin nam - lo.' and features a triplet of eighth notes. The second staff is marked with a '6' and includes a glissando ornament. The third staff is marked with a '9' and features a triplet. The fourth staff is marked with a '13' and features two triplets. The fifth staff is marked with a '16' and features three triplets. The sixth staff is marked with a '20' and features a triplet. The seventh staff is marked with a '24' and features a triplet. The eighth staff is marked with a '28'. The ninth staff is marked with a '32'. The tenth staff is marked with a '36' and features a triplet. The eleventh staff is marked with a '39'. The twelfth staff is marked with a '42'. The thirteenth staff is marked with a '45' and features two triplets and a glissando ornament.

altered, this new material gave rise to truly extraordinary results, which I immediately saw as providing extremely fertile ground for musical development (ex. 8).

Ex. 8 - MIDI file of *Shundorboner Golpo*

The image displays a MIDI score for the piece "Shundorboner Golpo". It consists of seven systems of musical notation, each with a treble and bass clef staff. The tempo is marked as  $\text{♩} = 120$ . The key signature is indicated by two sharps (F# and C#). The score includes several annotations: "b. 115 of *Headless Butterfly*" and "b. 117 of *Headless Butterfly*". The notation features complex rhythmic patterns, including sixteenth and thirty-second notes, and various chordal structures. The piece concludes with a double bar line and the number "15" in both staves of the final system.

As expected, the program traced the outline of the speech very accurately, the vowel sounds (generally pure in Bengali) giving rise to diatonic-sounding chords in which the notes followed the pattern of the harmonic series, whilst the consonants, being essentially percussive (especially in Bengali), gave rise to more dissonant note-relation-

ships. Furthermore, the forcing of the pitches into equal-tempered scale degrees ensured that some pitches were ‘rounded’ upwards to the nearest semitone and others ‘rounded’ downwards. This gave rise to frequent minor ninths and major sevenths where the computer might otherwise have read octaves. The MIDI file sounded essentially like an embellishment of the speech, following the contour accurately, but piling above and below each note chords composed of approximations of the frequencies that made up each syllable.

What piqued my interest however was not the accuracy of the computer’s analysis of the voice, or even the line it produced. Rather than wanting to clean the recording up in order to hear the contour of the speech, it was in the imperfections that I found interest and beauty. The computer naturally analysed the recording as a whole, picking up the considerable amount of extraneous noise on the primitive Minidisc recording alongside the actual speech, and faithfully converting every glitch, piece of distortion or background noise into notes. Most obviously, the sound of the Minidisc recorder’s motor was picked up as a whirring drone centred on a Db/C#-D-Eb cluster that can be clearly seen and heard in the raw MIDI file shown in ex. 8 particularly bb. 26-27), with also a higher resonance creeping at certain points, centred on a high Gb (b. 31 in particular). Due to the high prevalence of pedal points in my recent pieces- the closing sections of both *Galliambics* and *On the move* had both taken place over extended drones- the sinister fashion in which this strain would fluctuate in and out of one’s attention field held much interest for me, as well as suggesting a possible key area (Eb minor). The end result had an anarchic, sinister beauty. When played on a piano sound, the resultant sound was a bizarre Nancarrow-Chopin hybrid, with sudden, quite arresting diatonic chords delicately placed in the texture, like the flourishes of a particularly eccentric lounge pianist. Furthermore, being able to place the bewildering maze of notes in ex. 8 in a tonal context, no matter how tenuous, provided a much-needed reference point for them. The points in the piece (bb. 51-100 and bb. 136-156) that included material derived from ex. 8 are exactly the points where the greatest care was taken to create strong tonal reference points, chosen in order to bring out the richness of these rich, almost jazz-like chords.

This was material rich in potential, already suggesting some specific textures, possible ideas, and an unusual harmonic world highly in keeping with the way in which I was inclined to think about harmony at the time. Whilst some of it would eventually be highly developed and extended in the final piece, some of it was strong

enough to be used almost entirely as it stood, for example at b. 114 and b. 116, where the piano's eruptions are transplanted almost note for note from the sections of ex. 8 marked with brackets. These sudden interjections into the musical fabric of the piece's raw material produce much of the excitement and tension of the musical discourse. Like the 'naturalism' I hoped to impart by using speech-melodies in my music, I found this artificially-constructed, yet oddly visceral and organic-sounding material to be a very effective way of offsetting the dense, constructivist thinking that made up much of the argument of *Headless Butterfly*.

In conclusion, I have shown how mimetic practices in music, in this case the use of speech-melodies, need not be tied to specifically 19<sup>th</sup>-century, and thus archaic, methods of thinking about 'realism' and 'naturalism' in art. By using techniques that defamiliarise the material, and which promote a deliberate artifice in the sound that forces the listener to perceive the music freshly, one can enjoy the sensation of composing music of dynamism and expressive power, whilst at the same time framing this in the context of a compositional theory that constantly questions this emotive content and never allows expression to become habitualised.

Another device central to my music, and deployed in a manner that is analogous to the use of speech melodies, is folk music, including material and techniques drawn from outside the Western art music canon. The next chapter explores this in relation to my piano trio, *On the move*.

## CHAPTER 2

### FOLK MUSIC IN *ON THE MOVE*

“...I remember how my father and I used to talk, back in those far-off days twenty-five years ago, about how a great composer might use our stuff as the basis for an American opera. We were a bit vague about the matter because we were Texans and had never seen a live composer.

I kept on talking about that American-opera-based-on-folk-themes, until one year the Columbia Broadcasting System commissioned a group of America’s leading serious composers to write settings for the folk songs presented on my series for CBS’s *School of the Air*. The formula was simple. First you had the charming folk tune, simple and crudely performed by myself or one of my friends. Then it was to be transmuted by the magic of symphonic technique into big music, just as it was supposed to have happened with Bach and Haydn and the boys. This was music education.

I recall the day I took all our best field recordings for *John Henry* to one of our top-ranging composers, a very bright and busy man who genuinely thought he liked folk songs. I played him all sorts of variants of *John Henry*, exciting enough to make a modern folk fan climb the walls. But as soon as my singer would finish a stanza or so, the composer would say, “Fine – Now let’s hear the next tune.” It took him about a half-hour to learn all that *John Henry*, our finest ballad, had to say to him, and I departed with my treasured records, not sure whether I was more impressed by his facility, or angry because he had never really listened to *John Henry*.

When his piece was played on the air, I was unsure no longer. My composer friend had written the tunes down accurately, but his composition spoke for the Paris of Nadia Boulanger, and not for the wild land and the heart-torn people who had made the song. The spirit and the emotion of *John Henry* shone nowhere in this score because he had never heard, much less experienced them. And this same pattern held true for all the folk-symphonic suites for twenty boring weeks. The experiment, which must have cost CBS a small fortune, was a colossal failure, and had failed to produce a single bar of music worthy of association with the folk tradition. As the years have gone by, I have found less and less value in the symphonizing of folk song. Each tradition has its own place in the scheme of mankind’s needs, but their forced marriage produces puny offspring...” (Lomax 1960)

Although I had long been interested in the work of the American folksong collector Alan Lomax, it is only recently that I became aware of this coincidental link

with the preoccupations that I had at the beginning of 2004. I had just completed the piano trio *On the move*, (written for the 2004 London Luciano Berio *Omaggio* festival), which was based on *John Henry*, the same ballad Lomax had brought to his ‘bright young composer’ for ‘symphonizing’. The passage quoted above outlines questions which ought to be reflected upon by any composer working with folk material or a tradition outside his own: how does he justify doing this, and why does he feel that this music particularly needs to be represented in a radically different way?

*On the move* successfully employs methods of deconstruction of material (in an attempt to avoid Lomax’s ‘puny offspring’), feeding the material through a complex polyrhythmic machine that owes a lot to the late music of Ligeti, music in itself composed partly through a constant study of, and dialogue with, folk and non-European music. Like the works discussed in the previous chapter, *On the move* develops its material in a way that attempts to hold several incongruous ideas in balance by subjecting them to highly constructivist musical thinking. Here it differs from the other work in this portfolio which uses folk material, *Drumhead Mass*, which bases its material on an austere reduction to one basic phrase of the melodic structure of *Lagan chumay*, a traditional Bengali wedding lament. In *Drumhead mass*, the material plays a far less immanent role in the piece, and the particular aesthetic problems in *Drumhead mass*, which are at least partly to do with problems of uncritical superimposition rather than interaction of material were hardly confronted.

In discussing *Headless butterfly* in the previous chapter, mention was made of the way that the electronically-manipulated material suggested a strange Nancarrow-Chopin hybrid. This puts one in mind of Ligeti’s citing of both these composers as models, alongside the matrix-like polyrhythmic structures of Central African Pygmy music for his ‘new modernist’ phase of the 1980s, and particularly the series of piano *études* with which this phase can be considered to begin. The Ligeti *études* represented for me a possible way towards a flexible idiom in which I would have the freedom to introduce diatonic, modal and polyrhythmic elements into my music without falling into neo-minimalist or neo-romantic writing styles. It also meant being able to incorporate the findings of my investigations into various musical fields into a rigorous, well-thought-out framework in a manner that could avoid pastiche or unintentional incongruity, whilst fully engaging with the musical material on its most basic level and allowing me to treat folk-derived material in such a way that it could be defamiliarised and re-enchanted.

A passage by Ligeti in his forward to Simha Arom's important study of Central African polyrhythm shows an important awareness of the rich possibilities that could be achieved by applying lessons learned from a study of this music to one's own:

[Arom's research] opens the door leading to a new way of thinking about polyphony, one which is completely different from the European metric structures, but equally rich, or maybe, considering the possibility of using a quick pulse as a 'common denominator' upon which various patterns can be polyrhythmically superimposed, even richer than the European tradition.' (Arom 1991,xviii)

This quick pulse or 'common denominator' is particularly fundamental to *On the move*. The introduction quickly establishes a motor-like semiquaver pulse that allows an elaborate polyrhythmic structure to be built upon a grid-like system reminiscent of study no. 6, *Automne a Varsovie* (1985) in which an elaborate concatenation of lines move simultaneously in different groupings of the basic pulse. In bb. 1-39 of *On the move* and also in other pieces of mine, for example in bb. 20-48 of *Headless butterfly*, or the passage beginning at b. 254 of *Shikar*, these grid-like structures function in a highly teleological fashion, as long, slowly-metamorphosing blocks of sound. They are examples of how extremely cerebral constructivism can be effective when harnessed to a well-heard texture and designed so that their construction will produce a directly audible result. Whilst *On the move* was concerned with achieving a form of naturalism (or at the very least a strong physical impact) through folk music, *Headless butterfly* returns partly to *Galliambics* by re-employing 'speech-melodies'.

### **American models: Lomax and the legend of John Henry**

The starting point for *On the Move* was Sid Hemphill's rendition of *John Henry*, recorded by Alan Lomax in 1942 in Senatobia, Mississippi<sup>6</sup>. My reasons for taking this song as a starting point were mainly aesthetic, equivalently naïve to my wish to use mimesis of speech in *Galliambics* and *Headless butterfly*: it had an enviable driving energy, a simplicity of utterance and a directness that I wished to learn from. In contrast to the dense, dry style than I had developed in *Galliambics*, I desired large, diatonic spaces in my music, aligned with a tangible sense physical excitement.

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<sup>6</sup> This recording featured Sid Hemphill on fiddle and vocals and Lucius Smith on Banjo and drums, and it was released on Lomax's *Deep river of song* series.

Something of this scheme is retained in long, static breathing-spaces in the resultant piece, areas that allow welcome relaxation from the density and motion in the surrounding sections.

*John Henry* is one of the most widespread of American folksongs, based on the folk legend of a convict-labourer who was said to have died in building the 'Big Bend' railway tunnel in the West Virginia mountains in the 1870s and credited in Afro-American balladry with countless, often superhuman, physical and sexual feats. Most versions of the story centre on a test of John Henry's prowess, where his overseer at Big Bend dares him to take part in a race against a mechanised steam drill to drill through the mountainside. A different version of the ballad, sung by Ed Lewis, another convict recorded by Lomax in 1959 in Mississippi describes the wager:

*'...Well John Henry's captain told him,  
I have a power steel driver down home.  
Well John Henry now if you'll beat that powerful steam driver down,  
Goin' to buy you a railroad of your own,  
I'm goin' to buy you a railroad of your own.*

*Well John Henry told his captain,  
He says, "A man ain't nothing but a man.  
For I would stand and see your  
Power driver beat me down,  
Would die with my hammer in my hand,  
Wo' I would die with my hammer in my hand.'* (Kaye 1997: 6)

John Henry beats the steam drill but dies in the act, literally, like many of the (mostly Afro-American) convicts, worked to death, whilst scoring a victory over the brutal system within which they had to work. Such extravagant tales of virility, violence and heroism circulated widely amongst prisoners that Lomax interviewed on his frequent visits to the Mississippi penitentiary system. The stories, along with the songs that accompanied them, seemed to have played a major part in keeping the men alive and sane in the most dehumanising conditions.

Though recorded outside the prison system, by a band whose principal function was to provide entertainment at parties and picnics, Sid Hemphill's version is one of the most energetic, differing strongly from the ballad-like, story-telling versions quoted above. As can be seen from my rough transcription (ex. 9), the song consists

Ex. 9

# John Henry

Introduction, first verse and variant lines

Trad. US, performed by  
Sid Hemphill and Lucius Smith  
Transcribed by Oliver Weeks

Voice

Fiddle (tuned minor 3rd below standard violin tuning)

Banjo, Drums (recording fades in)

Voice

Fd.

Bj. Drm.

Verse 1: This ol' ham - mer... killed John Hen - ry,

Verse 2:

Verse 3:

(fiddle drones, occasionally shadowing voice)

alternative banjo riffs

Voice

Fd.

Bj. Drm.

laid 'im low, laid 'im low, This ol' ham - mer

gliss.

gliss.

Voice

Fd.

Bj. Drm.

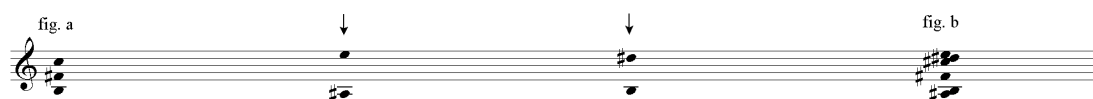
killed John Hen - ry. Laid 'im low...

of short, pithy, much-repeated phrases that refer to the principal symbols of the legend and allow the symbolic and emotive value they would presumably have for the intended audience to sweep the song along.

Aware of the dangers of ransacking folk music for ephemeral exoticism and the reducing what was in its original context a powerful, dynamic means of musical expression to an invalid and regressive one that Lomax saw in CBS' 'symphonized' *John Henry*, I aimed to deconstruct the song rather than set it, analysing it in order to understand the parts that had made it seem so mysterious and powerful to me. Whilst deriving some motifs from it in a relatively traditional manner, I also isolated certain idiosyncracies and mannerisms in the performance and began to magnify them in the resultant piece, exploring them at length and building larger complexes of music upon them.

The most important of these 'mannerisms', the one that, integrated into *On the move*, sets off the explosion of activity at the work's opening, was extracted from the shimmering first couple of seconds as Sid Hemphill's recording fades in. I was drawn to the fiddle's mysterious, slightly detuned concatenation of open fifths in the opening bar (fig. a), hovering over a barely-submerged banjo and drum ostinato that seems to merge with the lower-end rumble and hiss of the old tape recording. After a couple of seconds, the fifths are decorated by the fiddler sounding out a shadow of the vocal melody, with an unconventional use of a lower sharpened leading-note and the upper fourth on the third beat of bar 3 (fig. b). This opens out the chord by symmetrically framing the droning F# on either side with semitone clashes, from which I extracted the diatonic cluster (ex. 10). This small inflection became the springboard to the first 1'30" of *On the move*. Furthermore, in using fifth-based harmony that was derived

Ex. 10 - outline of opening of *John Henry* and chord derivation



from this small motif I selected material that suited the string instruments in the trio, an original idea having been to have them detuned by at least a semitone to achieve a darker, more 'folksy' sound. I eventually rejected the idea, not wishing especially to write an old-time fiddle piece, and instead had the pianist play the fifths with a defamiliarising, hard, steely, and necessarily equal-tempered tone. Nevertheless, echoes of

the idea remain, most notably in the section beginning at b. 114, and in the violin's open-string chords from b. 151.

Also prevalent, mainly in the piece's middle section, were microtonal inflections derived directly from Sid Hemphill's recording. In particular, the sixth of the scale (otherwise a standard ionian mode in B) appeared to constantly be played sharp, almost sharp enough to sound like a 'flat' acoustic seventh. From this 'imperfection' I derived much of the microtonal activity in the piece. The 'acoustic' A $\flat$  (an 'acoustic' 7<sup>th</sup> if the B $\flat$  with it is accompanied is taken taken as its root) from b. 61 was the basis for the entire slowly-detuning section that follows, (the specific techniques relevant to this passage are discussed in Chapter 3), and the small microtonal inflections that occur in the string lines between bb. 71 and 103.

Finally, certain motifs in the melodic line (marked as figs. c, d and e) play an important role at points in the *On the move*. Fig. c is most evident in the opening 1'30" of the piece, stretched almost to the point of obsession into ever-lengthening, cascading pentatonic chains (ex. 11, left hand). Figs. d and e begin slowly to be introduced from b. 44, but remain highly fragmentary until the lushly-harmonised coda (b. 149 onwards). The previous, quasi-improvised section having pulverised most of the musical material into an ugly series of clusters, the coda reassembles these motifs into something like a reinvented rendition, or a nostalgic echo of the original tune. Only after a complete breakdown can a delicate, tentative process of reconstruction be allowed to take place.

*On the move*'s opening is a direct stylisation of the opening ten bars of *John Henry*, but stretched out to four times the original length and allowed to develop in a way unfettered by any demands of folk-like authenticity. The piano is treated as a mini-polyrhythmic study in its own right, the two hands following strictly plotted rhythmic modes completely independently of each other. The stringed instruments, doubled at the octave in order to make a penetrating enough counterpart to the piano, follow their own rhythmic mode, gradually expanding 'eruptions' from a single pitch b. 25 onwards. Despite their rhythmic independence, all parts are linked harmonically in order to create non-tonally-directed, but diatonic harmony that works alongside the rhythmic energy to propel the piece forward with great urgency, an attempt to transcend tonality by employing its organisational, salient properties whilst avoiding conventionalised means of tonal musical expression.

Ex. 11 - polyrhythmic grid for opening section of *On the Move*

At the opening, the entire musical substance consists of a jagged, spasmodic repetition of fig. a, that develops the crude repetitions and futile dislocations of *Başbuzuc*, which I composed for Heichele fortepiano<sup>7</sup> near the beginning of my time at the Academy, and which outlines some of the aesthetic and technical devices that find expression in later pieces. In a comparable way, the first fifteen bars of *On*

<sup>7</sup> The Heichele fortepiano piano is an 18<sup>th</sup>-century instrument built in Vienna. It incorporates various colouristic stops, including ‘bassoon’ and persuccion effects, that were intended to imitate Janissary band music. The *Başbuzuc* (I use the Romanian spelling) were Ottoman light cavalry that ravaged the Balkans in medieval times. They occupied a position somewhere in between soliders and highway robbers.

*the move* begin to slowly saturate this figure, the hands beginning to separate from bb. 17-19 where the pitches from fig. b are introduced. As if brought to breaking point by the constant repetition, the eruption of the strings at b. 25 triggers a passage of constant expansion, the music being allowed to erupt wildly upwards, expanding and contracting, but following carefully-laid-down rhythmic templates. Although up to b. 25 the piece has, after a fashion, followed the outline of Sid Hemphill's recording, there is now a radical departure, with the outline of the abstracted folk song exploded into a wild flowering of polyrhythmic activity. In the right hand, this takes the form of waves of slowly-contracting arpeggiated figure, the 'crests' (the accented d#-e chords which expand chromatically upwards) grouped in a slowly-contracting grid of semi-quaver pulse-units (marked in ex. 11), designed to create a very audible sense of increasing momentum and instability as the arpeggios become progressively more bunched-up. Whilst the right hand develops arpeggios derived from fig. b, the left hand simultaneously follows a different scheme, obsessively stretching the pentatonic fig. c out further and further in groups of increasing numbers of semiquavers.

The opening of *On the move* shares its spasmodic quality of the beginning not only with *Başbuzuc*, but with *Headless butterfly*. Here it was a direct attempt to achieve successful analysis of 'imported' musical material that contributed to the effectiveness of *On the move*. Whilst the *On the move* and *Başbuzuc* begin, almost as if in an attempt to summon primal forces from nowhere, by hammering a repeated pattern into the listener's head until it reaches breaking point, *Headless butterfly* begins with an ever-changing, unrelievedly *fortissimo* tutti unison line that 'gets stuck' on a single obsessive gesture (b. 20) and then breaks out around b. 33 in similarly wild proliferation of polyrhythm to *On the move*. Here however, the thinking is not grid-like but more relaxed, consisting of freely imitative, overlapping and interrelated lines, a hybrid of counterpoint and heterophony that also owes something to the heterophonic textures found at certain points in *On the move*.

*On the move* also contains, alongside these mathematically-constructed systems, are passages which have a similarly relentless, directional effect but are entirely structured through intuition and improvisation. After a climactic concatenation of lines at b. 113, a melodramatic, crashing, accelerating series of chords ending on a rumbling cluster follow. After attempting several strict polyrhythmic schemes that failed to have the effect I needed, I cast aside numerical integrity in favour of improvising the rhythm into the computer. (This is a direct counterpart to the small victory

of freedom of constructivism that takes place in the sections of *Galliambics* that include free parts.) As the computer could quickly put my improvised approximation of the required texture into score, I could then integrate the chords I wanted into the rhythmic framework with relative ease. This method of limited, computer-based improvisation was a necessary tool in creating a tactile sense of direct engagement with sound, creating a raw, tangible impact, the physical force of this engagement with sound carrying the music along. It was important to know that I had the timing exactly right, and to be able to hear it. The passage was based on crude improvisations of the sort shown in ex. 12 which were then adjusted rhythmically, allowing for a grading of the acceleration by introducing triplets at b. 137 and quintuplets at b. 141. I then replaced the diatonic clusters I had played with chords derived from the tangled string-piano writing at b. 79-97. This created a less white note-dominated harmony and strengthened harmonic and motivic continuity between the new passage and other parts of the piece.

A similar process occurred with the overlapping, heterophonic instrumental lines from b. 40. My aim was to re-create the kind of heterophonic counterpoint that was familiar to me from listening to Persian and Indian classical music, where the principal melodic instrument is frequently shadowed heterophonically by subsidiary accompanying players. Having found my composed-out attempts to write like this to be too 'stiff' or have a tendency to introduce unnecessary complication (a particular, needlessly-intrusive left hand piano accompaniment to bb. 47-57 that had taken some time to construct had to be abandoned at one point in the process), I recreated the process by recording the principal melody onto a PC-based Audio recording program and improvising shadowy lines that followed the tune, spreading out like ripples in a wave. Bb. 47-57 represent this improvisation in its most untouched form, the improvisation then taking off into a flourish in the piano at b. 56 which grew intuitively from the texture I had created experimentally. This idea forms the basis of the string lines that overlay the quasi-recapitulation of the opening from bb. 98-113.

*On the move* is little more than a series of moments that each in turn spark off a new, kinetic idea which is then seized on and allowed to germinate in the following passage. Rather than creating an episodic form, an organic, slowly developing structure occurs, with well-graded transitions between the various units. I frequently exercised the freedom to abandon constructivism and mould the material almost physically, as if shaping wet clay by hand. Knowing when to do so, and when to harness

quasi-mathematical constructivism was necessary in order to harness the potential, kinetic dynamism of the musical material.

Ex. 12 - improvised clusters for bb. 114 -148 of *On the Move*

The musical score for piano, showing measures 8 through 28. The score is divided into systems for Piano and Pno. (Piano). The tempo is marked as quarter note = 120. The music features complex, dense clusters of notes, characteristic of John Cage's 'On the Move'. The score is written in 3/4 time and includes various musical notations such as slurs, ties, and dynamic markings.

Returning to the issues outlined at the opening of this Chapter, we find Alan Lomax criticising his collaborator for producing ‘puny offspring’ from two great, em-

phatically non-puny traditions when he applied an inappropriate European symphonic technique to material he had failed to understand in order to achieve dubious ends- the 'legitimation' of folk song by placing it in a completely foreign, but 'respectable' setting. I used analytical, deconstructing musical techniques to atomise my material in order to contain the emotive and exotic power that it contained. Although the techniques of defamiliarisation discussed in Chapter 1 are not so obvious here, there is an important, defamiliarising force in the confrontation between material and technique. In acting as an explosive stimulus for the kinetic musical outbursts that entirely make up the structure of the piece, I am thus able to force the material to be perceived afresh.

The final chapter enlarges on this 'kinetic' conception of sound relating in particular to the music of Edgard Varèse and the way in which it can be applied to the peculiar confrontation between technique and material that takes place in my own music.

## CHAPTER 3

# SOUND-OBJECTS, SOUND-MASSSES AND TELE- OLOGY

One exception to Adorno's criticism of the 'psuedo-scientific' thinking in the New Music, in his case of the post-war generation, was Edgard Varèse:

“[the] work of Edgard Varèse bears witness to the possibility of musically mastering the experience of a technologized world without resort to arts and crafts or to a blind faith in the scientization of art. Varèse, an engineer who in fact really knows something about technology, has imported technological elements into his compositions, not in order to make them some kind of childish science, but to make room for the expression of just those kinds of tension that the aged New Music forfeits” (Adorno 2002: 194).

Varèse's system of ideas for the “liberation of sound”, even if planned (perhaps inevitably, like most composers' theoretical systems) towards a utopian ideal still have direct application to compositional technique today because they were not based upon a specious analogy between music and non-musical thought, “the mannerisms of a machine shorn of utility” (Adorno 2002: 194). Xenakis shared this sensitivity to the needs of sound organisation—ways in which structural thinking taken from a knowledge of engineering and architecture can be immediately used as immanent, overriding tools for organising musical thought. Whilst I found the specifically mathematical content of *formalised music* resistant to absorption, his theories and music share with Varèse the concepts of ‘interpenetration’, ‘rotation’ and ‘crystalisation’ of ‘sound-masses’. The strong architectonic nature of the two composers' music is evident from listening to them. Their theories of the architecture of sound are simply expressed in differing language.

Here I discuss the ways in which the two composers, but principally Varèse's conceptions of music as the physical interaction of ‘sound-masses’ can be applied as a means defamiliarisation of material, by energising isolated phenomena—‘sound-objects’, which are often taken from music outside my own and exploited for the particular things they evoke—and re-energising them by treating them as distinct physical entities which can interact with other sound-masses in the music. I also explore the ways in which the collision of monolithic, often highly teleological blocks of sound

can throw up points of stylistic fracture, temporary awkwardnesses that contribute to the process of defamiliarisation. Before discussing the interaction of sound-masses in my own music, I would like first to discuss how I see them working in Varèse's own music, particularly in *Ecuatorial*.

Varèse's vocal music forms a consistent body of work which appears to inhabit quite a different world to that of his better-known instrumental works. In *Offrandes*, *Ecuatorial* and *Nocturnal* we find "evocations of mystery and drama... achieved through means so strikingly simple and direct that they could be said to be bordering upon being 'naturalistic.'" (Wen-Chung 1973: iii). These works have a seductively indefinable exoticism that seems at odds with the visceral, modernist iconoclasm that characterises works like *Hyperprism* and *Ionisation*. Along with the composer's own polemic, they have given Varèse the reputation of a musical futurist. However, the futurist and primitive were, for Varèse, aesthetically close. Despite seeing music and an "art-science", and claiming himself to be a "worker in rhythms, frequencies and intensities" (Varèse 1971: 32), he nevertheless felt that he was working "at a new primitive stage in music" (Varèse 1971: 26) and, in speaking of *Ecuatorial*, explicitly claimed to have "conceived the music as having something of the same elemental rude intensity of those [pre-Colombian Mesoamerican art] strange, primitive works" (Varèse 1961). Thus the case might be made for a closer identification between the primitive and futurist in his musical as well as his polemical outputs, and that his consciousness of working as a modern 'primitive' allowed him to engage with the process of organised raw sound at a new, fundamental level. The infinite imagined Americas of *Amériques*, the mysticism of *Arcana*, the slow inevitability of noise crystallisation in *Ionisation*, the depressive lyricism of *Density 21.5*, or sense of alienation in the late works are not absent from the supposedly more primitive *Offrandes*, *Ecuatorial* and *Nocturnal* and are powerfully conjoined in the longest and richest of these, *Ecuatorial*. Moreover, the confidence with which Varèse espoused the future "liberation of sound" and the technological sophistication with which it is realised in his works often belies an aesthetic unevenness, an occasional stylistic naivety inconsistent with the desired effect which occurs to some extent in all his works. This sense of stylistic fracture can be highly problematic in that it often seems unintentional rather than an expressive or subversive tool, at odds with the level of seriousness that appears to surround Varèse's work. It is, however, arguably suited to the monstrous, forbidding edifice of *Ecuatorial*.

In *Ecuatorial*, one can clearly see the functioning of the timbrally-differentiated ‘sound-masses’ of which the composer spoke (Varèse 1971, Stempel 1979), which, whilst interacting to an extent, are more sharply differentiated than in Varèse’s other works. The primary sound-mass is represented by the parts for the singer and the two ondes martinot, which function as an embattled lyrical focal point in an almost unrelentingly antagonistic instrumental context, consisting of two subsidiary sound-masses: the thunderous, *Ionisation*-like piano-percussion backdrop that drives the piece forward rhythmically and which, to an extent, provides the core of the instrumental sound, and the organ-brass combination, which generally punctuates the work’s narrative with the kind of kinetic, dissonant explosions of sound that are typical of all mature Varèse. The tension between these sound-masses is quite tangible when listening to the piece, with the ensemble frequently threatening to overwhelm the ondes-vocal line.

Most of the pieces contained in this portfolio employ what I came to see as ‘sound-objects’, which are directly treated in a way analogous to Varèse’s use of sound-masses. The use of these ‘sound-objects’ in my music first arose as an unconscious response to problems I perceived with development. I wanted music that was salient, that possessed the elasticity and dynamism suggested by terms such as “crystallisation”, which suggests an inevitable teleological force, and Xenakis’ “elasticity of planes”, which suggests an inherent dynamism in the musical material, but was not happy to uncritically accept conventional methods of developing material. Certain ‘ways out’ were suggested to me. One method of developing material arose in *Nightlight for Alice* and *Drumhead Mass*—the extraction from a simple musical element of the salient intervallic ‘identity’ and the manipulation of this through statistic and probability-related means, as opposed to the essentially motivic thinking that is still inherent in serial and quasi-serial methods of development. This was suggested to me by the Swiss composer Phillipe Kocher, who had developed a system of computer algorithms based upon observations of similar, ‘unconscious’ manipulation in his own earlier works. In *Nightlight for Alice*, this is rather latent and is still somewhat undeveloped, having mainly found its way into colouristic flourishes, which in themselves, are ‘muddied’ and made awkward by using extended techniques derived from a close study of Lachenmann’s *concrète* instrumental techniques. However, in both this piece and the one directly following it, *Drumhead mass*, there is a sense of superimposition of this material upon relatively conventionally-treated musical discourse,

not of immanence, nor the sense of these techniques having a physical impact upon the music's structure.

The argument of pieces like *Galliambics*, *On the move*, or *Shikar* is dominated by a succession of large, strongly goal-orientated, slowly-morphing blocks, generally composed of close-knit contrapuntal textures, which avoid more conventional (i.e. note-spinning) methods of developing material. *Galliambics* was the first of these pieces to harness the dynamic force of block-like thinking. Of the pieces that precede it, *Başbuzuc* relies on ostinati and the disruption of these through points where the polyrhythmic layers fall out of synchronisation with each other (this happens with increasing force from b. 79 to the end), or through sudden moments of metrical and textural fracture and juxtaposition that are found commonly enough in works stretching from Stravinsky, Birtwhistle to Barry. Here, it is the rhythmic identity of these blocks that comes to the fore rather than any specifically lyrical thinking. In *A rainy day on Bethnal Green*, this rhythmic identity is nebulous, composed of rhythmic structures that are too complex to immediately impress themselves upon the listener's ear. In pieces like *Shikar* and *Galliambics* they are explicit and strongly-defined, the focus of attention.

In *Galliambics*, the blocks of sound tend to follow their own strict internal logic, largely interrupting the flow of the surrounding passages. Two such examples are bb. 53-100 and its later equivalent, bb. 171-184, a passage which acts as the final part of a highly-rhythmicised but condensed recapitulation. They bookend the 'galliambic', bacchanalian section of the piece, interrupting any previous musical discourse with a sudden access of long-range, highly directional logic, mostly concerned with effecting a dramatic modulation in metre, tempo and in general sound-world. In each passage this is achieved by fragmentary use of canon in passing the speech-rhythm among the instruments, and by a slow compression onto a clear tonal centre in the bass- c# in the first passage, reached at b. 75 and g in the second, reached at b.162. These equivalent passages play a crucial role in the piece's formal symmetry, allowing the frustrated energy of the 'bacchanalian' music to be first brought into play, and then finally dissipated. Outside these passages, the music is generally diffuse and limpid, providing a simple, rugged form abounding in stark contrasts.

This use of compression as a means of pattern making arose essentially through an attempt to interpret Xenakis' conception of musical material as subject to dynamic outside forces, for example in the way that he calculates the behaviour of in-

dividual sound events as equivalent to particles making up a physical substance. In my pieces, shorn of its mathematical basis, it appears as a simple directional force. An event is repeated, each time with progressively distortion, as if in response to an increasing directional pressure that slowly, inevitably warps it out of shape. A similar process appears in Varèse's instrumental writing—for example, the E $\flat$  clarinet/ D trumpet line that extends through the opening 8 pages of *Intégrales* is constructed through a similarly obsessive repetition, expansion and contraction slowly in time and space, as if transformed by an unseen, but strongly felt force.

In *Galliamabics*, this way of thinking is applied to one of the more important pitch-structures in the piece. The inner viola lines from bb. 1-20 are essentially broken-chord configurations of a series of chords derived by gradually compressing the db-c-g-a pitch structure of viola 2's material in bar 1 (ex. 6), so that the line is confined to a perfect fourth by b. 20, before collapsing onto the lower strings. This process begins again at b. 27, at b. 47, and again at b. 53, always in the inner parts. In the last case, it is able to hone in upon a clear c# (viola 2 at b.68), thus breaking away from the cycle of repetition and assisting in the general move of the entire ensemble onto a clear tonal focus. Although the introduction relegates the idea to the function of a sinister, pregnant accompanying figure, fluctuating at the edge of perception, this series of chords plays a role in most of the pitch material of the piece. Two important uses are its linear presentation in a characteristic descending line, first heard in the solo viola at b. 96, and its verticalisation in the large block chords in the violins at b. 120. Thus, the material of *Galliamabics* is strongly unified, rhythmic unity provided by the speech-rhythm and pitch/melodic unity provided by the directional force of this sequence of compressed chords.

A very simple, but dramatic, technique of progressive distortion that was a logical extension of this motivic compression idea is used in several of the works presented here. *On the move* and *Headless butterfly* use the distortion to manipulate their most prominent sound-objects. In *On the move*, a single gesture, the chord announced in equal-tempered tones at b. 40, is slowly flattened over the passage from b. 40 to b. 79. This slow corruption and repression of a single gesture, even one that appears unassailably emphatic and energised on its first appearance passage, was the direct stimulus for a parallel section in *Headless Butterfly* (bb. 67-99), where a single diatonic chord is also gradually detuned over a considerable time period. This sound-object is an extremely crass D major chord with an added second at b. 51, which

could have been derived from a Country & Western ballad. The instrumentation applies a form of shock tactic to this innocuous material by having it blared out by each instrument in a way that maximises the rawness of that instrument's sound and refuses to let it blend with any of the others—the strings will inevitably play their fifths slightly out of tune, especially in relation to the open strings, and the wind instruments appear at the bottom of their registers where they might most be expected to buzz loudly. In a similar fashion to *On the move*, the boldness of the gesture is eroded slowly until it sinks imperceptibly beneath the music's surface, as if buckling under pressure.

This 'debased chord' in *Headless butterfly* is a gesture that I have come to think of as epitomising my concept of sound-objects. By using material outside my own music, sound-objects can be used as a means of carrying on a dialogue with music from the past, or from other traditions. It can be a critique of material through a play with the resonances the chosen material may be expected to have upon a listener and through techniques of decontextualising, distortion and the confusion of signifiers and signifieds.

The most prominent of the sound-objects that carry with them specific cultural or historic resonances is the muddied, distorted unison D that appears like a feverish refrain in *Shikar* (and in the embryonic version of this piece, originally entitled *Cracking up*). This came from several sources. Firstly, through an interest in the way Kurtág deliberately uses archaic sounds, sounds that appear to signify something, and indeed initially do, that are ultimately defamiliarised through decontextualisation in a way that is akin to electronic sampling. This defamiliarisation can be achieved through repetition; if the sound-object comes from a source in which it would form part of a conventional 'argument', for example, it would become 'strange' through its exact repetition beyond what might otherwise be conventional. The hackneyed guitar figure that opens *Grabstein für Stephan*, but never becomes the rippling, gentle song-accompaniment that it appears initially to be setting up is an example of this form of defamiliarisation. By remaining frozen, suspended in time, the listener is forced to perceive the sound-object in a fresh way, stripped of its conventional function. An example from outside the mainstream Western avant-garde, of the way in which material that is in itself essentially kitsch can be completely defamiliarised and reenergised in a subversive way, can be found the cold, insistent piano loop from Public Enemy's *Black steel in the time of chaos*, from the 1988 album *It takes a nation of millions to*

*hold us back*. The sample comes originally from a saccharine twiddle that appears on a piano solo in Isaac Hayes' *Hyperbolicityllybicsequedalymistic*. (from the 1969 album *Hot buttered soul*). The defamiliarisation lies in the tension between the saccharine, 'muzak'-like origin of the sample and its isolation in its new, alienating context. Sampled, chopped up and insistently repeated, it takes upon an urgency that underlines the harshness of the vocal delivery and imagery that it counterpoints.

To return to my own music, the constantly-repeated unison D chord, that swells in and out of consciousness in *Shikar* (that dominates the textures from b.257)-the most prominent sound-object in the piece- was suggested by the way a tape loop constructed from the final cadence of Sibelius' 7<sup>th</sup> Symphony fades in and out of *Revolution #9* on the Beatles' 'White album' (*The Beatles*, 1968). Any question as to whether this usage is, or was, intended as defamiliarisation is less important here than the fact that this wave of grandiose sound completely loses its identity, its teleological importance, its cadential quality, its sublimity, its grandeur, and becomes a sort of distorted refrain to the collage of other 'found' sounds. In *Shikar*, the same function is fulfilled by this chord as a deliberately 'classical' sound-object, one that could ostensibly begin a Mozart symphony. It is both instantly recognisable in its instrumentation—timpani roll with hard sticks, brass and wind distributed roughly as in the grandiose opening chord of a classical symphony's slow introduction was kept as close as possible. The D is stripped of its pomposity as an opening statement, as it fades in uncertainly, as if a tape machine had been randomly started regardless of anything going on around it. Its repetition and its return, almost completely unaltered except for a fluctuation in intensity level, is regulated only by different levels of instrumental doubling.

It may be rightly objected that the weakness here is that in its first occurrence, it *does* actually begin the piece. Even muddied by the many superimposed layers of noise and freely-repeated instrumental lines, and given an elemental, explosive force by the mass doubling of brass and percussion, it still recalls the opening of so many symphonic works of the Austro-German tradition, from Brahms' 1<sup>st</sup> Piano Concerto to *Soldaten*. It could, on the other hand, be argued that this recall of the original function of the sound-object at the opening of the work only strengthens the sense of degradation, of defamiliarisation to which it is subjected later in the work. This process- the way the sound is weakened, detuned, and made to fluctuate in and out of consciousness in a nightmarish fashion, follows exactly the same process of distortion that is applied to sound-objects in *On the move* and *headless butterfly*. It also has a more

complex function than one it fulfils in these pieces, in that it works a central structural pillar, one that penetrates other sound-masses and permeates the architectural focal points of the piece. An example of this occurs in the passage from b. 254. This passage follows a section in which the entire content of the piece is reduced to a slowly, ugly pulsing on a single low cluster centred around c1, in the low strings and wind. Summarily dismissed by a brass eruption at b. 253, this cluster is then kick-started by this interruption, invested with internal, kinetic energy of its own, and initiating a slow expansion of the cluster into a polyrhythmic net of string pizzicati, harps, prepared piano and percussion. The unison D sound-object, which lurches into focus at b. 257, begins a process of distortion akin to that described in other pieces, slowly slipping from a position of authority over the texture, to one where it is submerged by the other sound-masses. This is the last time that it manages to have any dominance over the musical material in the piece. Throughout the piece, it has given the impression of always being present, fluctuating in and out of consciousness in a way that is reminiscent of the way the B pedal in the murder scene of *Wozzeck* represents the idea of the murder moving between Wozzeck's conscious and subconscious—that of something that could erupt destructively at any point. After this process of degradation has taken place, it makes several attempts to wrest control of the structure (at bb. 292, 303 and 314) but is each time contradicted by a return of the, now, vastly expanded polyrhythmic texture that first erupted into being at b. 254. Thereafter, it only appears as a distant echo in the way the detuned brass chords hang, frozen in the texture from b. 338 until the end, having been drained of the explosive, kinetic force that was manifested within it as an opening gesture.

## CODA

The image of re-enchanting sound came to me from an article by LSE anthropologist Alfred Gell. Gell wrote a great deal about art, and in an article entitled “Technology and Magic”, he explores the links between magical thinking, modern technology and the arts. He argues that, far from becoming disenchanted, as Max Weber had predicted, the modern world constantly throws up new enchantments. Weber had thought that, with the rise of science and rationality which increasingly explain everything, magic, enchantment and mystery would become obsolete. Gell argues that magical thought is a constant because it is rooted in a specific mode of thinking universal to the human brain, which is, in fact, creative thought. It makes us capable of generating completely new and unexpected combinations, bringing together unrelated and unlikely things in new patterns. In the sense of being rooted in this type of ‘visionary’ thought, both the arts and technology are magic-like—they produce things that appear magical, impossible, enchanting. This is also the principle at work in defamiliarisation. Defamiliarisation can have the power to make us perceive things freshly, to stop things becoming habitualised, and thus unseen, to make them seem strange, puzzling and salient. In my own music, techniques of defamiliarisation have been used as a means towards the re-enchantment of sound and the re-energising of musical material.

I do not, of course, claim that I have the solution to New Music’s malaise as discussed by Adorno, but I would question whether this disenchantment is not perhaps exaggerated. I feel that there is much that is exciting in music at this point in time (as there was in Adorno’s time), and that this is an interesting moment because it calls for new creative idioms and approaches to sound as a means of undoing the routinisation that, if left unchecked, inevitably occurs in every field of art.

## BIBLIOGRAPHY

- Adorno, T.W. 2002. *Essays on Music*. Leppert, R. (ed). Berkeley: University of California Press
- 1963. *Quasi una fantasia*. Livingstone, R. Transl. London: Verso
- Alberman, David. 2005 "Abnormal Playing Techniques in the String Quartets of Helmut Lachenmann" In *Contemporary Music Review* 24(1), pp. 39-51.
- Albertson, Dan. 2004 "Foreword" In *Contemporary Music Review* 23(3/4), pp.3-5.
- Albertson, Dan & Eberhard Huppe. 2004 "Brief Biography" In *Contemporary Music Review* 23 (3/4), pp.3-5.
- Arom, S. 1991. *African Polyphony and Polyrhythm: Musical Structure and Methodology*, Thom, M, Tuckett, B and Boyd, R. Transl. New York: CUP
- Babbitt, M. 1971 "Edgard Varèse: A few Observations of his Music." *Perspectives on American Composers*. Ed. B. Boretz and E.T. Cone. New York: Norton, pp. 40-48.
- Beckerman, Michael 1986 "In Search of Czechness in Music" In *19<sup>th</sup> Century Music* 10(1), pp 61-73.
- Bernard, J.W. 1981 "Pitch/Register in the Music of Edgard Varèse." *Music Theory Spectrum*, 3, pp.1-25.
- Catullus, C.V. 1998. *Catullus- Poems*. Michie, J. transl., Ware.
- Chase, G. 1966. ed. *The American Composer Speaks*. Baton Rouge: Louisiana State University Press.
- Clarkson, Austin. 2005 "A Note on '...zwei Gefühle...', Musik mit Leonardo" In *Contemporary Music Review* 24(1), pp. 53-55.
- Dahlhaus, C. 1983. *Vom Musikdrama zur Literaturopera: Aufsätze der neueren Operngeschichte*. Munich, Salzburg: Emil Katzbichler.
- Ferrara, L. 1984 "Phenomenology as a Tool for Musical Analysis." *Musical Quarterly*, 70, pp.355-73.
- Gann, K. 1995. *The Music of Conlon Nancarrow*. Cambridge: Cambridge University Press.

- Gasser, J.H. (ed.) 2001. *Catullus in English*. London, New York: Penguin.
- Gell, Alfred. 1988 "Technology and Magic" In *Anthropology Today* 4(2), pp 6-9.
- Grella-Mozejko, Piotr. 2005 "Helmut Lachenmann—Style, Sound, Text" In *Contemporary Music Review* 24(1), pp. 57-70.
- Habermas, Jurgen. 1987. *The Philosophical Discourse of Modernity*. Cambridge: Cambridge Polity Press.
- Hockings, Elke. 2005 "All Dressed Up and Nowhere to Go" In *Contemporary Music Review* 24(1), pp. 89-100.
- 1995 "Helmut Lachenmann's Concept of Rejection" In *Tempo NS* 193, p 4-10.
- Hollander, H. 1958 "Janáček's Development" In *The Musical Times* 99(1386), p 427.
- Holloway, R. 1999. "Expressive Sources and Resonances in Janáček's musical Language." In *Janáček Studies*, Wingfield, P. (ed.) pp. 1-17. Cambridge: Cambridge University Press.
- Jahn-Bossert, Hans-Peter. 2005 "Fear of ...? Essayistic Miniatures on Grido" In *Contemporary Music Review* 24(1), pp. 31-38.
- Kaye, A. L. 1997. *Sleevenotes to Southern Journey: Bad Man Ballads Volume 5. Songs of Outlaws and Desperadoes*. Cambridge, Mass: Rounder Records.
- Kupkovic, Ladislav. 1980. "the Role of Tonality in Contemporary and 'Up-to-Date' Composition" In *Tempo NS* 135, pp. 15-19.
- Lachenmann, Helmut. 1995 "On Structuralism" In *Contemporary Music Review*, 12(1), pp. 93-102.
- 2004 "On My Second String Quartet" In *Contemporary Music Review* 23(3/4), pp.59-79.
- 1997 "Open Letter to Hans Werner Henze" In *Perspectives of New Music* 35(1), pp. 189-200.
- 1980 "The 'Beautiful' in Music Today" In *Tempo NS* 135, pp 20-24.
- Lesser, David. 2004 "Dialectic and Form in the Music of Helmut Lachenmann" In *Contemporary Music Review* 23(3/4), pp.107-114.
- Loewenbach, J. 1961. "Leoš Janáček and Rabindranath Tagore." In *A centenary Volume: Tagore 1861-1961*. pp. 159-162. New Delhi: Sahitya Akademi.
- Lomax, Alan. 1960 Article in *HiFi/ Stereo Review*. Publisher Unknown.
- 1970 "The Homogeneity of African-American Musical Style" In *Afro-*

- American Anthropology* Whitten, N. & J. Szwed eds., New York: The Free Press.
- 1993 *The Land Where the Blues Began*. New York: Pantheon.
- Mattis, O. 1992. "Edgard Varèse's 'Progressive' Nationalism: *Amériques* meets '*Américanisme*.'" *Edgard Varèse: Die Befreiung des Klangs*. Ed. H. de la Motte-Haber. Hofheim: Wolke, pp.149-178.
- Marvin, F.W. 1991 "The Perception of Rhythm in Non-Tonal Music: Rhythmic Contours in the Music of Edgard Varèse." *Music Theory Spectrum*, 8, 61-78.
- Mobbs, K. 1984. "Stops and Other Special Effects On The Early Piano." In *Early Music*, Vol. 12, No. 4, *The Early Piano I*, pp. 471-476. Oxford: Oxford University Press.
- Nonemann, Rainer. 2005. "Music with Images—The Development of Helmut Lachenmann's Sound Composition Between Concretion and Transcendence" In *Contemporary Music Review*, 24(1), pp. 1-29.
- Ouellette, F. 1973. *Edgard Varèse*. Trans. D. Coltman. London
- Pace, Ian 2005 "Lachenmann's *Serynade*—Issues for Performer and Listener" In *Contemporary Music Review* 24(1), pp. 101-112.
- Rihm, Wolfgang. 2004 "Grinding Away at the Familiar" In *Contemporary Music Review* 23(3/4), pp.21-29.
- Ruzicka, Peter 2004 "Toward a New Aesthetic Quality. On Helmut Lachenmann's Aesthetics of Material" In *Contemporary Music Review* 23(3/4), pp.97-102.
- Ryan, David & Helmut Lachenmann 1999 "Composer in Interview: Helmut Lachenmann" In *Tempo* NS 210, pp. 20-4.
- Saussure, Ferdinand de 2007 "The Nature of the Linguistic Sign" In *The Critical Tradition: Classic Texts and Contemporary Trends (3d ed.)*. D. Richter ed., Boston, New York: Bedford/St. Martins.
- Schlovsky, Victor. 2007 "Art as Technique" In *The Critical Tradition: Classic Texts and Contemporary Trends (3d ed.)*. D. Richter ed., Boston, New York: Bedford/St. Martins.
- Schuller, G. 1971. "Conversation with Varèse." *Perspectives on American Composers*. Ed. B. Boretz and E.T. Cone. New York: Norton, pp. 52-65.
- Sloterdijk, Peter. 1987 *Critique of Cynical Reason* M. Eldred transl., Minneapolis: University of Minnesota Press.
- Sperber, Dan. 1985 *On Anthropological Knowledge: Three Essays* Cambridge, Paris:

Fondation de la Maison des Sciences de L'Homme.

- Štědron, B. 1955. *Janáček: Letters and Reminiscences*. Thomsen, G. transl., Prague: Artia
- Steinitz, R. 2003. *György Ligeti: Music of the Imagination*. London: Faber and Faber.
- Stempel, L. 1974. "Not even Varèse can be an Orphan." *Musical Quarterly* 60 (1974), pp.46-60.
- 1979 "Varèse's 'Awkwardness' and the Symmetry in the 'Frame of 12 Tones': an Analytic approach." *Musical Quarterly*, 65, pp. 148-66.
- Stoinova, I. 1986. "Edgar Varèse: *Ecuatorial*." *Melos* 48/4, pp. 59-91.
- Strawn, J. 1978. "The Intégrales of Edgard Varèse: Space, Mass, Element, and Form." *Perspectives of New Music*, 18/1, pp. 138-60.
- Taruskin, Richard. 1970 "Realism as Preached and Practiced: The Russian Opera # Dialogue" In *The Musical Quarterly*, 56(3), pp. 431-54.
- Taylor, Stephen. 1995 "Chopin, Pygmies and Tempo Fugue: Ligeti's "Automne a Varsovie" In *Music Theory Online* 33, The Society for Music Theory.
- Thomas, Gavin. 1993 "The Poetics of Extremity. Gavin Thomas Introduces the Remarkable Music of Salvatore Sciarrino" In *The Musical Times* 134(1802), pp. 193-6.
- Tyrell, John. 1970 "Janáček and the Speech-Melody Myth" In *The Musical Times* 111(1530), pp 793-796.
- Van Solkema, S, ed. 1977. *The New Worlds of Edgard Varèse*. New York.
- Varèse, E. 1961 "Preface." *Ecuatorial*. New York: Colfranc Music, 1961.
- 1971. "The Liberation of Sound." *Perspectives on American Composers*. Ed. B. Boretz and E.T. Cone. New York, pp. 25-33.
  - 1983. *Ecrits*. Ed. L. Hirbour. Paris.
- Varèse, L. 1973. *A Looking-Glass Diary. Vol.1, 1883-1928*. London.
- Vogel, J. 1962. *Leoš Janáček: A Biography*. London: Orbis.
- Wen-Chung, Chou. 1971. "Asian Concepts and 20<sup>th</sup>-Century Composers." *Musical Quarterly*, 57 pp.211-219.
- 1971. "Open rather than Bounded." *Perspectives on American Composers*. Ed. B. Boretz and E.T. Cone. New York: Norton, pp. 49-54.

- 1973. "Preface." *Nocturnal*. E. Varèse. New York: Colfranc Music, 1973.
- Whittall, A. 1967. "Varèse and Organic Athematicism." *Music Review* 28, pp.311-315
- Wilde, Oscar. 2007 "The Decay of Lying" In *The Critical Tradition: Classic Texts and Contemporary Trends (3d ed.)*. D. Richter ed., Boston, New York: Bedford/St. Martins.
- Wilkinson, M. 1957. "An Introduction to the Music of Edgard Varèse." *The Score*, 19, pp. 5-18.
- Wingfield, Paul 1992 "Janáček's Speech-Melody in Concept and Practice" In *Cambridge Opera Journal* 4(3), pp 281-301.
- Xenakis, I. 1985. *Arts/Sciences: Alloys. The Thesis Defense of Iannis Xenakis before Olivier Messiaen, Michel Ragon, Olivier Revault d'Allonnes. Michel Serres, and Bernard Teyssedre*. Kanach, S. transl., New York: Pendragon.
- Zemanova, M. 1989. *Janáček's Uncollected Essays on Music*. Zemanová, M. transl., London, New York: Marion Boyars.