MAKING THE ACT OF MUSIC VISIBLE

Theatrical Considerations in Music Composition

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VOLUME 2

SCORES AND MEDIA DISKS

ABSTRACT

This research investigates the music-theatre phenomenon for the purpose of:

- clarifying how that differs from more traditional forms of musical theatre, i.e., Opera and Broadway musical;
- discussing its aesthetic bases;
- explicating its modes of operation in relation to both music and theatre.

The writing is structured in three main parts. The first concern of the discussion is to clarify the connection between music and performance. To that end, Part One starts by reflecting on the nature of music and how its perception has been changed by modern technology, throwing live performance into question. The notions of physicality, embodiment, and gesture are then invoked in order to re-position music firmly within the performing arts. Part Two then delves into music-theatre touching on issues of terminology, artistic scope, positioning, production, funding, structures, institutions. Part Three, finally, offers some conclusions and recommendations.

The Thesis is then followed by a commentary to the portfolio of compositions accompanying this research. The musical scores and audio-visual material relative to the works therein discussed are included on 1 separately bound volume.

KEYWORDS:

Physicality, Corporeality, Embodiment, Gesture, Cross-modality, Synaesthesia, Interdisciplinarity, Hybridity, Performance, Music-Theatre.

INTRODUCTION

Music has also been a scenic event for a long time. In the 19th century people still enjoyed music also with their eyes, with all their senses. Only with the increasing dominance of mechanical reproduction of music, through broadcasting and records, was this reduced to the purely acoustic dimension. What I want is to bring the audience back to an enjoyment of music with all senses. That's why my music is a direct, exaggerated protest against the mechanical reproduction of music. My goal: a re-humanisation of music-making!

Mauricio Kagel (1970).

This research was motivated by my increasing dissatisfaction with the 'acousmatic' listening mode, the 'ear-only' musical experience which bypasses or erases human performance to exist only as disembodied sound, nowadays the commonest way for the dissemination and reception of musical works.

Though I have never had doubts about the fact that there is indeed a place for that particular way of producing and appreciating music, and that many advantages and advances in music have been derived from the use of (re-)production technology, I found a cause for concern in the way that has changed our perception of music: performance has gradually come to be seen as accessory, or redundant, and the nature of music has come to be construed merely as sound.

Thus, starting from a critical re-examination of the role of the recording in music making, particularly with regard to its effects on performance, in this writing I set out to explicate why human performance is a necessary and integral part of a whole musical experience, and, if that is so, to reflect on how performance could be re-defined in our post-recording and digital age.

Those, I believe, are important questions for the contemporary composer. As John Blacking remarks:

Thus if a composer wants to produce music that is relevant to his contemporaries, his chief problem is not really musical, though it may seem to him to be so: it is a problem of attitude to contemporary society and culture in relation to the basic human problem of learning to be human (Blacking, 1976, p.104).

An awareness of the performative nature of music, and of the place and function of performance in the music-making process, is key to an understanding of music as a cultural phenomenon, not just as a commodity for consumption.

The leap from such considerations to music-theatre is only a personal answer; not a necessary step, but a logical one nevertheless.

PART 1

BEYOND SOUND

Music as a Performing Art

1.1 - The Music Object

The development of western music has been characterised by a slow but steady process of reification whereby music, essentially an *activity*, gradually came to be conceptualised as an *object*.

There are two distinct but not mutually exclusive levels at which the music-object takes shape in this system. In the first, music is construed as a specialised sonic product, as opposed to the music-dance-drama-ritual multimodal compound which once constituted the Greek mousiké, and which can still be found today in many non-western cultures. This is a kind of aural absolutism in which the 'sound itself' is identified as the locus of musical meaning, and the aural experience is singled out as the only relevant to music. In the second, which could be labelled the 'literary' approach, music is equated with the abstract concept and relationships informing a piece's structure, as represented by the written page, the score itself. By privileging the product rather than the process and context through which music is brought into existence, these approaches demote the performance to a mere functional role, i.e., performance as 'execution', as that which can bring nothing to—in fact, it might detract from—the self-sufficient work.

And indeed, given the possibilities offered by modern technology, the practice of embedding the sound directly onto some digital media has become the preferred way for the presentation of works. Most of the music we are exposed to nowadays is manufactured in studio by splicing together takes of a performance that actually never happened. Or, quite often, the human performer is bypassed altogether, as now many works are forged directly from stored and manipulated sound matter.

Divested of its performative nature, music becomes an object for consumption, a score to be read silently or some sound to be listened to -or, in fact, some aural wallpaper meant to be ignored-rather than an activity in which we participate. As Nicholas Cook remarks:

Music has become part of an aesthetic economy defined by the passive and increasingly private consumption of commodified products rather than through the active, social processes of participatory performance. In short, we seem to have forgotten that music is a performance art at all, and more than that, we seem to have conceptualized it in such a way that we could hardly think of it that way even if we wanted to (Cook, 2001).

At the root of this phenomenon lie rather complex reasons, including aesthetic, ideological, social, and technological ones. I am assuming that such reasons are sufficiently well known and understood, as they have received extensive treatment in the writings of many specialists. In the next section, therefore, I will merely hint at them as I approach directly our post-recording age and concentrate on discussing its effects on live performance.

1.2 - The Recording Revolution

Concisely, the development of music in the western world has largely, and necessarily, mirrored the socio-cultural evolution that culminated with the present-day capitalist system of production, with its emphasis on specialisation and commodification. From (primarily) communal activity music became a professional enterprise by dedicated specialists; hence the figure of the composer, as distinct from the performer, emerged, along with notation, inevitably leading to standardisation, thus allowing for reproducibility, copyrights, etc.

Technological advances corroborated/accelerated this process and eventually, with the advent of recording, completed it by freezing the performance onto a convenient, portable –and marketable—medium. Considering the far-reaching effects this had –and is having– on music, we can advisedly talk of a 'recording revolution'. As Simon Emmerson remarked, '[t]he initial impact of recording in the last part of the nineteenth century was thought of as profound and yet some of the consequences are only just becoming apparent' (Emmerson, 2000b, p. 197).

Live performance was obviously the aspect of music most affected by the new technology. The reification of the musical work radically changed our perception of the concert event, which increasingly came to be seen as subordinated to its acousmatic (recorded) version. In his book, Repeated Takes: A Short History of Recording and its Effects on Music, Michael Chanan thus sums up the current state of affair:

A mutation of musical communication has occurred in which live performance has become a mere adjunct to most people's musical experience, which now comes to them overwhelmingly through loudspeakers and even earphones. Our musical experience is now predominantly what Pierre Schaeffer, the pioneer of musique concrète, called 'acousmatic': sounds that one hears without seeing their source. (...) The integrity of the musical work of the past, its intimate unity with the time and place of performance, what Walter Benjamin called its aura, has been destroyed. Music has become literally disembodied, and the whole of musical experience has been thrown into a chronic state of flux (Chanan, 1995, p. 18).

As the acousmatic becomes overwhelmingly the most common musical experience, a paradoxical reversal occurs by which the recording becomes the standard for assessing the value of live performance. Adorno, one of the first to recognise the implications of the new technology, thus complained about this new attitude to live performance:

The new fetish is the flawlessly functioning, metallically brilliant apparatus as such, in which all the cogwheels mesh so perfectly that not the slightest hole remains open for the meaning of the whole...The performance sounds like its own phonograph record (Adorno, 1938, quoted in Chanan, 1995, p. 118).

If it does not, Chanan adds,

then the concert-hall listener is discomfited. The reason that this streamlined performance comes to replace interpretation and its element of spontaneity is precisely to ensure that the concert performance shall indeed be a copy of the record, and the concert-goer will not be disappointed (Chanan, 1995, p. 118).

That problem is particularly well known in the popular music field, in which many artists/bands have struggled with trying to recreate on stage the kind of soundworld –and performance standard—to which their audiences were used to from their records.

In response to those problems, some artists have opted out of live performance altogether and embraced to the full the mechanical approach. The Canadian pianist Glenn Gould is a case in point. Giving up live performance in 1964, he spent the rest of his life as a recording artist, developing his own unique techniques that exploited the recording medium in (relatively) creative ways (i.e. shifting perspective, by changing microphone placement, in the course of a single piece). In a passionate conversation with Yehudi Menuhin, in which he makes his case for the 'superiority' of the recording medium, Gould makes a revealing admission when he relates why he came to relinquish live performance: 'I found I was competing with my own recordings, which nobody can do really. My recordings represent my best thoughts'. He then concludes that the concert hall experience 'was the standard until something else came along to replace it, which is exactly what the recording did; and the recording, surely, is now the standard against which the concert must be judged' (in Menuhin and Davies, 1980, pp. 292-4).

Crudely put, once we have a machine that can re-produce in all its nuances -sometimes, under certain circumstances, with 'better' results- a musical realisation, we might start questioning the necessity of 'live' performance.

And things can only get worse (for live performance) as soon as technology starts to be employed as a means of *production*, rather than re-production. The attractiveness of purely acousmatic studio composition are obvious enough. In the words of Denis Smalley:

The electroacoustic medium is unprecedented in that, unlike instrumental and vocal tradition, it permits access to the entire sound-field. It is free to develop sound repertories that are not confined to the notion of the instrument or voice, and it does not have to construct its sounds from material sounding bodies. Consequently, it need not be limited by the human practicalities of real-time execution and live performance practice (Smalley, 1992, p. 539).

Here Smalley emphasises the 'freedom' of the electroacoustic medium as opposed to the 'limitations' of the human performer.

Effectively, the electroacoustic medium was first hailed by many as the tool that would 'liberate' the composer from the necessity of a performer. Like their cousins sculptors and painters, finally composers, too, were able to fashion their own music by working *directly* on the matter of which music (so they thought) is made: *sound*. The final product would sound exactly as the composer intended, untainted by any 'interpretation' by a human performer.

Nevertheless, many artists soon recognised the limitations of the 'limitless possibilities' offered by the tape-solo format, especially with regard to 'performance', which in fact, significantly, came to be re-baptised as 'diffusion', and started re-introducing the live performer on stage. This could take the form of the 'mixed' work, i.e., tape part plus live instrumental part; or the form so-called 'live electronics', whereby the sound of the live performer is manipulated through electronic processing; or, again, a combination of these two approaches.

But, though there are indeed a few pieces that have managed to integrate successfully the two worlds, even this approach presents a number of serious artistic and technical problems. As Simon Emmerson perceptively pointed out, the term 'live', as applied to electronic music, came slowly but steadily to be replaced by the term 'real-time'. If with the former the emphasis remains on the human, the latter reveals more accurately what is actually going on during such performances: a rather ambiguous situation in which, Emmerson writes, 'many actions (and interactions) conducted between people and machines on the concert platform in no way give cues (or even clues) as to whether there is any essentially 'live' (human-produced) activity' (Emmerson, 1994b).

What happens is that the causal link -real or *apparent*- between physical gestures and sound is obliterated in the total sonic result, thus confusing and disorienting the listener as to the actual contribution of the live performer. Denis Smalley goes right at the heart of the problem when he writes:

The arrival of computers, MIDI-controllers and live signal processing on the concert stage has introduced a new problem related to gesture and vital focus. There is an increasing ambiguity between what is seen and what is heard, leading to ruptures in the link between the sounding and visual aspects of gesture. (...)

What are the consequences? The causal connection between gesture and sound is undermined or destroyed, and performance gestures previously visible become invisible. Thus we witness a shift even in live performance towards the acousmatic. This is at once an enticing and dangerous prospect. It is enticing because of the potential expansion in the notion of the instrument and its musical language capacity. It is dangerous because at an extreme, in live acousmatic performance the word 'live' becomes redundant and meaningless. These are serious questions for the performer and composer: if you stay too close to the traditional gesture-model, electroacoustic potential is not explored; if you go too far away you destroy the notion of 'performance' (Smalley, 1992, pp. 548-9).

These are, in essence, the effects of the subverted relationship between sound and source. Before the advent of electricity, our sounding model was primordial, i.e., both our modes of apprehension and production of sounds were rooted in the physical domain and governed by close gesture-sound causal relationships. But all that was rapidly to change from the turn of the twentieth century. Emmerson talks of three great acousmatic dislocations:

Dislocation 1: Time (recording)

Dislocation 2: Space (telecommunications (telephone, radio), recording)

Dislocation 3: Mechanical causality (electronic synthesis, telecommunications, recording)

(Emmerson, 1994a).

These are obviously overlapping and interacting, and, as Emmerson writes, 'effectively modified all the standard relationships of body to sound –it did not replace them altogether, but extended and challenged them' (Emmerson, 2000b, p. 198). The far-reaching and rather alarming consequences of such a phenomenon are thus starkly expressed by Emmerson: '[m]y first response to this would be entirely pessimistic. Live performance as we have known it can logically cease' (Emmerson, 1994a).

In effect, it only takes but a short reflection to realise that, to put it bluntly -insofar as the sound is coming from a loudspeaker, questions of who or what produced that sound -and how, where and when!- become plainly irrelevant. Thus, if in performance the contribution of the live player is not evident as live, then that part might as well have been mixed down with the electronics and the piece presented as an acousmatic work.

It is with reference to the above problems that, in his essay titled 'Losing Touch', Emmerson asks: 'What is it to be 'live' in electroacoustic music?' (Emmerson, 2000b, p. 194). But, really, I feel that such a question could, and perhaps *should*, be extended to all music produced in our age, not just electroacoustic music. The electronic medium is by now an inescapable reality; any kind of music is bound to make use of technology to some extent. And even if a composer tried to restrict him/herself to purely acoustic resources they would still have to take into account the fact that they would be 'competing' with their own recordings.

What is it to be 'live' in our post-recording age is, as I see it, the question that every composer writing for live forces (at least composers involved in research) should ask. The answers and solutions to that question may be only tentative and provisional, but the question must be asked.

My impression is that, in creating the problems discussed above, modern technology has also exposed something about the very nature of music. What is being revealed is that when the sonic result is regarded as the whole point of music making, then -yes!— the machine can gives us that, even better than humans in a live performance situation can. The question, of course, is whether music can be reduced to a merely sonic artifact.

A few composers seem actually perfectly comfortable with the notion of music as sound. The term 'sonic art', in fact, was formulated precisely as a way of clarifying the object of their concern and so distancing their approach from more 'traditional' forms of music. Smalley spells this out rather vehemently when he writes: '[c]all it sonic art or sonic sculpture if it makes you any happier, but it is still a sounding art, and music was ever that.' (Smalley, 1992, pp. 551-2).

And yet, observations like the following by Emmerson leave me under the impression that not all electroacoustic composers are fully contented with just their sonic 'powers'. He writes:

In recent years there has been an increasing interest in the use of instruments (and their performance traditions) from other, usually non-western, cultures in contemporary western art music in general and electroacoustic music in particular (Emmerson, 2000a, p.115).

The interesting question is: why would composers in the electroacoustic medium which, to repeat Smalley's quote, 'permits access to the entire sound-field. It is free to develop sound repertories that are not confined to the notion of the instrument or voice, (...) it does not have to construct its sounds from material sounding bodies', be so interested in non-western resources? Not so much for their 'limited' instruments, I believe, but precisely for their performance traditions—what Emmerson puts in brackets—traditions which are deeply rooted in performativity, traditions of musicking more than music.

It also transpires from Emmerson's writing that 'spontaneity and vitality' is what many composers 'admire in non-western music' (Emmerson, 2000a, p. 126).² In fact, I would add, that is what many feel we have lost in our western tradition, and what makes us look with longing at 'primitive' music. The question is: how do we get that ineffable quality back into our music?

In the same essay, which is an account of his experience of writing for an ensemble which included Indian musicians, Emmerson also clarifies that computer interaction is not applicable in such a circumstance, since, he declares: 'I maintain a belief in the 'touch of the now' as an essential ingredient in intercultural interaction' (Emmerson, 2000a, p. 123). But why should a belief in the 'touch of the now' be reserved or confined to 'intercultural interaction'? Should we not appreciate the 'touch of the now' as an essential ingredient of music, as I would rephrase it?

The question, again, is: how do we achieve and/or preserve that 'touch of the now' quality? In fact, first of all, what is it? where does it come from, or what is it given by?

¹ I am referring to Christopher Small's usage of the term, as in his book: *Musiking* (Small, 1998).

What Emmerson actually writes is: 'There are plenty of examples of composers killing stone dead the spontaneity and vitality which they themselves admire in non-western music through insensitive appropriation of surface technique' (Emmerson, 2000a, p. 126).

Schaefferian theory can give us valuable insights into the nature of sound itself; the principles of spectromorphology can contribute to our ability for structuring timbral material; research into synthesis and DSP can provide us with powerful tools for the creation and manipulation of the sonic matter. But if we want to take music back on stage we need to broaden our field of enquiry and acquire a new conceptual framework that takes into account human relationships as well as sound relationships.

Perhaps it is the notion of *performance* itself, the very site for the emergence of the 'touch of the now', that we need to investigate. That notion clearly entails some human presence physically engaged in a process. But we need to understand, first, why is human presence important and/or desirable; then, what kind and level of physical engagement constitutes 'performance', and what kind of processes we are referring to.

Such a task necessarily entails challenging the assumption that sound is all there is to music, and that is what I will attempt in the following sections.

1.3 - The Musical, The Extra-Musical

I have outlined above the possibility that music is something more than merely aurally perceived sound structures. The question, then, is: what else is there to music, what other elements, beside the sonic, are contributing to make up the 'stuff' of which music is made?

Certainly defining and circumscribing music is an impossible task, especially if we tried to adopt a global perspective. In effect, we live in an age in which contact with music from 'other' cultures is both unavoidable as well as actively sought by composers, and this fact cannot be overlooked. Thus, how can we frame the above question to avoid the danger of coming up with a western/eurocentric model?

Carl Dahlhaus must have felt the same problem when, expressing his reservations on a UNESCO project for a world history of music, thus commented on the problem of formulating a unified concept of music:

Sonic phenomena for which a European observer reserves the term "music" –a word for which a linguistic equivalent is often missing in non-European cultures—lose their original meaning if they are divorced from their "extra-musical" context. Strictly speaking, the context of which they are an inextricable part is neither "musical" nor "extra-musical." The former expression [that is, "musical"] stretches the concept of music, a concept of European origin, to such an extent that it can no longer correspond with European reality, while the latter ["extra-musical"] presupposes a concept of music that is not only European but specifically modern. This latter concept of music, which, in a strict sense, dates only from the eighteenth century, crudely distort non-European musical reality —a reality not just of sonic facts but also of the consciousness of those facts (Dalhaus, 1985, p.241).

Significantly, a few writers, particularly ethnomusicologists, are now more inclined to talk about 'musics' rather than music.

Anyhow, defining music –if that is at all possible– is beyond the scope of this research. For our purpose it is enough to realise that concepts such as 'musical' and 'extra-musical' are shifting –and culturally determined– terms. We should therefore be cautious before we discount particular elements as 'extraneous' to music in our pursuing of an hypothetical 'purity', as it might only blind us to the richness and complexity of the phenomenon as a whole. Besides, and more importantly, even when some elements may somehow be identified as 'extra-musical', these might still have some important bearing on the *total* musical result. The ethnomusicologist Nketia, for example, referring to the music of Africa, pointed out how 'extra-musical' factors can determine form:

Although the formal organisation of vocal and instrumental sound is guided principally by musical considerations, details of structure are influenced by extrinsic factors as well. Form may be influenced not only by the roles assumed by various members of a performing

group or by the context of a performance, but also by the nature of the movements and expression with which music is integrated (Nketia, 1974, p.177).

What is emerging strongly from the recent writings of (ethno)musicologists is that music, as a cultural fact, cannot be analysed merely in terms of sonic or formal structures. John Blacking has particularly insisted on this point. He wrote: '[t]he answers to many important questions about musical structure may not be strictly musical' (Blacking, 1976, p. 89). He therefore stresses, in more general terms, the necessity of a different scholarly approach. He states flatly: '[w]e can no longer study music as a thing in itself when research in ethnomusicology makes it clear that musical things are not always strictly musical' (Blacking, 1976, p. 25).

More recently, Jean-Jaques Nattiez seems to have come to similar conclusions. In his seminal work, *Music and Discourse* (1990), Nattiez put forth a semiotic theory of music which, following Jean Molino, distinguishes three levels of signification: the *poietic*, *esthesic*, and *neutral* levels. The poietic level is concerned with all the facts and circumstances surrounding the work's creative process; the esthesic level with the facts and context of the work's reception; finally, the neutral level looks at the work's immanent structure, i.e. the physical trace as a 'sonic object', in the form of a score or recording. Only through a synergetic approach that takes into account all the three levels can we hope to understand fully the meaning of a musical work. Thus, in talking about universals in music Nattiez stresses:

one thing is certain. As soon as we accept the validity of a tripartitional conception of music, we can no longer investigate universals just in terms of sheer sonorous material. We must also look at them in terms of the poietic and esthesic strategies that are associated with that material (Nattiez, 1990, p. 62).

All this signals an important shift from considering products to considering processes, an orientation that has become widespread in all cultural analysis across disciplines. By looking beyond immanent structures, notions such as context, behaviour and performative processes are then brought (back) into the picture. As Dane Harwood puts it: 'the *process* of understanding and engaging in musical behaviour may be more universal than the *content* of musical knowledge or action' (Harwood, 1976, quoted in Nattiez, 1990, p. 66).

For the present purpose, I believe that the notion of 'engaging in musical behaviour' can be a useful starting point for the task we have set ourselves above: a better understanding of musical performance. True, we would still need to grapple with the question of what constitutes engagement in musical behaviour. But having got thus far it already allows us to infer that when we talk about music we are talking of a complex and eminently human activity. We are no longer referring to some sonic artifact, but to a particular process of establishing human relationships through rhythm and sound relationships.

Having established —or reminded— that music as a cultural phenomenon is an eminently human activity partly answers the first point of our enquiry into performance —why is human presence important and/or desirable. At this stage, however, such presence remains unqualified. Even composing an acousmatic piece in the studio, on the above terms, constitutes engagement in musical behaviour, as does 'diffusing' that same piece in a concert hall situation. The acousmatic product, furthermore, is surely 'imbued' with 'human presence', and the 'diffusion' event obviously includes an audience, as well as, often, the composer himself at the mixing desk.

It must therefore be the *particular way* in which this presence is manifested at the phenomenological level that is crucial for our perception of an event as 'live' performance. In order to elucidate this point I will invoke the notion of *physicality*, to which we now turn.

1.4 – Physicality 1: Embodiment

In his essay titled Musica Practica Barthes writes:

There are two musics (at least so I have always thought): the music one listens to, the music one plays. (...) the same composer can be minor if you listen to him, tremendous if you play him (even badly) –such is Schumann (Barthes, 1977, p. 149).

Anybody who has ever played an instrument, whether professional or amateur, would recognise the truth of Barthes's observation. This apparently trivial truth seems to point to the fact that actual bodily involvement in the playing of an instrument can significantly affect our perception of a piece of music. More than that, it reveals that there can be no real substitute for such an engagement —we do not merely want to listen to Schumann, we want to play him. We want to play him even badly—it does not so much matter how it sounds, it is the activity itself that matters and that gives us pleasure. In fact, it gives us much more than just pleasure; playing gives us access to a work's very essence in such a way that listening alone could not. That is why it can become 'tremendous': playing puts us inside the music.

What remains to be qualified is what do we mean by playing music, and, for that matter, what is a musical instrument. Barthes, of course, is referring to the piano, that is, a 'traditional' instrument based on the 'primordial' model of sound production rooted in the physical and acoustic domains. What is the relevance of such a model for establishing a certain and meaningful relationship between the player and the music? How important is adherence to this model? What happens when we move away from the 'primordial' model?

Robin Julian Heifetz, a composer who, as he states, has composed only electroacoustic music since 1977, is adamant in maintaining that he *plays* the computer, and complains about the difficulty of having this fact accepted or recognised as such by other ('conventional') musicians. He thus reports his frustration at the outcome of a typical conversation:

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"What instrument do you play?"
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(...)

"OK, Robin, you want to be manipulative? Then tell us what regular musical instrument do you play?"

I in turn ask with Talmudic flair:

"Why is the computer not a regular musical instrument?"

At this juncture they surrender and the dialogue ends (Heifetz, 1989, p. 87).

[&]quot;The computer."

[&]quot;No, seriously, what do you play?"

[&]quot;I play the computer."

He then proceeds to substantiate his argument by showing how the computer is a machine just as any 'traditional' instrument is, and to prove his point he starts describing at length, in a rather sarcastic style, a 'mechanical apparatus (...) whose configuration is most labyrinthine. It consists of sundry interrelated parts (...) it has almost ninety switches (...)', and so forth. After which he finally reveals:

If you have not yet guessed, I am talking about a machine which possesses more moving parts than the computer -a device of such intimidating dimensions that today I only wish I had learned to play the trumpet as a child. Yes, I am talking about the piano (Heifetz, 1989, pp. 87-8).

What Heifetz fails to realise is that it is precisely because the piano, as he says, 'possesses more moving parts than the computer' that it is more of a musical instrument than the computer. In fact, the computer hardly has any moving part.

But of course it is not *merely* having many moving parts that makes the piano a musical instrument, otherwise we could say that the piano is more of a musical instrument than, say, the natural horn. It is the particular relationship of the moving parts (or whatever other means of sound production) to the player's gestures that, in my view, constitutes the basis for distinguishing a musical instrument from a sound machine. In the case of 'traditional' musical instruments, that relationship is physically -meaning bodily- direct (at least to a degree). There is a high degree of control intimacy between the gesture and the corresponding sonorous outcome, and a high degree of predictability of the instrument behaviour. That means that playing techniques can be acquired, practised and perfected, thus becoming part of an over-learned repertory stored in the body as '(generalised) motor programs (...), or schemas' (Pressing, 2002). That is why there is a sense in which the 'traditional' instrument can be seen as an extension of the performer's body; musical thought literally flows through the performer's own body and is then transduced by the instrument into sound (in real-time!). As Jeff Pressing explains:

Over-learned schemas are typically processed automatically, without the need for conscious attention, which produces the oft-rediscovered feeling that the player observes his or her own body playing rather than directing it to play (Pressing, 2002).

Of course, even within the 'traditional' instrument model there are differences in the degree of mechanisation characteristic to different instruments. An organ, for example, is much more of a machine than a violin or a trombone. Nevertheless, what matters is that enough of the corporeal model of sound production is preserved to allow the particular kind of control that we associate to a musical instrument. Thus, the difference between a musical instrument and a sound machine is one of degree, rather than kind. As we progressively move away from the corporeal model we eventually approach a state in which the relationship between gesture and sound becomes totally arbitrary, and we can no longer separate the human input from the machine's -the machine literally takes over.

A great deal of current research is directed precisely to the devising of musical interfaces that can (re-)establish a meaningful level of human-machine interaction, but it is doubtful whether any model which does not take the physical/corporeal paradigm as its basis will be able to offer a satisfactory alternative. This is not a matter of 'holding on' to an established model and 'resist' the more abstract alternatives of the new digital technology in a kind of Luddite attitude. We must be clear about the relationship between music and the body: the evidence is strong to suggest that such a relationship is a fundamental one. As David Lidov remarks: '[a]nterior to its status as a sign, music is an action on and of the body' (Lidov, 1987, p. 69).

In fact, this is not just a semiotician's perspective. As Vijay S. Iyer reports: '[r]ecent neuropsychological studies of music perception have affirmed the cognitive role of body motion in music perception and production' (Iyer, 1998). In his doctoral dissertation, which deals thoroughly and extensively with issues of embodiment and cognition in music, Iyer states that the fundamental claim of his thesis is that 'music perception and cognition are embodied activities. This means that they depend crucially on the physical constraints and enablings of our sensorimotor apparatus' (Iyer, 1998). The close relationship between music and the body becomes particularly evident when referring to rhythm, which obviously draws almost exclusively on kinaesthetic relationships. In that respect, interestingly, Jay A. Seitz reports of the deaf percussionist Evelyn Glennie, who 'is able to play music through her ability to feel and adjust to the nuances of vibrations of musical instruments, the floorscape, and cognate materials' (Seitz, 2003). That shows how relative a part the auditory channel plays in certain aspects of music. A significant part of Iyer's thesis is devoted to arguing that 'rhythm perception and production involve a complex, whole-body experience' (Iyer, 1998). And Pressing, under the heading 'The bodily basis of musical thought', concludes by remarking: 'It is clear that full physical involvement aids learning, and that the subjective body experience is central to primal rhythmic elements of music like tempo, accelerando, syncopation, and ostinato' (Pressing, 2002).

In effect, some of these insights which have now found a scientific basis were already postulated, in less scientific terms, by Emile Jaques-Dalcroze in the first part of the twentieth century. Dalcroze, who was teaching at the Geneva's Conservatoire, came to realise that problems with the apprehension and execution of rhythm could be overcome through specific exercises, conceived to develop kinaesthetic awareness, involving the whole body (Dalcroze, 1921). Since then, the Dalcroze method and the practice of 'eurhythmics' has became well established in many countries worldwide. And, interestingly, we can see that, in turn, the essence of Dalcroze's 'ground-breaking' theories had probably been known all along by musicians in 'primitive' societies. Talking about the Venda, Blacking reports that '[w]hen the rhythm of an alto drum in domba is not quite right, the player will be told to move in such a way that her beat is part of a total body movement' (Blacking, 1976, pp. 109-110).

The crucial difference between the 'traditional' instrument model and Heifetz's computer playing should by now be apparent. In the latter, the body is totally alienated from the production of sound, and the few movements involved do not have, in semiotic terms, any 'gestural' significance. As Fernando Iazzetta points out, '[a]ctions such as turning knobs or pushing levers, are current in today's technology, but they cannot be considered as gestures. (...) It does not matter who or what performed that action, neither in which way it was performed: the result is always the same' (Iazzetta, 1997).

To put it bluntly, the fact that a word like 'play' can be used in so many senses and contexts should not blind us to the fundamental difference between playing a violin and pressing 'play' on a CD player.

The computer *could*, however, be 'played', but certainly not through its standard general-purpose interface consisting of keyboard plus mouse. Research must be grounded in a clear understanding of the musicians' expressive needs. Exemplary in this respect is Joel Ryan's approach. Ryan, a key figure and a pioneer in the design and playing of real-time interactive instruments, talks of his work at STEIM³ as '[a]n empirical method (...) for both artist and technologist in order to recover the physicality of music lost in adapting to the abstractions of generic technology' (Ryan, 1991). His perceptive thinking on the subject of interface design can be appreciated from the following remark, in which he stresses the relevance of *physical effort* in the playing of instruments:

Too often controllers are selected to minimize the physical, selected because they are effortless. (...) Though the principle of effortlessness may guide good word processor design, it may have no comparable utility in the designing of a musical instrument. In designing a new instrument it may be just as interesting to make control as difficult as possible. Physical effort is a characteristic of the playing of all musical instruments. Though traditional instruments have been greatly refined over the centuries the main motivation has been to increase ranges, accuracy and subtlety of sound and not to minimize the physical. Effort is so closely related to expression in the playing of traditional instruments (Ryan, 1991).

Ryan's orientation is representative of a strongly felt trend in the current research and development of new performance instruments, an orientation which recognises that a solid understanding of the body's role in music making is crucial for designing interfaces that can lend expressive potential to the computer.

This brief excursion into this huge area of research centred on the corporeal in music making has served, I hope, to bring to light the 'extrasonic' dimension of music. I shall try and make this further apparent through a speculative example.

³ STEIM, Amsterdam. Centre for Research & Development of Instruments & Tools for Performers in the Electronic Performance Arts. (http://www.steim.org)

Let us consider the playing of an ensemble of drummers (perhaps African musicians, if that picture helps). What would the role of the sound, as an acoustic phenomenon, be in such a circumstance? Any musician, whether professional or amateur, who has ever engaged in this sort of music making (or indeed any perceptive audience) would, on reflection, recognise that what is at stake in such activities is the very exhilaration derived from the coordination and communication between players; the excitement and drive of the intricate polyrhythms resulting from the merging of the individual into the group; the state of 'Nirvana' deriving from both using and losing the body, as it is surrendered to the rhythms flowing in and out of the performer; the sheer energy unleashed by the conspicuously redundant gestures which create as many patterns in space as they do in sound. What is being played, really, is the musician's own body. We could almost say that the role of the sound here is incidental, more one of ratification than an end in itself; almost the by-product of an activity which could, in some sense, be regarded as self-sufficient. At any rate, what I feel certain to maintain –and this is the real crux of the argument– is that here the sound acquires its particular value precisely insofar as it is the result of that particular process.

In other words, the beauty and value of the upbeats interlocking with the downbeats, and of the triplets interacting with the quadruplets is given by the very fact that all that is happening 'live' -now!- as a game of responses between human players -interaction in the deepest sense of this much overused word! Trying to replicate that process through a machine is totally missing the point. The fact that this actually happens quite a lot in today's music-making (I am thinking of commercial dance music, in particular) is, in my view, precisely the evidence of a misguided aesthetics that fails to appreciate the difference between live bodily-played rhythm and its acoustic simulacrum; an aesthetics that is unable to discriminate between a process and a product; an orientation that obscures the function, ignores the meaning, and endanger the practice of musical performance.

I have used drumming as an obvious example of embodied music in which the extrasonic dimension is magnified, but the same line of reasoning applies, in varying degrees, to all instrumental and vocal music. The sonic result in itself is only one side of the coin; how the sound is instantiated is the other equally important side. It is not simply that bodily involvement results in 'better', more expressive musical output. That might indeed be the case, but it is even deeper than that: bodily engagement in music making has value in itself (we want to play Schumann even badly!).

To put it another way, what we tentatively defined above as 'musical behaviour' may be precisely about *engaging bodily* with the physical sounding world. That could explain Lidov's remark that '[m]usic is significant only if we identify perceived sonorous motion with somatic experience' (Lidov, 1987, p. 70).

Some writers may dismiss the above arguments as 'hangovers' from the past. They recognise their validity, but maintain that things have changed, and that music now does not need to rely on such obsolete models. Denis Smalley, for example, writes:

There remains a barrier between those listeners who can accept and enjoy full indicative relationships and those who are unable to break free from the immediate visual and physical nature of gesture and utterance as represented by instrumental and vocal tradition (Smalley, 1992, p. 551).

In the above passage, Smalley seems to imply that it takes some sort of an intellectual leap to 'break free' from the 'primordial' model, engage the Schaefferian 'reduced listening' mode, and appreciate the musical discourse as inscribed in the sound itself.

I firmly believe in electroacoustic music as an enrichment of our musical possibilities. But I also think that an interesting question to ask would be: is the physical/corporeal model of music-making merely contingent to the technological development of a particular era, or is it a necessary feature of the art?

That is a hard question to answer, and we can only make conjectures. My impression is that positing the physical model as contingent rather than necessary would be like supposing that primitive humans wanted to make music but, lacking electricity, had to content themselves with stomping their feet and shouting; had they had a sound machine, they would have rather plugged that in and saved their soles and throats. Of course, modes of expression and cultural behaviour do evolve, and so does the practice of music making. But, if this can be taken as an indication, we still cycle though we have cars, climb mountains though we have helicopters, and sail around the world in small boats though we have aeroplanes. Cars, helicopters, and aeroplanes are useful when we want to go from A to B no matter how —we are interested in the *product*. But in cycling, mountain climbing and sailing destinations are less important, more of a pretext for engaging in that specific activity —we are interested in the *process*. Similarly, stomping our feet and making sound with and through our body might perhaps be exactly what music is about: a particular way of projecting ourselves onto and into the world, a *process* in which the machine can contribute by *extending* the body, but not by displacing it through abstract relationships or replacing it through automation.

The considerations and arguments exposed in this section, with their emphasis on the critical role of physicality and corporeality in music making, may be throwing some light on our investigation into musical performance. Obviously, as composers, we need to remain aware of the fact that unless enough of the primordial corporeal model is preserved 'live' performance is jeopardised at the outset. That, in itself, might not have been too difficult to guess, but there is much else that we need to consider before we can get the whole picture of the performance phenomenon.

Wa buttaken fit

1.5 - Physicality 2: Gesture, Movement, Sight.

In the previous section we have discussed physicality in the playing of vocal and instrumental music. We have seen that a very special relationship between body and sound production is in place at the primordial level and that, importantly, that is precisely what gives music its particular value and expressive power. In this section we will be exploring physicality under a different angle. While in the previous section we have concentrated mainly on the *functional* aspect of the sound-producing gestures and on the performers' kinaesthetic relation with their own playing, in this section we expand our investigation to include the role of non-strictly-functional expressive gestures and movements, i.e., those that go beyond the strict necessity of sound production. The performing body, again, will occupy a central place as the privileged site of gestural signification, but this time we will concern ourselves with the body as both *played* and *displayed*. This will necessarily take us into the visual domain since we are dealing with the phenomenon as perceived by both spectators and co-performers.

In our western tradition, it seems, the relationship between music and the body in performance has never been an easy one. According to Susan McClary:

Western culture —with its puritanical, idealist suspicion of the body— has tried throughout much of its history to mask the fact that actual people usually produce the sounds that constitute the music. As far back as Plato, music's mysterious ability to inspire bodily motion has aroused consternation, and a very strong tradition of Western musical thought has been devoted to define music as the sound itself, to erasing the physicality involved in both the making and the reception of music (McClary, 1991, p. 136).

'Puritanical' considerations aside, there seems to be quite a widespread assumption that the visual aspect of performance detracts, or distracts, from the 'music'.

Søren Kierkegaard, for example, talking of his experience of a performance of Mozart's Don Giovanni wrote: '[a]s soon as the eyes are engaged, the impression becomes confused; for the dramatic unity which presents itself to the eye is always subordinate and imperfect in comparison with the musical unity which is heard at the same time' (Kierkegaard, 1959, p. 119). If Kierkegaard was capable of talking in those terms about a performance of Don Giovanni—that is, an opera, something conceived to be appreciated visually!—how much more relevant would the rejection of sight be in purely instrumental music. In fact, amongst many, Robert Zimmermann remarked that '[t]he visual effect of the performance does not belong to the work's essence. (...) It is for this reason that orchestral musicians rightly appear in the simplest clothes; it would be best if they were not visible at all' (Zimmermann, 1865, pp. 48-9; quoted in Parrino, 2001).

This craving after an exclusively aural musical experience was eventually fulfilled, as we saw earlier in this writing, by the recording technology. But, interestingly, it is a matter of debate whether the elimination of the visual component actually facilitates concentration on sonic relationships, the 'essence' of the musical work. Michel Chion, who has dedicated much study to the relationship between sound and vision, seems to think that the opposite is in fact the case:

Schaeffer thought the acousmatic situation could encourage reduced listening, in that it provokes one to separate oneself from causes or effects in favour of consciously attending to sonic textures, masses, and velocities. But, on the contrary, the opposite often occurs, at least at first, since the acousmatic situation intensifies causal listening in taking away the aid of sight (Chion, 1994, p. 32).

Some artists, in fact, think of visibility in music as a desirable and valuable component of the total musical experience, and a few would even insist that vision is essential for the apprehension of the full meaning of the works.

Stockhausen, for example, declared: '[f]rom the time of my earliest compositions I've had the impression, too, that the visual element counted as much as the aural experience'. And talking specifically about Gruppen he stated: '[a]s I see it, every act of the orchestral players ought to be visible to the eye' (in Tannenbaum, 1987, p. 80). Again, Stravinsky thought that '[t]he sight of the gestures and movements of the various parts of the body producing the music is fundamentally necessary if it is to be grasped in all its fullness', and thus complained: 'why wish to ignore it, or try to do so –why shut the eyes to this fact which is inherent in the very nature of musical art?' (Stravinsky, 1975, p. 72).

In recent years gesture and movement in music have received a significant amount of scholarly attention. The meaning of 'gesture' is open-ended, which is both a virtue and a drawback. The term has become a handy concept in discussion and analysis of contemporary music, particularly of timbre-based acoustic or electroacoustic composition, where reference to pitch or rhythm relationships becomes inappropriate or meaningless. In such contexts the term is generally intended in its figurative sense, though such sense is quite often based on our experience of a real physical gesture, i.e., from the energy-shape of a certain passage of music we can infer a corresponding physical gesture. On the other hand, the actual physical gestures and movement of musicians in performance have themselves become an object of study for their potential for signification.

Not any movement can be appropriately defined as a 'gesture'. Gesture is movement that can be regarded as meaningful, regardless of the explicit communicative intention of the acting subject. Following Françoise Delande (1988), many writers recognise three gestural levels: the geste effecteur refers to the basic functional movement necessary to produce the sound; the geste accompagnateur refers to the player's whole-body movement not directly involved in the

production of sound; the *geste figuré*, finally, is completely non-functional and therefore regarded as purely symbolic in its expressive content. These three levels are obviously overlapping and interacting. A few examples will serve to clarify the extent to which performers' gestures may communicate valuable expressive information. As we will see, some authors even contend that they may constitute a fully articulate semiotic system.

The pianist Alfred Brendel maintains that 'the sound of sustained notes on the piano can be modified ... with the help of certain movements which make the pianist's *conception* of *cantabile* actually visible to the audience' (Brendel, 1976; quoted in Nattiez, 1990, p. 44). Brendel also mentions another interesting and rather peculiar case:

there are many examples of pieces where [suggesting things with physical gestures] is necessary. Things like the end of Liszt's *B minor Sonata*, where before the three *pianissimo* B major chords there is a crescendo on one chord that one has to convey bodily, with a gesture. It is the only possibility (Brendel, 1976; quoted in Nattiez, 1990, p. 44).

This last example is also used by Francesco Parrino in his article Musicology, Semiotics and the Performative Gesture to demonstrate that, contrary to Lidov's thesis, performer gestures can be more than merely unarticulated indexical signs. Parrino argues that the above case constitute an example of an iconic gestural sign, in that it 'represent an acoustic phenomenon which does not happen in actuality, [i.e., it has gone beyond the functional purpose of sound production] and proves that 'performative gestures' can develop an independent semiotic system of articulation' (Parrino, 2001).

In other words, there is some evidence to believe that performer gestures not only are conveyors of meaning, but also that the relationship between gesture and meaning is not merely a basic one-to-one correlation. Gestures can actually rise to higher levels of abstraction and thus constitute more sophisticated relationships.

Robert Hatten, Professor of Music Theory at Indiana University, has provided another important contribution to the subject of gesture. He writes:

beyond the characteristic gestures we might consider appropriately implied by the work in the context of a historical style, a performance may entail additional gestures introduced primarily to clarify, or direct attention to, or emphasize, certain features of the work. In this way the performer may inject considerable personality into the work, at all level of agency (Hatten, 2001).

Hatten, who is himself a pianist, relates some quite interesting examples. Amongst them, he mentions the possibility of a pianist highlighting

the retrospective character of a tonally-relaxed coda by leaning back, as if suddenly removed from the temporal present and absorbed in the reverie of a memory. This visual

gesture may be accompanied by subtle changes of tempo and dynamics that tend to place the section under a veil of reminiscence. Such postures may be seen in photographs and drawings of Liszt and Brahms performing at the piano (Hatten, 2001).

As a further example, Hatten mentions a tense passage in the recapitulation of the first movement of Beethoven's *Waldstein* piano sonata, Op. 53, which is promptly resolved in mm. 171-173. He writes:

Note how the three-bar response and recovery to this dramatic moment appears almost to trivialize it, by treating it playfully and resolving its dissonant treat. The problem, however, is whether the previous wrong notes are a fateful injection by an external agency (...) or whether the principal agent has in some way "willed" the initial disruption (...) Here, a performer's gestures can be quite significant in projecting one or the other possibility (Hatten, 2001).

This example is of particular interest in that, by foregrounding the performer's choice of conveying either of the two possibilities and also choosing *how* to do so, it reveals that performers' gestures can indeed constitute a complex semiotic system of articulation, which corroborates Parrino's view.

Jane Davidson seems to have reached similar conclusions about the semiotic nature of performers' gestures. Davidson is one of the only few scholars to have conducted empirical research on the visual and gestural components of musical performance. Her studies have revealed the presence of a rich vocabulary of non-functional movements generally employed by performers, and understood by their audiences, from which she infers that such gestures can be regarded as signs communicating relevant affective/expressive information. Davidson goes as far as saying that 'vision can be more informative than sound in the perceiver's understanding of the performer's expressive intentions' (Davidson, 1991; quoted in Parrino, 2001). In effect, the plausibility of Davidson's statement can be fully appreciated by considering the possibility of conveying, in performance, contrasting visual and aural information for ironic purposes.

On a methodological note, Parrino remarks that '[t]he difficulty in achieving an understanding of the meaning of the 'performative gesture' seems to lay on the fact that when one considers the visual aspects of a performance, these are usually seen as subsidiary to its aural aspects.' Instead, pointing out how sheer physical activity can sometime be experienced as music, he advocates: 'we should try to approach the physical activity involved in a performance of music as an integrated and fully articulated system of signification in itself' (Parrino, 2001). Parrino corroborates the above point by referring to John Cage's 4' 33" and Mauricio Kagel's Con Voce as two gestural and self-sufficient 'soundless' works. And, on the same note, I could add my personal experience of a concert by Frank Zappa in 1974 in Milan, where the band indulged in a superbly orchestrated –in fact, choreographed– soundless piece. I found the vibraphonist's part particularly effective –very musical!

In effect, when works like the above are considered, we could actually talk of them as articulating symbolic gestural signs -Delande's geste figuré— the highest semiotic level. (In basic semiotic terms, an icon resembles its referent; an index points to its referent; while a symbol is related to its referent only by convention). In those works there is an element of deliberateness and self-reflexiveness which clearly goes beyond the iconic level, i.e., the level of merely enacting a gesture which resembles a musician's gesture. Such pieces are clearly playing with other complex cultural and artistic factors, i.e. audience's expectations, performance rituals, etc., which are being deliberately and purposefully manipulated. It seems therefore plausible to view gesture in music as a fully articulated semiotic system.

It may be argued that such works are extreme examples for music; but even so, they are significant precisely for the grey areas they are inhabiting. They are musicians' works, and their being on the margins reveals a tension, a centrifugal force that spins the musical universe outward, towards new grounds. By *implying*, rather than *realising* the sound these works foreground the musical gesture as gesture, thus showing how music can easily bleed into theatre.

The discussion and examples in this section have shown the important contribution of performers' gestures in the creation and communication of meaning. This, in turn, points to the significant role of visual perception in music, thereby affirming the multi-dimensional nature of the art in its phenomenological manifestation as *performance*.

1.6 - Time and Space, Sound and Vision

Since we have made a significant move into the visual domain, it may be interesting, at this stage, to see how far we can go in claiming the visual territory for music.

Traditionally, attempts at separating music and the visual arts have been founded upon their inhabiting of either the temporal or spatial dimension, and on their appealing to a different sense modality for their apprehension. Thus, music is supposed to deal with the organisation of sound events in time, which are perceived through our sense of hearing, while the visual arts are concerned with the organisation of forms in space, and are perceived through sight. In his book 'Visible Deeds of Music', Simon Shaw-Miller (2002) sets out to question such apparently obvious assumptions.

To begin with, the division of the arts according to the spatial-or-temporal distinction may actually turn out to be a dubious proposition. As Shaw-Miller remarks: '[t]ime and space are always elements in art; temporal imagination creates narrative contexts in the process of "reading" an image' (Shaw-Miller, 2002, p. 141). This is perhaps better expressed in a footnote used by Shaw-Miller to corroborate his point, and to acknowledge his debt: '[t]his follows a similar argument to that of John Dewey, whose *Art as Experience* (New York, 1934) argues that the distinction between the spatial and temporal arts is misguided, because art is a matter of perception and perception is never instantaneous' (Shaw-Miller, 2002, pp. 265-6).

The distinction between spatial and temporal arts was questioned also by Paul Klee, though he approached it from a different, and perhaps more interesting, angle. As he put it:

All becoming is based on movement. In Lessing's Laocoon, on which we wasted a certain amount of intellectual effort in our younger days, a good deal of fuss is made about the difference between temporal and spatial art. But on closer scrutiny the fuss turns out to be mere learned foolishness. For space itself is a temporal concept.

When a point turns into movement and line -that takes time (Klee quoted in Shaw-Miller, 2002, p. 145).

I shall refrain, in this writing, from losing myself into a lengthy and detailed philosophical discussion on the relationship between time and space. But the possibility envisaged by Klee that space be a 'temporal concept' points to the fact that the relationship between the two domains is in fact one of mutual implication, rather than exclusion. Time/space distinctions, therefore, constitute a weak criterion for the demarcation of the arts territories.

As for the senses involved in the perception of each art, Shaw-Miller asks:

is our sensory experience in fact so autonomous, or is it rather that our senses always operate in relation to one another (as to an extent the cubist explored)? (...) Do not the senses form a kind of hermeneutic circle, what physiologists call "sensorial integration"? (Shaw-Miller, 2002, p. 131).

The answer comes from the French filmmaker and theorist Michel Chion, who argues that:

The eye carries information and sensations only some of which can be considered specifically and irreducibly visual (e.g. color); most other are transsensory. Likewise, the ear serves as a vehicle for information and sensations only some of which are specifically auditive (e.g., pitch and intervallic relations), the other being, as in the case of the eye, not specific to this sense (Chion, 1994; quoted in Shaw-Miller, 2002, p. 131).

In other words, as Shaw-Miller sums it up, Chion recognises senses as channels, rather than domains. Thus, Shaw-Miller concludes, '[t]he visual dimension may be as central to vision as the auditive dimension is to hearing, but (...) a single channel can convey all the senses at once' (Shaw-Miller, 2002, p. 131).

I thought appropriate to test the validity of the above claims against more scientific sources, and found that they are indeed consistent with the most recent findings in the area of perception. Prof. Shinsuke Shimojo and Dr Ladan Shams, neuroscientists at the California Institute of Technology, Pasadena, have conducted experiments which clearly point to the interdependence of our sense modalities in perception. In a joint article, they write:

Historically, perception has been viewed as a modular function, with the different sensory modalities operating independently of each other. Recent behavioral and brain imaging studies challenge this view, by suggesting that cross-modal interactions are the rule and not the exception in perception, and that the cortical pathways previously thought to be sensory-specific are modulated by signals from other modalities (Shimojo and Shams, 2001).

It follows that information captured and processed by the different sense modalities has then to be integrated before we can talk of 'perception' at all. In fact, it would even appear that 'consciousness does not have access to processing that may occur within individual sensory pathways before integration; it is only *after* the signals from the two modalities [auditory and vision] are combined that the percept becomes conscious' (Shams, 2002).

From a less empirical and perhaps more speculative ground, the psychoanalyst Paul Schilder maintains that:

every sensation is generally synaesthetic. This means that there does not exist any primary isolation between the different senses. The isolation is secondary. We perceive and we may

with some difficulty decide that one part of the perception is based upon optic impressions. The synaesthesia, therefore, is the normal situation. The isolated sensation is the product of an analysis. [...] Perception is synaesthetic. There is no question that the object 'body' presents itself to all senses (Schilder, 1950; quoted in Boucher, 2004).

Maurice Merleau-Ponty, in his *Phenomenology of Perception*, is saying very much the same thing, perhaps implying that a sort of cultural conditioning is what keeps us from recognising the multimodal nature of our perceptions. As he puts it:

Synaesthetic perception is the rule, and we are unaware of it only because scientific knowledge shifts the centre of gravity of experience, so that we have unlearned how to see, hear, and generally speaking, feel, in order to deduce, from our bodily organisation and the world as the physicist conceives it, what we are to see, hear, and feel (Merleau-Ponty, 1962; quoted in Boucher, 2004).

Thus, it would appear, even talks of 'visually perceived' versus 'aurally perceived' arts do not afford us with any reliable ground on which to tread.

However, what is important at this point is to put the above considerations into perspective. Clearly, it seems to me, there is a sense in which music is *particularly* concerned with time in a way that painting is not. In music, time constitutes the raw material, something that is calculated, measured, divided, sectioned, etc., just as, in the visual arts, space is similarly manipulated. As for perception, the auditory remains the privileged channel for music, just like sight does for the visual arts. All that can be reasonably maintained is that distinctions on the above terms are *relative*, rather than absolute. This is not a trivial point, and it does have consequences. As Shaw-Miller puts it:

it is useful to consider the difference between music and the visual arts as a matter of degree, not of kind. In so doing we are forced to reflect on scholarly practice, to see the validity of traditional disciplinary premises as historical, ideological conventions, not as natural unequivocal boundaries. This is not the same as saying that there are no differences between art and music or that such distinctions are false. (...) The issue of difference is one of constant negotiation (Shaw-Miller, 2002, p. 4).

1.7 - Performative Meaning and the 'Touch of the Now'

We seem to have come, therefore, to the conclusion that in art sound and vision share a common ground that is considerably vaster than was originally believed. Above all, through the preceding sections, we have seen unfolding a notion of music entailing a rich and complex web of relationships that just cannot be reduced to the sonic product alone, nor can it be reduced to its material trace in the form of recording, or to its representation as written instructions (score). We have seen that music is a particular mode of human behaviour, a particular way of interacting with the sonic environment through a particular way of using and displaying the body; a multisensory experience engaging both mind and body that bonds performers and listeners in empathetic relationship.

This inquiry started with the purpose of understanding more about musical performance; perhaps, in the light of all the considerations so far discussed, one conclusion can be drawn: Music is performance. In his article "Between Process and Product: Music and/as Performance" Nicholas Cook has no hesitation in acknowledging the performative nature of music. He writes: '[t]hat music is a performing art is self-evident as soon as you say it; it is only the literary orientation of musicology that makes us need to say it in the first place' (Cook, 2001).

Thinking of music as a performing art means recognising the performance event as a site for the emergence of meaning, rather than seeing performance merely as a transparent medium whose function is to transmit an already defined meaning that is *in* the work. Cook, who must be one of the not very many music scholars to have considered the writings of performance theorists and theatre practitioners, expresses that point thus:

The contemporary performance studies paradigm that has developed primarily in the context of theatre studies and ethnomusicology stresses the extent to which signification is constructed through the very act of performance, and generally through acts of negotiation between performers, or between them and the audience. In other words performative meaning is understood as subsisting in process and hence by definition irreducible to product (Cook, 2001).

'Performative meaning', evidently absent in the written score, is what is erased through mechanical reproduction. Performative meaning, by definition, emerges —can emerge only— in and through performance. It is the result of the interaction between sounds, gestures, performers, audience, space, context, and pliable and playable time present.

In effect, freezing music onto a recorded medium literally changes its ontological status in such a fundamental way that I almost wonder whether we are justified in using the same word -music- for both the live performance and the acousmatic version. I am thinking in particular of a very

interesting differentiation made by Smithers between 'in-time' and 'over-time' processes. That distinction, as summarised by Iyer,

is similar to that between process-oriented activity (...) and product-oriented activity (...). In-time processes are *embedded* in time; not only does the time taken matter, but in fact it contributes to the overall structure. (...). Over-time processes, by contrast, are merely *contained* in time; the fact that they take time is of no fundamental consequence to the result (Iyer, 1998).

Clearly, while musical performance exists 'in-time', the recorded version of musical works exists merely 'over time'; not a trivial difference, I think, considering that time is regarded as the prime element in music. And surely, with the loss of the 'in-timeness', of the processual element of music, the 'touch of the now' is also lost. In fact, they seem to me very much the same thing.

Thus, if we, as composers, are interested in re-discovering and cultivating the 'touch of the now' in our works, we must make the live performance our field of enquiry and action. But that, as I intend it, means more than merely writing scores for live performers conventionally playing conventional instruments, as we always done in the past; the whole point of this research is not about going back, it is about moving forward, it is about engaging with this new awareness of the performative nature of music. If we recognise performance as an integral and significant component of music, then it is possible that we may want to exploit its full potential. What I am advocating is that we consider performance as part of our raw material and integrate the sonic into a performative context of spatial and gestural relationships.

The ways in which that can be done are virtually limitless.

The works in this portfolio represent but a personal answer to the above challenge.

PART 2

THE ARTWORK OF THE FUTURE

2.1 – Music-Theatre

For a long time a form had been in my mind which I believed to be the only one in which a musician might express himself in the theatre. I called it, in my own private language, making music with the media of the stage. (...) and it must be made evident that gestures, colors and light are treated here similarly to the way tones are usually treated -that music is made with them; that figures and shapes, so to speak, are formed from individual light values and shades of color, which resemble the forms, figures and motives for music.

> Schoenberg (in Hahl-Koch, 1984, pp. 105-7)

The idea of a music-theatre, as a form distinct from Opera and Broadway Musical, has been around for about a century now. Works like Stravinsky's Histoire du Soldat and Les Noces, and Schoenberg's Erwartung and Pierrot Lunaire are often quoted as prototypical examples of the genre. How the music-theatre label can be correctly and meaningfully applied, however, remains a subject of great confusion and disagreement.

To begin with, we have a number of alternative versions in which the term can appear, i.e., music theatre, musical theatre, concert theatre, new music-theatre, etc. And, as a matter of fact, any of those terms is freely used as much for works which distance themselves from Opera and Musical as for any staged musical event, including Opera and Musical. As Eric Salzman remarks:

Ironically, the term has proved to be only too successful and has been applied to virtually any form of theater that incorporates sung or danced music as a primary component. Instead of being reserved for a musico-theatrical third stream that has gained independence from both opera and musical theater, it has been used to describe almost anything, up to and including commercial musicals. That leaves what may be the most important and characteristic art form of the turn of the millennium without a proper name (Salzman, 2000).

To try and circumscribe the music-theatre phenomenon would not only be a hopeless task, it would also clash with the exploratory, open-ended spirit of the form. However, it is vital to clarify at the outset that this research is specifically concerned with a narrow, technical sense of the term which, in this writing, I reserve for a particular kind of works which:

- stand in direct opposition to the more conventional Opera and Broadway Musical forms;
- are directly concerned with the purposeful manipulation of the relationship between musical and theatrical elements in a structural way.

For the sake of clarity, from now on in this writing I will be employing the capitalised and hyphenated version of the term, i.e., 'Music-Theatre', to refer to works that fit the above criteria; while 'music-theatre' will be used as a general term, and 'musical theatre' to refer to both Opera and Musical.

To understand the difference between Music-Theatre on one side and Opera and Musical on the other, it is useful to look at how the traditional text-based approach in the theatre has been rejected by the avant-garde theorists and practitioners during the 20th century. During that time, a significant number of theatre artists, starting, roughly, with Artaud and continuing with Grotowski, Schechner, Brook, Barba, etc., (but not forgetting the contributions of the Futurists, the Dadaists, the Surrealists, and the Bauhaus), felt the need to bypass the playscript and engage in a more direct manner with the phenomenological aspect of their art. While the traditional literary approach emphasised narrative, plot and character, the avant-garde sought the 'essence' of theatre through the direct exploration and formalisation of gesture, movement, sound, action and theatrical space. And of course, as it is usually the case, the 'experiments' of the avant-garde have subsequently informed much of what we may now call, in more general terms, contemporary theatre.

It was only logical, then, that the same sort of revision which was carried out in theatre at large would occur, with the necessary adjustments, within musical theatre, i.e. Opera, Musical and the like. It could perhaps be argued that the term 'Music-Theatre' is an unnecessary complication of our terminology; after all, theatre did not change its name when the primacy of the text was denied or demoted. Why not seeing Music-Theatre simply as the natural evolution of Opera and just keep the term, and tradition, intact? Here again, it is not so much a matter of an idle quibble over terminology; what we call it is less important than our understanding of the differences at work in the two styles. We should realise, however, that while theatre is a general term that covers an almost infinite variety of forms from all over the world, some of which do indeed do away with text and narrative, the term 'Opera' refers to an exclusively European phenomenon that has ossified into a form that inevitably calls to mind sung dialogues and arias, bel canto and display of vocal techniques, primadonnas and castrati, lavish sets in imposing playhouses, a social ritual for the upper-class, etc. We really run the risk of having a work poorly defined, and ultimately to hamper discussion, if we tried to force the label of Opera onto something that so clearly deviates from its hardened conventions.

Thus, as a general notion, we could begin by saying that Music-Theatre stands to musical theatre as avant-garde theatre stands to conventional, text-based theatre. In some more detail, we could have the following as a concise list of some of the structural features that set Music-Theatre apart from musical theatre:

- Narrative is either non-existent or is operating at a more rarefied level of signification, with less linearity and a higher degree of abstraction.
- Role/character playing is either absent or is operating at a different level than more conventional Opera and Musical; 'actors' (if any) are representing more some states of being in the world than some particular figure of an individual.

- Dialogues are either completely avoided or reduced to a bare minimum, and so is the spoken word in general –the discourse is mostly carried by sound and gesture alone, in interaction with other purely theatrical elements like lighting, costumes, props, scenery, stage FXs, etc.
- Blurring of the actor/musician distinction –ideally, musicians should be part of the act.

I must stress that these are not categorical distinctions, but rather broad generalisation indicating the higher or lower degree of reliance on certain elements. Some works may contradict some of the above points and still function as Music-Theatre; how it is done is more important than what is done. Furthermore, some Music-Theatre works may deliberately employ certain devices characteristic of Opera in order to comment on the form, as a self-reflexive or deconstructive Opera, or Meta-Opera.

On the front of the genesis of a work, we come to another significant distinction. In musical theatre the usual creative flow starts with a text (or libretto) which is then 'musicalised' and, later, realised as theatrical action through the 'mise-en-scene'. By contrast, Music-Theatre is conceived directly as musico-theatrical action, the 'mise-en-scene' being largely integral to the work since the conception stage. To put it another way, it is possible to conceive of different -and equally valid-'productions' of an operatic work, which is in fact what happens regularly. But we cannot generally have a 'production' of a Music-Theatre work other than the one originally conceived by the composer. The theatricality of a Music-Theatre work is 'inscribed' in the score-script in a deeper sense than the way it is in musical theatre. It is true that some stage directions can be found in some libretti and/or Opera composers' scores. But such theatrical instructions are merely serving the narrative, they are not being manipulated as pure theatrical elements in themselves, and in interaction with musical elements. The Music-Theatre composer is thinking 'vertically', conceiving music and/as theatrical action simultaneously, rather than providing the sonic plaster to a preexisting narrative structure, or conversely, theatrical action to a set score. It is only in this way that unity and full integration of media in Music-Theatre may be achieved. In Opera and Musical, by contrast, music and action are integrated only in the superficial sense of being interlocked, of 'fitting together', as it were. Perhaps the term 'fusion' is more accurate to describe the sort of relationship between music and action in Music-Theatre.

A very important point follows from the above remarks. A Music-Theatre work is hybrid in a very special sense: the piece is hybrid at the outset—the conception and creative process are hybrid, not just the product. To use the terminology employed by Molino and Nattiez, a Music-Theatre work is hybrid at the poietic level, not just the esthesic. In effect, it is only with Music-Theatre, and not with musical theatre, that we are in the presence of eminently interdisciplinary work, in the full sense in which the term was clarified by Danielle Boutet:

Very broadly, the idea of interdisciplinarity denotes practices integrating the medium and ideas of two or more disciplines. For me, this does not include multi- or pluridisciplinary works when they are the result of the collaboration of several disciplinary artists – i.e. the simple addition of disciplinary practices. Rather, I reserve the term interdisciplinary for hybrid practices that integrate elements borrowed from different disciplines, or for practices where the artist applies the notion of his or her original discipline (his or her own sense of form, familiarity with a material language, mastery of tools) in work that is more easily identifiable with another discipline (Boutet, 1996).

This superimposition of musical logic onto theatre, or, to re-emphasise Boutet's definition, applying the 'notion of one's original discipline in work that is more easily identifiable with another discipline', is what Music-Theatre is about: the structuring of theatrical elements as if they were musical elements. It is precisely through this 'crossing over' by the composer that the potential for truly innovative work may emerge. It is this search for connections at any and all structural levels, including the level of the artforms themselves, that gives value to the Music-Theatre project. As Jerrold Levinson perceptively notes:

One striking and central significance hybrid art forms have, and which partly explains their appeal to and pursuit by artists, is this. Hybrid art forms, and the works they encompass, tend to be symbols of creativity itself, of forcefully and purposively putting things together, of welding items previously disparate and unconnected into new and more complex unities. To create is typically to reorganize and recombine preexisting materials into unprecedented wholes. The hybridization of art forms does precisely this, not at the level of single works and their components, but at the level of artistic categories and their antecedents. Thus individual hybrid artworks, in virtue of the arts they display in combination, acquire a significance as emblems of creative activity in general (Levinson, 1984, p. 11).

If Levinson is right, hybrid art works are the ultimate compositional act. That is an obvious enough attraction for the composer. And indeed the leap from 'putting together' sounds to also composing the *context* in which sounds are to take place is not that big after all, especially when we consider that, as Shaw-Miller puts it, '[i]n a post-Cagean musical universe the traditional boundaries among disciplines are no longer hermetic: they are, quite literally, in flux' (Shaw-Miller, 2002, p. 242).

2.2 - Music Theatre?

In the previous section we have identified some salient traits of Music-Theatre, and highlighted some differences between that and musical theatre. But there are some other works combining music and theatre that, though themselves not Opera nor Musical, would not qualify as Music-Theatre in the sense the term has been construed so far in this writing. Such works may well be 'theatrical' but, in fact, the aesthetic premises and artistic aims on which they are based are quite unlike the ones set by this research—the crucial distinction is between musical works featuring a theatrical part that functions as a decorative or accessory component, and works in which theatricality is an integral structural feature.

As an example, we may look at a recent operation for a tour across the UK promoted by the Contemporary Music Network. Masterminded and produced by theatre director Lou Stein, the venture involved the enhancement by theatrical means of some recent works by composers James MacMillan and Deirdre Gribbin. An article appeared in "M", the magazine of the Performing Right Society, tells us something about the relationship between the music and the theatrical parts in the works concerned:

One fundamental point about the whole enterprise, however, is that the music has not been altered or adapted in any way for the sake of this production. "These are all very fine pieces which can stand alone without any of these special effects. The visual imagery, the soundscape and the theatrical direction will merely enhance them," says Stein (Stevens, 2005).

And again, to corroborate the point, we also read:

MacMillan himself says that he is intrigued by the idea of adding additional layers to his music in this way, "although, [MacMillan speaking] of course, the music itself doesn't need anything else to make it work" (Stevens, 2005).

The above statements reveal how that way of doing music theatre is significantly different from the Music-Theatre form explored by the works in this research. One thing is to coinceive a musical work as theatre at the outset, and another is to conceive supposedly 'autonomuos' music which is later aligned with theatrical parts; in the latter case, that 'tension' between media, that work of deconstruction of the individual artforms that is a central preoccupation of the Music-Theatre project is lacking. True, with these works we may say that the performance is 'adding' to the experience; the theatrical 'spectacle' is 'enhancing', the music, and we may even say that the meaning of the music is 'clarified', or brought out, by the visual associations. But there is nothing inherently theatrical about the work as conceived by the composer; the theatricality is merely furnished as a 'packaging' act by the theatre director. In analytical terms, we could say that the work is hybrid at the esthesic level, i.e., the level of reception, while at the poietic level we could

clearly identify the two creative processes of the composer and theatre director respectively, dislocated in time and space.

Such procedures, in other words, are not engaging in any genuine interdisciplinary 'practice'. As Boutet pertinently remarks 'I insist upon the word "practice", which I employ deliberately. For it is not the finished work that determines the interdisciplinary nature of a project, but rather the artist's practice taken as a whole' (Boutet, 1996). The result is a 'product' that is hybrid only in the rather superficial sense of combining two artforms. At best, such operations belong to the category defined by Levinson as 'juxtapositional' hybrids, i.e., cases in which 'the contributing elements are distinct and separable from one another; they form a whole by summation and not by merging or dissolution of individual boundaries' (Levinson, 1984, p. 9).

2.3 - Concert-Theatre

There is yet another series of works that is worth discussing. These may be quite appropriately referred to as Concert-Theatre⁴ pieces. Unlike the work discussed in the previous section, Concert-Theatre pieces are fully relevant to this research, and could be seen as included in the broader notion of what I call Music-Theatre, the difference between the two approaches being more one of degree than kind.

In Concert-Theatre we have the same deconstructive, critical approach as in Music-Theatre, the same high degree of integration and purposeful manipulation of visual elements, but Concert-Theatre pieces tend to restrict their activity and focus more specifically on the concert format itself by subverting the conventions of musical performance and concert rituals. While broader Music-Theatre works may include acting subjects who are not directly involved in the production of music, Concert-Theatre pieces tend to rely exclusively on the musicians themselves –and as themselves—for their theatrical effect. In that sense, they belong to the category of non-matrixed performance.⁵

In their book, *Music Since 1945*, Elliot Schwartz and Daniel Godfrey make a relevant observation about the inception of the style:

There are many good reasons why a fascination with performance ritual should flourish just now. We have become acutely aware of many different cultures and alternative performance traditions, (...). Moreover, many have begun to view "performance" as an integral component of all the arts. (...) in any performance, even at the level of four people sitting down to play a string quartet, complex factors are at work (Schwartz and Godfrey, 1993, pp. 289-90).

In fact, the starting point for Concert-Theatre works is often the questioning and revision of our Western performance tradition, and the recovery of the theatricality inherent in musical performance, a quality that has been gradually filtered out as conventions crystallised around a unidimensional notion of music. As Schwartz and Godfrey point out,

Every live musical performance, whether avant-garde or traditional, is to some extent both a theatrical and multimedia event. (...) Nevertheless, our culture has long since developed a performance ritual that isolates music from extraneous visual and aural stimuli, and from any outward physical expression not required to perform it (Schwartz and Godfrey, 1993, p. 136; bold in original).

⁴ Here, again, I am only offering my own formulation of this term. There is no consensus on how the label is to be used, or what works belong to it. What is true, however, is that there are indeed a number of works that may be grouped together for the particular way they function with regard to performance.

⁵ I am referring to Michael Kirby's formulation of performance, who sees it as a continuum between acting (matrixed) and non-acting (nonmatrixed). See: Kirby (1987).

Some of the most representative pieces of the genre could be seen in the work of Mauricio Kagel, Luciano Berio, George Crumb, Karlheinz Stockhausen, Trevor Wishart, John Cage, and Morton Subotnick, amongst others.

The score of Kagel's *Sonant*, for example, includes sentence fragments to be read aloud by the players, who are speaking directly to the audience. Another of his pieces, *Match*, is configured as a sort of competition between two cellists, with a third performer acting as a referee. And again, *Dressur*, features two percussionists handling a wealth of wooden-only conventional and unconventional percussion instruments and objects. They play on a rotating wooden platform, and use some most unorthodox playing techniques, gestures and attitudes, including tapping objects on their bared stomachs.

In the opening section of Berio's Sequenza V, the trombonist is instructed to stand facing front:

and look upwards for imaginary prey while at the same time slowly "taking aim" with trombone. Begin play as if though shooting, the sound (...) being like gunshots (Stuart Dempster, in Berio's Sequenza V score).

Metamusic, by Toshiro Mayuzumi, for violin, saxophone, piano, and conductor is a largely pantomimed work, where most of the notated passages are to be executed as silent physical gestures, interpolated by sudden bursts of sound at erratic moments.

There are many more works that could be mentioned, and some works in the Fluxus circle would also qualify for inclusion. But for our purpose we have enough information to move on to some more pertinent questions.

2.4 - Music and Theatre

As was said in the previous section, the difference between Music-Theatre and Concert-Theatre is more one of degree than kind. Another way to put it is to say that Concert-Theatre is a particular instance, or a sub-set, of Music-Theatre, one in which the composer operates within certain limits, exploiting, as far as possible, the theatricality inherent in musical performance. It is quite rare, however, to find pieces that fall neatly into one or the other of the two areas, and instances of works which blur the distinction between the two abound.

In the works mentioned above, for example, Berio's Sequenza could be fairly easily labelled as Concert-Theatre. Kagel's Match, however, already includes a non-musician, the referee; and Dressur makes extensive use of props and costumes. If it was just a matter of labelling a piece Concert-rather than Music-Theatre I would not worry too much. But there is much more to it.

What I am trying to suggest, is that once a composer has set out to explore theatricality in music the question of where to stop becomes the most interesting and urgent one. Trying to remain strictly within the Concert-Theatre aesthetics, i.e., trying to restrict operation to the manipulation of musical performance techniques and conventions, may indeed seem an enticing possibility, capable, in theory, of producing some interesting artistic results. That enterprise, however, has its own problems and limitations. To begin with, there are only so many things a composer can do within such a circumscribed field; one can change an aspect and subvert another, but the piece still has to work in some way. 'Shocking' or disorienting strategies relying on the audience's expectations of the 'standard' code of performance wear out quickly; once you have written a part instructing a clarinettist to walk out half-way through your symphony, writing the same instruction for the trombonist in your next piece is not good enough. If one is not careful, what started as critical practice could easily turn into an exercise in clever-cleverness with no much musical purpose.

But that is not all. Though there may be valid personal artistic reasons for a composer to explore that particular area, there are no valid ideological reasons for rejecting the possibility of expanding activity beyond that area. After all, if one is questioning a performance tradition why should s/he want to respect its (traditional) disciplinary boundaries? And indeed, once one has embarked on the deconstructive project of redefining musical performance it becomes even difficult to say where such boundaries are. Once we start claiming—or re-claiming—the theatrical domain for music those barriers are down, the gates are open, so to speak. In effect, the Concert-Theatre concept is more a theoretical distinction for analytical discussion than a real category; its hypothetical boundaries ultimately fade into Music-Theatre.

That takes us to the burning question that has haunted me throughout this research: how far can we go in taking music into the theatrical domain before the Music-Theatre label becomes redundant, and we would better refer to a work as, simply, Theatre?

After all, music has always been part of theatre, although, until recently, in incidental roles only. But, as we have seen above, since the work of the avant-garde through the twentieth century theatre has moved to a different level of signification, away from traditional text-based constructions. Conventional narrative, plot and character have been expunged or radically re-defined. Dialogues and monologues may or may not feature in a work. The new theatre is a structuralist theatre concerned with the formalisation of the performance time and space in a non-semantic fashion. Its ingredients have been distilled down to gesture, movement, sound. In principle, disregarding the question of abilities, a piece such as those defined in this writing as Music-Theatre could come from a composer as well as from a theatre director. In other words, there seems to be a zenith point at which Music-Theatre and avant-garde theatre converge. What do a composer and a theatre director do differently?

I think that the difference is a subtle one, but significant nevertheless. First of all we must realise that Music-Theatre as a term does not refer to a thing, but to a relationship. That is why it is so slippery and difficult to handle; it is a typical case in which the limitations of our language do not help. When we refer to a work as a Music-Theatre piece, what we mean is that the piece establishes a particular relationship between music and theatre, and that relationship is a source of meaning. While theatre generates meaning through its own sign-system, in Music-Theatre meaning is generated by the interaction between two sign-systems: music and theatre. It is at the level of that interaction that Music-Theatre 'takes off', so to speak, and detaches itself from theatre.

The composer and the (avant-garde) theatre director work with the same ingredients, but what a composer does is to impose a musical logic on the work. The theatre director, by contrast, may well use sound in a structural way, but the overall logic of the work need not be musical. It is the interplay, or *friction*, between musical logic and theatrical logic that creates the Music-Theatre hybrid.

That means that it does not so much matter how many actors or other theatrical elements are introduced; as long as the piece 'functions' musically we are justified in referring to it as Music-Theatre. Musical logic, then, is what the composer must not lose sight of when crossing into the theatrical domain: a concern for sound and rhythm relationships that is manifested in and through theatrical action.

⁶ The notion of 'structuralism' is now in current usage amongst theatre theorist/practitioners to emphasise work that privileges the relationship between parts, rather than semantic meaning, as the site for aesthetic appreciation. See, for example, Hornby (1977); Kirby (1987).

Those who have tried to describe in words such an enterprise had had to resort to metaphorical and even paradoxical expressions: Acts of Music Made Visible (Wagner); Tragedy from the Spirit of Music (Nietzsche); Making Music with the Media of the Stage (Schoenberg).

Perhaps the Music-Theatre project just can not be rationalised any further.

2.5 - To Boldly Go

Interdisciplinarity is not the calm of an easy security; it begins *effectively* (...) when the solidarity of the old disciplines breaks down (...) in the interests of a new object and a new language'. (Barthes, 1977, p. 155)

Having abandoned the familiar terrain of musical theatre, and the devices and conventions associated to it, the composer finds him/herself roaming in this largely unexplored and not always hospitable territory. This section is devoted to enumerate a small sample of the many considerations and problems facing the composer in his or her journey through Music-Theatre.

Relationship between Music and Theatre

The composer is having to re-configure the relationship between music and theatre for each new work. In fact, the creative process turns out to be largely concerned with the search for an interesting connection between the two sign-systems, between music and action, sound and vision, musical and dramatic gestures. The work is then structured around the exploration and fulfilment of this novel pairing, a process hopefully driven by a meaningful and purposeful design, if the work has to acquire any status above the level of mere exercise.

Performance Space

The composer has to re-conceive both the performance space, and his/her approach to it. Traditional venues are only one of the many possible settings in which work can be presented; quite often the realisation of new concepts of works will entail the exploration of alternative environments and circumstances. Alternative venues, however, suffer from a host of technical problems peculiar to each one, i.e., acoustic, logistic, health and safety, and other structural issues; all things that have to be taken into consideration at the various stages of development of the new work. A taste and ability for working site-specifically, then, becomes an important and integral aspect of the composer's asset.

Competence

Music-Theatre composers have to cultivate an interest and knowledge in the art and practice of theatre, if they are to be able to handle the form. Not that collaborations are necessarily excluding the possibility of a truly hybrid Music-Theatre work. Some particular arrangements can work; but, to do so, all partners concerned, though specialists in different fields, must have *enough* expertise, knowledge and vision to be able to provide –in genuine interaction between them– inputs at all levels and in all areas of the project.

Development Process

An important part of the compositional process is often carried out at a workshop/rehearsal level. That requires the availability of resources, both financial and structural, that are actually rarely available. As Jeremy Peyton Jones, in an article appeared on 'New Notes', reminds us,

Many of our most innovative theatre companies devise their work through extended period of rehearsal and the development of ideas – it's only really in this way that new languages for music theatre can be found, and this of course requires a new awareness among funding bodies (Peyton Jones, 2001).

(more about fundings will be said in the next section.)

Necessarily, the composer will have to establish and develop a close relationship with performers. In effect, he or she will find themselves fulfilling the role of the theatre director, and that requires, amongst other things, a particular sensitivity to the feelings, needs and personality of the performers concerned.

Sometimes, a work may be conceived to exploit the particular strengths of some performer or group of performers. That may lead to a problem that Simon Emmerson has labelled as 'the fixity of the personnel' (Emmerson, 2000a, p. 123), a situation in which the work remains tied to the particular cast for which it was originally conceived, posing a potential problem to the future of a work. That risk, however, is part of the Music-Theatre's aesthetics (see next point below).

Documentation of Works

Another consideration relates to the problem of documenting and preserving the performance of Music-Theatre works. To begin with, unlike musical performance, Music-Theatre is as much about sound as it is about sight. Sure, we could film the event, and that could give somebody who was not present some sort of an idea about the work. But a video is just an artifact which can only capture a particular angle of what is meant to be a multisensory experience. In fact, the harder one tries at achieving a 'faithful' rendition of the live performance, the more the result becomes dull and meaningless. In that respect, a skilfully manipulated video that clearly comes through as an artifact in its own right would be a much more desirable option. In that way we could achieve a superior aesthetic and artistic result, though, again, the product should be regarded as different from the performance itself in quite a fundamental sense.

In fact, sight is only part of the equation; there is a deeper, ontological aspect to the difficulty of the enterprise. With (music-)theatre we are entering the realm of Performance with a capital P, a mode of manifestation which, by definition, excludes reproducibility. As Peggy Phelan asserts:

Performance's only life is in the present. Performance cannot be saved, recorded, documented, or otherwise participate in the circulation of representations of representations: once it does so, it becomes something other than performance. To the degree that performance attempts to enter the economy of reproduction it betrays and lessens the promise of its own ontology. Performance's being (...) becomes itself through disappearance (Phelan, 1993, p. 146).

The Music-Theatre composer, thus, is deliberately embracing an aesthetics of ephemeralness. His or her works will live (if at all) principally in the memory of those attending the event. Such are the consequences of questioning the notion of music as a merely aural experience, and re-defining it as a performing art.

2.6 – The State of the Art

The life of the Music-Theatre composer is not an easy one. As an eminent hybrid, his or her work fits everywhere and nowhere, but mostly nowhere. In this no-man's land, the artist has to struggle to find opportunities for performance, and even when an opportunity arises, s/he has to put up with inadequate venues, ridiculously low budgets, inexistent rehearsal time. Applying for fundings can prove a nightmarish experience due to the uncategorisable and, above all, misunderstood nature of the projects concerned. Even finding the right, open-minded performers can be extremely difficult. Our system of musical education does not seem to be geared for interdisciplinary training. The chances of finding performers that are skilled at both acting and playing music are extremely narrow indeed. Furthermore, the kind of commitment required from them surpasses the standard demands of conventional performance; quite often they would be required to memorise their part as well as the way that works with the theatrical structure in order to interact efficiently with it, and not all are prepared to take on that sort of work.

Ironically, in recent years a lot of talk about music theatre has been going on at various levels, with a number of conferences held, festivals organised, articles published and composers' work performed. Yet, more often than not, a look into such activities reveals a disappointingly traditional and unimaginative perspective of the phenomenon. What is generally meant by music theatre is either some reshuffle of Opera, or some sort of works involving a spectacular blanket, like the example mentioned at section 2.2 above.

It is quite a remarkable phenomenon how Opera, which had been given for 'dead' early in the twentieth century, was suddenly resurrected around the eighties, which were, perhaps significantly, the years of the Reagan/Thatcher yuppie culture. And even more remarkable is how it is not just traditionally-minded composers who cling to the form; even those who are supposed to be the cutting-edge of the situation end up falling in the trappings of the 'Fat Lady'. Composer Jeremy Peyton Jones is only one of the few to have noted how:

Several composers who might be considered at the experimental end of the spectrum have resorted to many of the standard operatic conventions when it comes to creating music theatre: characters singing dialogue, all lines delivered by operatic style voices, epic themes and lavish sets (Peyton Jones, 2001).

Nicholas Till and Kandis Cook, of "Post-Operative Productions", who have put forth a rather energetically critic Manifesto about music theatre under the title "I don't mind if something's operatic as long it's not opera" say very much the same thing: '[e]ven composers whose musical language may be impeccably avant-garde invariably fall back upon a reified model of nineteenth-century dramaturgy, nineteenth-century models of plot, character, subjectivity, vocal expressivity, etc.' (Till and Cook, 2002a).

Later, in the context of an interview, Till and Cook continue their analysis of the phenomenon by exposing the social and cultural atmosphere that support and perpetuate the old, worn forms. They point out how in modern British culture, as in everything else, 'the public sector has entered into a Faustian pact with the commercial sector'; a sort of arrangement hardly conducive to experimentation and change. 'Unfortunately', Till and Cook continue,

we currently have a government that has accepted the ideology of the market and dresses it up as a kind of cultural populism, sloganising about things like "access" or "diversity" and so on. It makes it almost impossible for those of us engaged in making new work (Till and Cook, 2002b)

So it is that even the few who are trying to explore new models are finding themselves marginalised by the policies and cultural agendas of the public institutions, which would rather channel resources and fundings towards initiatives that can guarantee safer and greater returns, be that in financial terms or in terms of political power.

Thus we have a depressing situation in which, while the more experimental work is regularly carried out on a shoe-string, the more conservative work is lavishly showered with utterly phenomenal budgets. That sets the vicious circle in motion by which the low quality achievable by the destitute work prevents appreciation and results in further misunderstanding of the form, which is therefore further denigrated and neglected.

And things do not seem to be any better on the other side of the Atlantic, if that can be of any comfort to anybody. As Eric Salzman writes,

The confusion between music-theatre (an art form that needs to be subsidized) and musical theatre (a business that must pay its own way or better) is deadly. Where does "serious" new music-theater find support? (...)

New music-theater has long been an orphan. Except for the American Music Theatre Festival in Philadelphia (...) and the Music-Theater Group (...) there has never been an institution in this country devoted to music-theater in all its various manifestations as an art form. (...)

Without a theater specifically devoted to music-theater as an art form –the contemporary equivalent of what the opera house used to be– it is difficult to imagine how the music-theater idea can continue to evolve except in the most experimental and economically skimpy of contexts (Salzman, 2002).

From another angle, at the level of education and scholarly activity, we have the lack of a genuine understanding of interdisciplinary practices in general. As Shaw-Miller remarks:

The institutional structuring of academic departments, although challenged in recent years, has traditionally made it difficult to cross the borders of disciplines, (...). The specialist nature of the separate fields (and discourses) mean that when discussion does take place, it is usually in terms of already accepted categories and demarcations formulated in relation to only one of the disciplines involved (Shaw-Miller, 2002, p. 32).

Ignored by the public; rejected by the funding bodies; neglected by the academia; misunderstood by the composers themselves. Such is the state of the art.

And if Till and Cook are right when they say, quoting Brecht, that 'you can't make progressive work, however formally novel your artistic language may be, within reactionary institutions. You have to create new structures and new frameworks' (Till and Cook, 2002b), then the future of the artwork is rather bleak indeed.

PART 3

THE FUTURE OF THE ARTWORK

3.1 - CONCLUSIONS

At the current state of development, it may be appropriate and useful for composers to pause and reflect on the effects and consequences brought about by electronic, computer and recording technology in the past few decades, and assess the extent to which such media are affecting our relationship with, and understanding of, the musical art.

The fact that modern technology allows us to produce sonic artifacts without the need for human performers should not make us conclude hastily and simplistically that the mere acoustic result is all there is to music. On the contrary, it should make us reflect critically on the place and value of performance in the music-making process, that which electronic production bypasses and mechanical reproduction filters out.

On closer examination, music turns out to be a complex phenomenon not reducible to sound alone. A great deal of research emphasises the central place of the body in music making. Physicality, embodiment, gesture, and sight –as well as sound– are recognised by many as important and integral aspects of music making. Those givens constitute and emphasise the processual aspect of music, and when they are considered together and understood as interacting elements of a wholistic process a clear picture of music as a performing art emerges.

The discovery and re-appropriation of the extra-sonic dimension of music may inspire some artists to explore and exploit the theatrical dimension arising from the deliberate manipulation of gestural relationships.

This writer sees that possibility as a positive and potentially fruitful direction for contemporary music. However, the crossing into theatre requires caution and a critical approach for any genuinely innovative result to be obtained. A clear sense of purpose and necessity should always be the driving factor behind compositional choices that include theatrical elements.

It would be impossible to try and codify the way in which that should translate into practice. Indeed, the value and impetus of the enterprise reside precisely in its open-ended nature.

Nevertheless, as a personal solution and, possibly, a way forward for contemporary music, this author points beyond the conventions of Opera and away from solutions which introduce theatrical elements merely as decoration. Beyond Opera because its forms, concerned as they are with their dramaturgy of plot and character, merely perpetuate the same relationship between music and theatre. Away from theatricality as mere decoration because those works that do make use of theatrical elements in that way, often as an afterthought, do not achieve any depth through the interaction between music and theatre. They are founded on a parasitical relationship with theatre, drawing from it and giving nothing back.

The approach sketched in this research, instead, stresses the relationship between music and theatre as the privileged site for the emergence of meaning, and makes that its point of departure in the creation of each new work. The composer is specifically concerned with the purposeful manipulation of that relationship and seeks to explore the various possible configurations in which the two sign-systems may be brought together in interesting and novel ways. That results in a synergetic pairing of the two domains which produces a third integrated hybrid whole that is greater than the sum of its constituent parts.

Works that adhere to that procedure and aesthetics are referred to, in this research, as Music-Theatre pieces. This author, however, also warns of the potential confusion and lack of consensus surrounding the term and its various alternative versions. In fact, the rather conspicuous activity publicised as 'music theatre' in recent years almost invariably turns out to be but a revival of the operatic, or some other superficial way of associating music and theatre. There does not seem to be at present any satisfactory name for this particular style that can escape ambiguity, and it is therefore necessary constantly to clarify what is intended when discussing works combining musical and theatrical elements.

As the epitome of interdisciplinary activity, Music-Theatre works escape easy classification and categorisation. While that is part of their strength and value, it is also the source of a number of problems related to their production and funding. New adequate structures and dedicated organisations able to respond to the particular needs of the form are necessary for the development of new works of some significant import.

Making the Act of Music Visible means more than merely providing a spectacular context for musical performance, it means creating a situation in which the intersection of artforms takes on a special significance. It refers not to a static and hollow multiplication of signifiers, but to a dynamic process in which the individual media's identities are deconstructed and reconfigured into synthetic wholes to achieve forms and meanings not achievable through any of the constituent media in isolation.

Making the Act of Music Visible also means emphasising the "event-ness" of musical performance; recognising how it participates in the construction and communication of meaning, and how it functions in society as a site for the enactment of human relationships. It means valuing the actuality of the performing body and the interaction between performers, space and audience.

Modern technology has an important role to play in this project, from sound generation and manipulation to multimodal environments for gestural interaction. But we need not lose sight of the ontology of performance: its concern with material bodies, real spaces and time present.

Roberto Filoseta, January 2006.

Roberto Filoseta

MAKING THE ACT OF MUSIC VISIBLE

Theatrical Considerations in Music Composition

COMMENTARY

to the Compositions in the Portfolio

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are included on 1 separately bound volume (Volume 2).

INTRODUCTION

The following pages discuss a selection of works that explore the area outlined in my Thesis and address the preoccupations discussed therein. Such concerns and goals could be summarised thus:

- To think beyond mere formalism and abstract musical construction, proposing instead a conception of music as a contextualised, communal and audience-oriented activity.
- To put forward valid alternatives to studio-manufactured music by experimenting with novel forms of musical performance in which the visual/theatrical aspect of music is recognised and creatively exploited.
- To engage in genuine interdisciplinary practice, i.e., one which starts at the embryonic stage of development of works as a particular process through which works are created, rather than as a multidisciplinary final product.
- To produce works that transcend disciplinary boundaries and integrate artforms into synthetic new wholes.
- To produce work that can reconcile the use of sophisticated technology with a humanist concern for the central place of the human performer in music.

As this research is so crucially concerned with the actuality of live performance, it has been my ambition to investigate the subject 'from within', as far as possible basing my writing and views on works actually produced, rather than discussing a pile of unperformed scores and sketches inhabiting an ideal 'empty space'. That has meant working within considerable constraints, shaping ideas around the available (often meagre) resources, rather than the other way round.

Inevitably, the result has sometimes been a compromise of the original idea, but the value of the actual experience has largely made up, in terms of my own development, for the shortcomings.

Music-Theatre Works

Sadhaka

for the sound sculptures of Derek Shiel and electroacoustic part approx. 15 minutes

This work was written in response to a composer competition launched in conjunction with the exhibition of Derek Shiel's sound sculptures held at the *Estorick Collection Of Modern Italian Art*, London. Aptly titled 'The Art of Noises', the event implied a connection to the aesthetics of the Italian Futurists, the artistic movement in which the gallery specialises.

Indeed, Shiel's collection of metallic structures would certainly have interested Russolo, although Shiel, who is principally a visual artist, conceives his 'noise-makers' to function both visually and sonically.

Amongst the options contemplated in the competition's brief, my first decision was to complement the live-played sound sculptures with a fixed electroacoustic part, thinking that the metallic, harmonic-rich nature of the sculptures would produce interesting results through electronic manipulation.

Sadhaka was the first work to stimulate my interest for the Music-Theatre form. In embarking on this project, I started thinking about the possible relationships between the live and electronic parts, which made me confront some issues well known to electroacoustic composers (see the discussion at sect. 1.2 – 'The Recording Revolution', in this Thesis).

I have always found the 'live-plus-tape' format one of the most problematical to write for; the composer is having to face some serious artistic problems, quite apart from the technical ones. The dilemma is what to put on tape and what not to. Ultimately, one could have the whole composition fixed on tape; why have a live part at all, and if so, how does that function?

It seems to me that the line between a decent piece of electroacoustic music and a karaoke session is a very fine one. Denis Smalley and Simon Emmerson, amongst others, have written extensively on this problems of roles (Smalley, 1992; Emmerson, 1994a; 1994b; 1998; 2000). What you have is a situation in which if the live part tries to sound like the tape, there is the risk of loosing the sense of 'live'; conversely, a tape part modelled on the sort of gestures conventionally associated with the live instrument could lead to a 'cop-out' effect in which the electronic medium is not used to the full, and we are missing out on the possibilities of manipulating and creating new sounds, new relationships, and so forth.

With this particular project, it seemed clear to me that the visual aspect of the sculptures could not be overlooked. As their name implies, 'sound sculptures', unlike conventional instruments, function on two levels: the acoustic and the visual; in that sense they are a cross-over where music and visual art meet. Treating them merely as sound makers would defeat -even contradict- the purpose of their particular design, their ontological status as exhibition pieces.

Clearly their visual strength ought to be creatively exploited. Thus, I found that the visual component and inherent theatricality of the sculptures was providing a valid reason for having a live part, and decided to emphasise that aspect by actually interweaving choreographed movement with the musical structure.

In contrast to the disembodied nature of the acousmatic part, I started thinking in terms of musical gestures becoming physical gestures and vice versa. Thus, in this work the 'live' is emphasised by making the causal relationship between gesture and sound conspicuous. In some instances I have gone as far as relating the mere physical gesture, without the striking, to a sound occurring in the tape part, thus playing with 'real' and 'apparent' causal relationships, often presented juxtaposed to each other. Seen with reference to Delande's gestural levels (1998), we can talk of a strategy of blurring the distinction between the 'geste effecteur' and the 'geste figuré', i.e. between the functional and the symbolic components of the gestures (see the discussion at 1.5 – 'Physicality 2: Gesture, Movement, Sight' in this Thesis).

In fact, something even more complex is going on. As all musical gestures are performed in a ritualised styles, whereby the 'geste accompagnateur' is deliberately emphasised and magnified, all gestures acquire a symbolic meaning, as 'geste figuré'. Thus, in its establishing of an elaborate web of relationships between musical gesture, physical gesture, and body movement in space, Sadhaka could be seen as a project about re-finding a place for the body, for physicality in electroacoustic music.

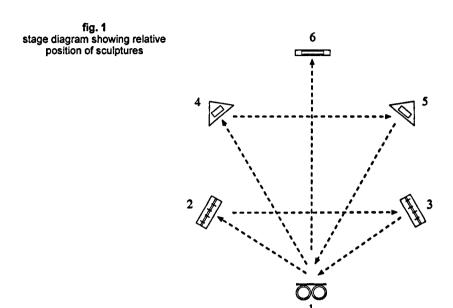
As a Music-Theatre piece, Sadhaka is a highly integrated work. Sound and action have been conceived in close interdependence, which means that the piece could not be performed in any other way than that in which it has been written. The musical and theatrical parts have become a unit, an integrated hybrid which could not be analysed with reference to its constituent parts, but can only be discussed as a whole.

The piece follows a dramatic plot that is made evident on both the visual and the sonic level. The 'totemic' appearance, in their post-industrial way, of these sculptures suggested to me the theatrical idea explored in this work, which may be read as a metaphor for 'moving to higher levels of consciousness'.

The six chosen sculptures are placed in a large circle symbolising the sacred field within which ritual action is carried out. The sadhaka/performer enters the symbolically charged space of the set, where he is met with some obstacles revealing the inadequacies of his current station. He has to undergo a series of tests to transform his lower self before he may be admitted to a higher level.

Sculptures 2, 3, 4, and 5 on the diagram (below) represent the obstacles, the unresolved conflicts, the muddy sentiments; while sculpture 1 is the allied, the vehicle and weapon of the sadhaka. Sculpture 6 is the goal, the *Shakti* or *Anima*.

Thus, as an overarching structure for the action we have the following progression [fig. 1]:



The performer starts from sculpture 1; he then proceeds to deal with sculptures 2 and 3; comes back to 1. Proceeds further afield to deal with sculptures 4 and 5; comes back to 1. Finally, having overcome the obstacles symbolised by the previous sculptures, he can proceeds to encounter sculpture 6.

This strategy lends the work a sense of progression and direction; Sadhaka is indeed very much a goal-oriented work, at the symbolic as well as at the actual formal level.

To maintain a cohesive soundworld, all sounds used in the tape part come from manipulation of recordings of the same sculptures. There is a high degree of interaction between live and tape parts, with call-and-response games, shadowed rhythmic patterns, and passages in which gestures are taken over from each other.

A chronic problem in scoring for live and tape is that of representing, through notation, the electronic part. With this project, in addition, I had to face the problem of notating unconventional instruments, the sculptures themselves. And the physical action, too, at times required graphic representation.

In Sadhaka I have devised signs which I felt could stand intuitively as the graphical counterpart of the occurring sounds, through reference to their textural feel, pitch contour, density, intensity,

morphology and gestural energy. They are fairly self-explanatory, and should be easily recognised when listening to the work's CD. The score's accurate time-scale could also be reliably used to identify events.

Where appropriate, especially with rhythmic gestures, conventional notation has been used. For some particular passages, that has been accomplished by notating an overview version of the gesture where it occurs in the score, while referring the performer to the detailed notation found in the appendix section. In that way, a consistently spaced timescale has been maintained, which I think is crucial to the rendering of a tape part on the score, rather than adjusting the bar-length to accommodate the different passages, which would disrupt the sense of time as graphically plotted.

Sadhaka was the prize-winner in 'The Sculpted Sound Composers Competition'. So far, the work has received three performances. The first one was at the Lilian Baylis Theatre at Sadler's Wells, on December 2001. The second performance took place at the Robin Howard Dance Theatre at 'The Place', as part of the prestigious dance showcase 'Resolution!', on January 2003. The third performance took place at Gallery Oldam, Manchester, where the sculptures were being exhibited, on June 2003. The first two venues are relatively conventional (modern) dance theatre spaces, with tiered seating and stage at floor-level. The third venue, instead, consisted of a large rectangular exhibition space, with marble flooring and glass walls on the two long sides; here the audience were seated all around the space, with the action performed in the centre.

I think it is a virtue of this piece that, in principle, it can work equally well in either situations. However, in larger venues, as I felt it would have been appropriate at the Robin Howard Theatre, the sculptures need to be amplified to compete adequately with the tape part. This is a particularly difficult problem to solve, first because of the rather fragmented design of these particular sculptures; and second because the precise, neat and visually purposeful design of the setting must not be upset by stands or cables, these last also presenting a problem of safety in an area where physical action is carried out. This is something I would like to address on my next opportunity to perform this piece, though, as usual, it is very much a matter of available time and budget.

WMDs

for acting vocalist, flute, tuba, and electronics; site-specific to the Wapping Power Station approx. 15 minutes

WMDs was written in response to a SPNM⁷ call for works to celebrate their 60 th season. The brief specified an ensemble consisting of mezzo-soprano, flute tuba and electronics. The setting for the performance was an unconventional and rather unusual venue, which clearly called for a site-specific approach.

The Wapping Power Station, the last of the hydroelectric plants to close down in England, was converted in recent years into a trendy restaurant-cum-art-gallery doubling as performance space. Like most structures built for similar purposes around the same time, it is a rather impressive grade II listed building in Victorian style. The main area consists of a large quadrangular space split into two long rectangles communicating through a series of large, high arches found along the dividing wall. One of the two halves has been cleared of the machinery and now functions as a bar/restaurant of contemporary décor; while the other has retained as integrally as possible its original features, including the impressively huge heavy-metal machinery and the associated controls, the electrical switch-knob-and-lever boards along the walls, which so effectively convey the atmosphere of what the place actually was: a 'Power' Station.

The concept for WMDs came to me on my first visit to the place, soon after learning of the SPNM call for works. It was the time when the Weapons-of-Mass-Destruction affair had reached hysterical and most controversial proportions. In surveying closely the Wapping Station, thinking of all the interesting things an acting vocalist could do in such a peculiar setting, I felt a little like those UN inspectors entering the military bases in Iraq, which triggered the WMDs concept.

Amongst the many disturbing aspects of the political crisis, I noticed in particular the way in which an atrocious concept had been turned by the media into an acronym, a much more manageable and neater shorthand that divested the original words of much of their horrific connotations. I decided therefore to focus on that aspect, exacerbating at times the contraction of the concept, the acronym form, through repetition, while at other times expanding, stretching and dissecting the entire words, which again compromises their original significance. At no point in the piece the vocalist is actually uttering 'Weapons of Mass Destruction' in any intelligible sense. This device was useful in establishing some aesthetic ambiguity and distance and achieving a degree of abstraction, while also allowing for interesting vocal possibilities, especially in the expanded version.

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Paharta Eilaseta Making the Act of Music Visible

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⁷ Society for the Promotion of New Music

The following is a section-by-section account of the work.

Sect. 1/a

The piece opens with flute and tuba players in position, blowing air through their instruments, while the vocalist enters the performance area carrying and shaking a bell-tree. Having reached the set spot, she then drops the bell-tree and starts chanting an expanded version of the words "Weapons of Mass". Dissected into individual phonemes, each sustained for the whole length of a breath and chanted in a meditative fashion as pure sound, the terrible words have lost their intelligibility and have become instead a mantra, a sacred invocation, the very opposite of their original meaning. While chanting on a monotone, the singer is instructed to explore each phoneme playing with changing formants, to vary freely dynamics and vibrato, and to introduce randomly some quick embellishments by using a technique known by Indian musicians as 'gamak', which consists in moving off the root pitch and returning to it very rapidly. The voice is also subtly processed by a small amount of ring modulation. As the vocalist reaches the "ahsss" phoneme of "Mass", and seems to be going on to uttering the next word, she is abruptly cut off and anticipated by an audio file triggered in real-time. The word "DESTRUCTION!", sharply delivered as a shout by a crowd of people, is heard over loudspeakers, coming as a shocking contrast after the slow, relaxed delivery of the preceding material. Flute and tuba respond with a sustained minor 9th, while the vocalist, shaken from her meditative state, goes to the bass drum and plays a blow which cuts off flute and tuba.

Sect. 1/b

This time, the same phonemes are shouted in a variety of timbres, especially wild and guttural ones, again bypassing intelligibility. Now the vocalist appears like a wrathful Demon, rather than the peaceable entity of the preceding section, brandishing the bass-drum beater which she waves in a menacing way each time she starts a phoneme. This serves the dual purpose of functioning as a theatrical device, as well as providing the cues to flute and tuba, who are playing a series of dissonant chords changing with each phoneme; the tuba plays only short C#s sforzatissimo, changing register at each phoneme, while the flute sustains a series of multiphonics.

Continuing with the strategy of reversing the previous section, the last phoneme is promptly followed by an audio sample delivering the word "destruction" in a mellifluous, seductive way. Once more, the vocalist is thrown by the striking juxtaposition, which this time appears as a charming formula. Confused, she lowers the beater and asks herself: "destruction?", to which she is promptly reassured by a further appearance in the acousmatic part of the word "destruction" delivered in a most sensual, rapturous way. Spellbound, the vocalist drops the beater, and repeats the word a few times while moving, as if automatically, to the typewriter.

Sect. 2

Here, she starts typing (anything), mumbling unintelligible words while interpolating, louder and clearly, the acronym "double-u em dees" stressed in a variety of ways. This gesture refers not only to the press (as a reviewer simplistically thought), but also to the official reports, the military dossiers, the secret papers and documents; to the politicians' talks and propaganda, as well as to the confused comments of the manipulated masses. All rendered in an impersonal, 'administrative' way.

During this section, the sound of a balloon being inflated is heard in the electronic part, while flute and tuba play long notes. The tuba part consists of exactly twelve different pitches, starting in extreme high register and steadily descending, while the flute part is allowed to repeat some notes and to vary slightly its path for a more interesting design: it descends with tuba to begin with, then moves in the opposite direction in the second half, increasing the space between parts, thereby creating a sense of mounting intensity and stretch.

The climactic point is marked by the sound of a balloon burst (in the electronic part), cutting off flute and tuba who by then have reached their extreme registers. The vocalist responds with a jump and a shout, leaves the typewriter and moves on to the next section.

Sect. 3/a

The vocalist moves around the hall inspecting the machines, looking into gaps/holes and opening lids/hatches while calling "double-u em dees?" at specified points. The cues are provided by the sustained notes ending each phrase on the flute part (playing solo), which are then cut off by the vocalist utterances, so that at each call follows an enigmatic silence. The vocalist attitude, at this stage, is relatively calm. In conclusion of this sub-section the vocalist, taking her cue from a repeating motif appearing in the flute part, proceeds to opening a metal port-hole and shouts into it: "double-u em deeeeeees?". This last is processed through delay/reverb and let to resonate.

Sect. 3/b

This time the cues are provided by the solo tuba, with an opposite strategy at work: now the calls are immediately answered by tuba blasts, followed by the anxious silence of the vocalist, who now has switched to a nervous, fearful attitude.

A sustained high-pitched note in the tuba part is cue to the vocalist's climactic gesture, "double-u em deeeeeees?", shouted with hands at both sides of the mouth, as if calling from the top of a mountain, again processed through delay/reverb and let to resonate.

Sect 3/c

The two winds now join for a duet, while the vocalist, moving with a furtive attitude, continues the search around the place, her movement visibly affected by the instrumental gestures, but this time

without calling. After a lively exchange symmetrically structured, and a stretched gesture of suspense culminating in a sudden burst, flute and tuba end this section by rendering their own version of the "double-u em dees" sound, by adding some voice to the breath. The vocalist freezes and listens with alarm to the rather sinister 'callings'.

Sect. 3/d

Recovering, she goes to a metal cupboard and starts knocking and calling "double-u em dees?", as if certain of something/someone being in there. The winds repeat over and over a phrase, actually the retrograde of each other, structured in a 2-against-3 relationship between parts. The vocalist becomes ever more impatient, and ends up shouting and beating on the metal door with both hands. This is cue to the electronics to trigger the audio sample of a metal clang, which stops the winds and pushes the vocalist back.

Having taken a few aimless steps, the vocalist then starts enacting her chasing of her finally found lost pet, beginning with tender calls ("double-u em dees") and becoming increasingly irritated as the (imaginary) pet dodges all attempts at being caught. After a last angry shout, she walks resolutely to the tam-tam and strikes it.

Sect. 4/a

The winds attack with a minor second, and the vocalist, turning towards the audience and brandishing the tam-tam beater, shouts "DESTRUCTION!". She then proceeds to operate the many buttons, knobs, wheels, etc. that are part of the old machinery. Flute and tuba play gestures that are made even more ominous by their processing through delay/reverb, while the sound of natural wind, in the electronic part, keeps growing in intensity. The climactic point is marked by a thunder crash from the electronic part.

Sect. 4/b

[natural wind in electronic part keeps going]

Flute and tuba combine to play a subtly changing dissonant drone, while the vocalist, having climbed on top of a machine and let the thunder sound dispel, starts recitation of four ghastly sentences adapted from "The Book of the Apocalypse of Baruch the Son of Neriah", to which follows a wild cry and a particular posture symbolising the Goddess Kali.

Sect 5

As the wind grows even further in volume, the vocalist climbs down, moves to the bass drum and tremble her hands on the skins for a few seconds, before finally moving to strike, with a big gesture, the tam-tam.

The natural wind is morphed (crossfaded) with a processed version, which takes over the flute and tuba parts and fades down to a moderate volume. The vocalist walks around as a desolate witness of the aftermath, humming the tritone suggested by the processed wind sound. Gradually, the humming is turned into a wailing sound, and this in turn morphed into a spoken "who", in preparation for the final enigmatic sentence, "WHO ARE THE INNOCENTS?", which is delivered calmly but gravely, marking clearly each word.

WMDs as Music-Theatre

We can see that WMDs achieves a high degree of integration between music and theatrical action; between the two there is a tight relationship of mutual implication. The sound is never incidental to the action, nor is the action incidental to the sound. An acousmatic version of this piece could not possibly be conceived, and even a video document could never convey the full impact of the work as the live performance can. Sound and vision coexist in synergetic relationship, generating a third entity that is greater than the sum of the two.

There is no narrative as such, but the flow of actions is clearly structured according to formal relationships pertaining to both the musical and the theatrical domain simultaneously.

The degree of role-playing, if there at all, is very low. The singer is not really 'impersonating' a character, but rather playing with a vocabulary of attitudes that are organised formally, disjointed from the reality of any individual self or type of humanity.

WMDs is also a good example of a site-specific work. The atmosphere of the space and its features and fixtures have all been thoroughly exploited and purposefully integrated with the piece's structure. So successfully has that been achieved that, sadly, the possibility of repeated performances is seriously compromised. I can only hope to find an opportunity to transplant the idea to some setting with similar or comparable features.

Concert Wired Up

Wapping Power Station

Richard Morrison

WHAT critic could resist the invitation to see a man play five tubas simultaneously in a disused power station? Especially if this remarkable event was happening not a million ems from his paper's office.

Thus it was that I experienced Oren Marshall's In the Silent Room, one of the truly unique compositions of our time. Marshall, a tuba virtuoso who must have lungs like elephants' bladders, attached four hose pipes to the valves of what you might call his master-tuba. These extended to four other tubas positioned all round Wapping's trendiest restaurant/gallery (there isn't a lot of competition).

He then set the wild echoes flying (wild? the tuba?) with some ear-poppingly rapid passagework, each note assaulting the audience from a different corner. These were mingled with foghorn-like blasts and sounds that perhaps one should coyly describe as bodyfunctional. A riveting display of tuba prowess — I just hope someone finds a musical purpose for it one day.

That was the last item on a very long bill called Wired Up to Wapping, a celebration of the Society for the Promotion of New Music's 60th anniversary. The SPNM has been enlivening the ambience in the Wapping Power Station for the past fortnight with a series of clangorous sound-andsculpture installations. I loved the disembodied piano twangs with which Cameron Sinclair accompanied the disturbingly ripped-apart pianos in Alexandra Julyan's sculpture, Composition of impulses.

But Wednesday's free concert — cleverly done as dinner-cabaret, so we could scoff posh bangers-and-mash during the boring bits — was supposed to be the high point of the birthday party: a showcase of the brightest young turks on the electronic-music scene. Sadly, too many pieces sounded liked boys playing with toys: composers so in love with what computers can do that they forgot to think of a point.

Where wit was employed, though, the medium came to life. Though over-extended, Michael Roas Cobian's Desacatao intriguingly worked live flute sounds (Nancy Ruffer) into a soundscape full of sinister, disconcertingly familiar samplings. Ruth Duckworth's Steamtalk was exactly that: a steamy and electronically inflamed duet between a mezzosoprano (the excellent Katina Kangaris) and Marshall's heavy-breathing tuba.

And Roberto Filoseta's WMDs, as the name suggests, was a sharp skit that debunked pre-war media frenzy (amplified chattering and typewriter tapping), then sent Kangaris wandering into the audience, calling "weapons of mass destruction?" with increasing desperation, as if searching for an errant cat. Who said electroacoustic satire was dead?

CAPTIVE

for 4 performers, sound sculpture, and electronics approx. 75 minutes duration (including sound installation)

This work explores the condition of being enslaved, confined, trapped; physically or mentally ... or both. It may be real or imaginary, given or self-inflicted, accepted with resignation or fought against.

What is freedom if not the luxury of choosing your master?

[programme note to first performance]

Performance of this work requires a large stage, and involves two acting musicians, two butch performers, and a specially designed sound sculpture –a rather large metallic structure of totemic appearances, the manifold functions and meanings of which are becoming apparent in the course of the piece.

The sound sculpture is placed centre stage [see diagram in score-script], while the musicians are placed one right one left of the stage area. One is playing an array of percussion instruments, including skinned drums, a fine collection of hand-made bronze pieces of many different sizes, and a vibraphone. These are all amplified and processed in real-time by the same performer [M2]. The other musician [M1] is playing piano plus other percussion instruments, bronze pieces, and a bamboo flute. Playing of the piano is extended to the inside strings in various ways. Again, all instruments are miked and live-processed. Of the two butoh performers, the male is mostly naked, with just some white material wrapped around his waist; he is also wearing a heavy-duty pair of leather shackles at his wrists, with 3 meters of metal chain attached to each of them. The female's body is rather more covered, using the same white material. Both performers' bodies and faces are painted white. The musicians wear all white: trousers, shirt, and shoes. The purpose of all performers wearing the same colour is to avoid the reading of any inappropriate, superficial distinction of their statuses and roles.

Captive is a full-length Music-Theatre work exploring the tension between our desire for freedom and our need for constraints. The piece is structured around chunks of theatrical action organised according to a formal logic that is both musical and theatrical simultaneously. The theme of being a captive —or feeling like one— is proposed and re-elaborated in a number of ways, each one invested with a rich symbolism that lends the work several layers of meaning.

The subject of captivity necessarily entails the issue of freedom, which is here construed as being negotiated between our objective limitations and circumstances –the 'given'- and those that we impose to, or create for, ourselves –the 'self-inflicted'. Thus, if freedom in the fullest sense is unattainable, or unbearable ('terrible freedom', would say Jean-Paul Sartre), all we are left with is,

in the best of circumstances, the possibility of choosing within a set of available constraints; or, as I put it in the programme note to the work, the luxury of choosing your master.

As a broad generalisation, the male actor may be associated with states concerned with the body: the condition of being enslaved, constrained, confined, trapped in a real physical sense. The female performer, instead, relates to the mental, psychological level of the experience. This, however, cannot be a clear-cut distinction; indeed, the two levels always coexist in some degree. At one end of the continuum we have obstacles, problems and limitations that we may consider as 'real', in an objective sense; at the other end we have the imaginary sensation of confinement carried to the point of psychosis. Between these two extremes lies our ordinary level of experience which is a combination, in various degrees, of the predicament as it actually is and as it is perceived and lived. It is precisely the interaction between the two levels that is interesting. Thus, someone serving a life-sentence in a penitentiary may be caught by a mystical experience and feel the most 'liberated' person in the world, while a tycoon on holiday on his 20-meters yacht may feel trapped by his success, his responsibilities, his family, etc.

To proceed with a section-by-section account of the work, it will be convenient, at certain points, to introduce the following abbreviations:

P1 = performer 1 (male)	P2 = performer 2 (female)	PP = both performers
M1 = musician 1 (piano, etc.)	M2 = musician 2 (percussion, etc.)	MM = both musicians
	SS = Sound Sculpture	· · · · · · · · · · · · · · · · · · ·

Section 0

Integral to the piece is a sound installation to be broadcast, for 15-20 minutes, in the foyer area of the venue, prior to the performance proper. This serves a dual purpose; the first one is logistic: the foyer is used as a buffer to gather the audience, so that they can be quickly shifted to their seats once the signal to open the house is given. This is to minimise the time of stillness of the performers, who have to take their place on stage before the audience is allowed inside. At the same time, this device is exploited to prepare the audience to the work, by giving some clues as to how to approach and interpret the piece. In my view the work starts the moment the audience arrives in the venue's area where the sound installation is being diffused. In ideal circumstances, the audience should be able to experience the transition between the sound installation and the following section as a smooth continuum.

The audio content for the installation has been realised by manipulating recordings of two subjects, male and female, uttering in turn a list of related concepts, juxtaposed as oppositions or

complements. The recordings were then processed to the limit of intelligibility, with a view of affecting the audience at a subliminal level. The full list of concepts is given in the table below:

MALE VOICE	FEMALE VOICE
physically bound	mentally trapped
constrained by chains	constrained by freedom
constrained by the body	constrained by the mind
slave of a master	slave of oneself
enslaved by knowledge	enslaved by ignorance
knowing to be enslaved	captive without knowing it
enslaved by morals	enslaved by sex
constrained by rules	constrained by tradition
trapped in the past	trapped in eternity
trapped by danger	trapped by fear
condemned to be a slave	condemned to be free
confined in a very small space	prisoner of Infinity
freedom to be	freedom to be a slave

One cycle of utterances, on the end product, lasts just over 4 minutes; this then repeats over and over as necessary to fill the desired time, giving the audience more chances to grasp the sense of what is being said. The two voices are also complemented by the processed sound of dragged chains which, beside being symbolically appropriate, contributes in making this a sonically interesting experience.

Section 1-a

Once inside, the audience is confronted with the sight of the male actor kneeling down-stage centre, facing the audience, shackled at his wrists to long chains. Behind him is the metallic structure of totemic appearance, the sound sculpture.

At a subtle light signal, only noticeable to the performer, the actor starts with a series of stylised howlings, which are amplified and subtly processed through reverb. The forth of these is taken over by an audio sample, triggered in real-time by the audio engineer, featuring a more heavily processed version of the performer's own voice, which swells to a considerable level, and ends as a long extrawet reverb/delay filling the performance space.

This section sets the scene of what the piece is about; it functions, to use the terminology of musical analysis, as the *exposition*, in which the main theme is first introduced. When the audience is shifted inside the house the lights are already half-dimmed, a performer is already on stage. This strategy, with all the other signals in place (the sculpture's appearance and central position) creates a particular atmosphere of 'sacred' space. Silence and stillness dominate for a while, then the first howling of the performer comes, unexpected and dramatic, giving sound to the theme's visual/theatrical counterpart.

Section 1-b

As the audio sample dissolves, MM enter stage, from opposite corners, and walk to SS. Here, they bow ceremonially to each other before starting a sequence of gestures played on SS. P1 is visibly affected by MM's playing, and responds with more howlings at specified points.

The section ends, mirroring the previous one, with a climactic gesture taken over by an audio sample, this time featuring both P1's howling and the sculpture's sounds.

MM back off from SS and remain still for a few seconds, as startled by the powerful 'energy' emanating, apparently, from the sculpture, then go to their respective positions as the sound dissolves in the hall.

In this section the sound sculpture is formally introduced. The reverential and ritualised attitude of the musicians serves to further establish (together with other signs, like its iconic appearance and centre placement) the sculpture as some special object of supernatural significance. In the meantime, the section functions musically by giving the musicians a chance to explore the sculpture's rather rich and interesting sonic possibilities. As their gestures are interacting with P1, who is re-stating the theme of the previous section, a relationship is created between SS and the Captive theme.

Section 2

A change of lighting now reveals something upstage behind the sculpture, appearing like a cocoon. Inside this gauze sheath P2, who until then had remained invisible, starts a hatching sequence. Her movement starts slowly and tentatively, and gradually build up in intensity and strength, eventually breaking free of the sheath enveloping her.

The climax is marked by a low pitch played on the piano's keys, just as P2, now fully out of the cocoon, makes a big gesture, throwing her hands up to the sky. A silence follows.

Throughout the above sequence P2 is actually half-hidden by SS, teasing the audience who can only see part of what goes on, though this is quite enough to grasp the meaning of it all. This device is more fully exploited in the next section. The musicians' activity mirrors this process through noise-based gestures (rubbing skins, scraping cymbals and piano strings, etc.), sparse to begin with, then building up density and volume. Their musical gestures interact with P2's movement, as they follow -but also influence- her action.

Here, we have a set of contrasting yet complementary meanings. In nature, a cocoon is something that affords protection and nourishment to the life inside. On the other hand, the cocoon stage is also something to break free from in order to progress to the next stage of development. It is protecting as well as confining; it is life-giving up to a point, after which it becomes a cage that must be escaped.

Section 3-a

Freed from her cocoon, P2 starts exploring the space in front of her. Moving to SS, and looking through it, she notices P1 on the other side. Attracted, she makes various attempts at going through SS. She doesn't seem to succeed at that, and ends up singing-wailing, as to lament her condition, and also to attract P1's attention, hoping perhaps in some help, or at least wishing for a closer encounter.

In this section we start to see the multiple functions and meanings of the sound sculpture. Here it appears very much like a cage, a barrier, an obstacle or impediment of some sort, a trap. Thus, P2, who had just attained freedom from the cocoon, finds herself once more constrained. Interestingly, she, appearing as if behind bars, sees P1 as *outside*, the side she is longing for, but P1 is himself in chains –it is not clear who of the two is the captive. Significant is also the fact that P2 *could* move around to the other side, but she does not –she can't see that. Instead, 'trapped in her mind' she gets entangled, that is physically trapped, in the sculpture parts.

P1, who until then had been largely ignoring P2's sonorous activity on SS, starts responding to her wailing, gradually turning his head and body to SS. However, at this stage P1's attitude is somewhat indifferent, merely watching but not actually moving towards her. P2 keeps wailing and intensifies her stretching-out gestures, which eventually result in the collapsing of parts of SS.

A further layer of meaning can be seen to interact with it all. As the sculpture is also firmly established as some sort of 'sacred' entity, the breaking/collapsing of its parts could be read as the infringement of taboos, tradition, morals, religious dogmas, etc., things sometimes regarded as 'enslaving' for the individual or group. It may be seen as intentional, as a rebellious, iconoclastic gesture, or as nonintentional, perhaps caused by unawareness, ignorance, emergency or panic. It may be hailed as 'liberating' progress, or regretted as poisonous degeneration.

At the formal/aesthetic level, the action of P2 behind and on the sculpture is intended to create visually interesting formal relationships through the interaction of the body axes and the sculpture's structure. In her exploration of spatial relationships, the performer also exploits the effect of hiding different parts of her body behind the sculpture, which has been carefully designed to allow a particular degree of visibility between its parts. Furthermore, P2 interacts musically with MM, as her action is 'sonified' as a result of her movement on SS.

Section 3-b

With much uncertainty, and even suspicion, gradually P1 starts approaching SS, wavering at various points in his journey. Even as he has reached SS and seems to be about to pass his chains on to P2, who is stretching her arms towards him, he turns away, uneasy and restless. P2's body flops over SS, as if giving up, exhausted. Soon after, however, though still hesitating, P1 offers his chains to P2. As P2 finally gets hold of the chains and uses them to climb over and across SS, P1's body posture is low and bent, looking away (down).

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Here, clearly, the important structural point is the 'coming through' of P2, who crosses over to the 'other side' of the sculpture, finally disentangling herself from the situation she was in. The noteworthy point is that this is achieved with the crucial help of P1, who is a captive himself. And, most significantly, we see him using his chains to drag P2 across—it is precisely what detains him that becomes the instrument of P2's liberation.

In this action, we see P1's hesitation, uneasiness, diffidence, and perhaps fear; all signals of P1's resignation to his status. He is not interested in questioning, trying to change things; maybe he is afraid of change. He would rather not get involved with P2's situation; it is only after the 'breaking' of the sculpture, with all the associated meanings outlined above, that P1 starts to move from his spot. A strong, irrevocable gesture had to be made to shake him from his passiveness. And even as P2 crosses over SS in triumphant posture, P1, by contrast, is low, bent and mortified. In opposition to the elated stance of P2, P1's attitude expresses negative feelings, a mix of distrust and dread towards this newly forming arrangement.

Section 4-a

Finally on the other side, P2 enjoys the chains she had been longing for, and which helped her to come through, to be 'free'. She plays with them as if with silk garments, wearing and passing them all over her body and moving with sensuous flowing gestures, posture fully upright and triumphant. P1 follows her; his posture is low, bent and mortified.

PP engage in a duet. Their movement on stage is led by P2, while P1, submissively, follows. Their contrasting postures serves to emphasise this relationship. We see P2's fascination with P1's chains, which played such an important role in her liberation. Contrary to P1's experience of them, P2 perceives the chains as something desirable, reassuring —even empowering.

PP playing with chains creates interesting sounds of a flowing, watery quality, which interact with MM playing.

Section 4-b

Gradually, the relationship established in the previous section is reversed: P2 starts resenting the chains she had previously cherished, while P1 starts resisting P2's movements, claiming back his chains and hence leading. He also regains his upright, dignified posture, while P2 gradually assumes a low, mortified attitude.

Eventually, PP part ways: P1 goes and flop over SS; while P2 sits on the floor, slightly more downstage, left of SS, back to audience.

[STILLNESS 1-2 minutes]

Gradually, we see P1 resisting P2's movement and claiming back control. Their postural quality is reversed and P1 is now leading the action. P2's infatuation with the chains gradually fades as she experiences the problems and responsibilities that come attached to them.

As PP part ways, P2 finds herself, perhaps for the first time, 'really' free. The cocoon, the sculpture-barrier and the chains have all been left behind. P1 ends up flopping inside SS, his upper body hanging loose over the sculpture's frame, and remains still in this posture until sect. 6. Perhaps he is just exhausted, or perhaps he is worshipping, devotedly prostrated, the mutilated sculpture. P2 sits on the floor, her back to the audience, frozen in the perception of her new status, still not knowing exactly what one is supposed to do of the circumstance. This is a moment of great stillness, lasting a couple of minutes, which is contrasted by MM's high activity, and functions musically as the climactic segment for this section.

The climax is then resolved when M1, after a last energetic gesture on the piano, suddenly stops.

M2, instead, keeps playing and, after a short solo, settles into an agreed pattern, a medium-fast dance rhythm of tribal flavour, which takes the piece into the next section.

Section 5

As M2 introduces a rhythmic pattern, P2 turns toward audience and starts dancing, beginning from sitting on the floor, then gradually standing up. Builds up into a frenzy; eventually collapses on floor, downstage right.

M1 joins the drumming shortly after the pattern starts, and the two musicians engage in a dialogue, while also interacting with P2, who drives the pulse just as she is driven by it.

Freedom is here lived as a dance. Tentative and slightly awkward to start with, as P2 first has to learn to dance, something she was not used to in her previous state; then gradually becoming wilder. Until, intoxicated by her limitless freedom, P2 collapses to the floor on the wave of her own momentum.

MM keep playing for a minute or two, then stop together on a coordinated gesture.

SILENCE.

Section 6

P1 rouses [with sudden movement] hitting SS with chains. Then starts a sequence of exploratory gestures, with mixed feelings of rage and reverence, often throwing chains at SS, and climbing over and through it. Eventually ends up chaining himself to SS [behind SS, back to audience].

Here we see P1 reacting violently against his status, or against the sculpture, or both. The recent vicissitudes seem to have transformed him. He is now challenging the sculpture and all that it represents.

And yet, there is ambiguity. We can see in his attitude a mix of awe and rage, reverence and resentment. Maybe he would not really want to do what he is doing; maybe he just feels that he has to do it. Perhaps his is a gesture of sacrifice, for the redemption of somebody else. At the end of the struggle, it is not clear whether P1 has remained entangled, captured by the sculpture, or whether he has deliberately chained himself to it, as if to a cross. This posture he will keep, still, to the end of the performance.

Musically, in this section we have a conspicuous quantity of sound coming from P1's chains clashing on SS. For better emphasis, here MM avoid using other metal sounds, or use them very sparingly in certain gaps and at the end of the section. Instead, they play low-pitched, deep drums, with M1 alternating between the drums and a bamboo flute; thus, we have metal, skin, and wind sounds. Their short, sharp, spiky gestures punctuate with sudden bursts P1's sonified action. The flute mainly plays piercing overblown high notes and trills (amplified and processed), while on the drums single sffz. blows, or short gestures, are often enough to create the austere and most dramatic soundworld the action demands.

Once P1 is chained to SS, MM conclude with a heated protracted gesture, which is gradually defused and dispersed.

SILENCE.

Section 7

P2 re-awakens; uneasy at finding herself free, feels lost; looks for boundaries [low on floor, explore stage, particularly edge; stretching, reaching-out gestures. Concludes section with 3 wailing calls (on edge of stage, stretching one arm towards audience, as if reaching out).

As P2 re-awakens, her excitement for the newly gained freedom has passed. In its place is now a deep sense of loss, confusion, purposelessness –and fear. Prisoner of infinity, she moves about the stage searching for boundaries, patterns, reference points; anything that could give meaning to her choices and actions. In her desperate search, P2 eventually reaches the edge of the stage, which here functions as the boundary of the boundless. From her freedom-trap, she wails (at specific points) as if crying for help, stretching out her arms beyond the edge, a stark dramatic gesture directed straight at the audience.

The musicians' gestures reflect the distressed state of P2 by creating an eerie soundworld, using cymbals, bronzes, a bull-roar and a flexatone. These particular instrumentation and gestures make a subtle reference to the beginning of section 3-a, when P2, just out of the cocoon, experiences a first glimpse of freedom, before encountering the sculpture.

MM must make sure to leave enough space (silence) around P2's wailing. The third wailing gesture is followed by a silence. P2 stays still.

Section 8

M1 approaches P2 from behind and starts playing sheenai. P2 is captured by sheenai's sound; M1 controls and leads P2 to a designated spot in front of SS.

P2's impasse is resolved by the intervention of M1. Here we see P2 under the controlling spell of M1's sheenai. A hypnotic web of sound seems to form around P2 as M1 leads her in front of the sculpture, the 'central' reference point. There, P2 assumes a posture related to her starting position in the cocoon, though she is now vertical, sitting on the floor in a foetal posture.

M1 performs this action knee-walking. Having accomplished the not easy task of taking P2 to the designated spot, exhausted, he slowly stands up and takes a few steps back. It might seem as if it is all over.

Section 9

[trigger audio sample 3]

Electroacoustic part comes in, appearing to exercise some control on M1, who responds by playing sheenai.

Eventually, elect. part climaxes overwhelming M1; M2 comes in to the rescue by playing SS; M1 leaves sheenai and joins M2 at SS. With coordinated gestures MM play a final hit then freeze, leaving the long reverb tail on the elect. part to fade out. [Lights fade out with sound] — The END.

Just as he was controlling P2, M1, in turn, is now being challenged by a higher power trying to control him. Here the acousmatic part functions as a disembodied entity, transcending the physical reality. M1 tries to confront the authority by engaging in a dialogue, or dispute, but this only has the effect of eventually enraging the acousmatic interlocutor. We see M1 overwhelmed by the escalating wave of sound from the loudspeakers, losing terrain and strengths. As the electronic part swells to a climax, M2 rushes to SS, which here functions as the physical counterpart of the disembodied entity, and tries to control the lashing energy through his vigorous playing. P1, recovering some of his forces, joins M2 at the sculpture. Then, at the top of the electronics' climax, MM end with a coordinated gesture and freeze in this last posture, leaving the long resonance on the electronic part to fade out.

For over a minute of great stillness we see a picture of all performers gathered centre stage around the totem-sculpture. MM stand left and right of SS, while PP have inverted their starting places.

The lights fade out with the electronic part to a black-out, and the piece is over.

Parallel Universes

for piano, cello, and live electronics approx. 16 minutes

Parallel Universes was composed for performance at *Mayfest 2004* (the week-long programme of events at the University of Hertfordshire). The piece is scored for piano, cello and live electronics, and was performed with David Bahanovich at the cello and myself at the piano.

The idea for the concept underlying this work came to me as I was experimenting with various ways of processing the sound of the live instruments. As with many of the effects explored I found the result so rich and interesting already on its own, I thought of presenting each instrument in isolation rather than combined with the other. I therefore devised a simple strategy in which each instrument would play short sections in turn, never playing together until the very last of the piece, where the two parallel universes eventually meet and briefly interact through a related, but not synchronised, phrase.

Each instrument plays eight sections which decrease in length as the piece progresses, thus signalling the convergence of the two worlds. And it is precisely at the end, in the last two bars, that the pitch logic on which the entire piece is based is fully spelt out.

Pitch-work, however, is not the main principle of organisation of the work; much more important here is the articulation of timbral relationships, which has been realised with regard to each instrument's characteristics and their manipulation through live processing. Thus, some of the notated gestures acquire much more sense when the result of their processing is taken into account. For example, the rationale behind a series of glissandos in one direction ending with a sharply accented note may be to trigger a glissando going the opposite direction in the electronic sound; staccato passages or single, apparently inconsequential, notes are often conceived to excite a delay or reverb FXs in the electronics; and so forth.

In the context of Music-Theatre work, Parallel Universes could be considered as a Concert-Theatre piece, though only in a rather weak sense. The theatricality of the piece could be seen in the unconventional playing techniques that feature largely in the piece, like playing inside the piano and the various 'extended techniques' included in the cello part. As Schwartz and Godfrey write,

Unconventional modes of sound production (tapping the wood of a violin, rattling the keys of a clarinet, or shouting into the mouthpiece of a trombone) inevitably have a theatrical effect not equaled by more traditional methods (Schwartz and Godfrey, 1993, p. 140).

That was certainly the case a few decades ago when such techniques were first appearing on the concert platform, and were perceived by audiences as quite 'radical'. Nowadays, such gestures, though by no means the norm, have lost some of their original impact and are gradually coming to be regarded as part of the 'standard' repertory of possible gestures in contemporary music.

Nevertheless, though the novelty element may have, to an extent, worn out, there remains the possibility for an audience to engage visually with the musical-physical gestures, which at times can have some quite significant expressive power. Indeed, few of the techniques included in this work have the effect of magnifying the 'geste accompagnateur' (Delande, 1998), in that they entail a whole-body movement for their execution, and can therefore emphasise the meaning of a passage (see the discussion at sect. 1.5 – 'Physicality 2: Gesture, Movement, Sight' in this Thesis).

However, at a deeper level, what prevents this piece to be qualified fully as Music-Theatre is the lack of a theatrical conception in the structural organisation of the gestures. Although at times conspicuous, in this piece gestures are merely the by-product of instructions aimed at a particular sonic result, with no attempt at constructing patterns of signification through them and through their interaction with the sound. In other words, there is no design, no plot, and the gestures, though individually carriers of meaning, are not organised according to any logic at the syntactic level. Thus, though there may be, in a broad sense, a theatrical aspect to this piece, a fully developed theatre part is missing.

In the context of this portfolio of works, this piece is useful for clarifying the point at which a significant relationship between music and theatre does or does not occur, thus providing some criteria for a meaningful usage of the Music-Theatre term.

BEGINNINGS

for piano, percussion, and dance-movement

21'21

Beginnings is the outcome of a particularly successful workshop session. The piece is entirely improvised, and the audio on the CD is the integral, completely unedited version of the original session.

It is unfortunate that the session has not been videoed, as it includes a dance-movement part, which is obviously lost in the acousmatic version. In fact, the interesting aspect of this exercise is the way the mover is used as a 'living score' by the musicians. And as the improvising dancer, in turn, takes inspiration from the musical material generated by the musicians, a highly interactive feedback loop is established between the dancer's movement and the instrumentalists' sonic gestures.

This kind of operation provides some interesting material for reflection about the dynamics of integrated Music-Theatre, particularly with regard to the extension of music into the visual and spatial domains. Improvisation plays an important role in this context, as its modes of operation are particularly concerned with physicality, which is here crucial in establishing the common ground between instrumentalists and dancer. As Jeff Pressing remarks,

Evidently, physicality is more essentially encoded in the process of improvisation than in re-creation of fixed music, because the performer feeds off all the resources of the moment to create, and thus relies more directly on manipulation of motor programs and specific motor acts in unforeseen, rather than foreseen, ways (Pressing, 2002).

If we consider the standard model of an improvising ensemble of instrumentalists, we can generally understand and appreciate how they interact musically with each other. Here, the communication is essentially based on their listening to each other (though, occasionally, some visual cues may be exchanged between musicians). Now, if an ensemble includes one or more performers who are not playing an instrument but are, instead, moving and gesturing in interaction with the musicians, we have a hybrid situation in which performers are relying not just on hearing, but on sight too. Thus, the dancers *listen* to the instrumentalists and translates their musical gestures into physical gestures, while the instrumentalists watch the dancers and translate their physical movement into musical gestures.

This suggests a close relationship between gesture, sight, and music. Clearly there is some sense in which music suggests physical movement and vice-versa.⁸ Indeed, as was clarified in this Thesis

⁸ We are not here concerned with the straightforward notion of step-dancing to a steady beat. There is no periodic rhythm in *Beginnings*, therefore the relationship we are postulating is a much more sophisticated one.

(sect. 1.5 – Physicality 2), the metaphorical sense ascribed to the expression 'musical gesture' is rooted in our experience of an actual physical gesture. Quite often that is intended as the physical functional gesture associated to a particular sonic result, i.e., we construct, or re-construct, in our mind the sort of movement necessary for the player to produce that specific passage. However, experiments such as the work we are discussing stretch that notion and demonstrate how the relationship between music and gesture may be much more complex and deeper than that, and may actually link music and movement in a more fundamental sense. Indeed, as Cook remarks,

That music embodies movement is an intuitively plausible proposition: why otherwise should listening to it prompt that kinetic excess which overflows into anything from the tapping of a foot to the most frenzied dance? (Cook, 1998, p.78).

We already accept the written score as a graphic (i.e., visual) representation of music, without giving much thought to the fact that some of the symbols therein are actually representing, in two-dimensional fashion, some spatial relationship and shapes, like pitch contour and intervallic spacing. Similarly, a moving body in the context of ensemble performance articulates spatial relationships through gesture and posture which may provide some musically useful information about intensity, phrasing, dynamics, mood, tempo, articulation, density, etc.

There are, however, some fundamental differences between a conventional score, which is a codified system of musical representation, and the rather more arbitrary correlation of a dancing body to music. In the latter case no one-to-one relationship can be obtained between the dancer's gestures and the musicians' 'rendition'. But this 'openness' is precisely what is interesting about this kind of operations, which are by no means intended to replace a score when one is needed. Performers have considerable choice in how to interpret the dancer's movement (just as the dancer has in interpreting the music), and in fact it is quite often most interesting to contrast a particular attitude with its opposite; for example, some very slow movement or stillness on the dancer's part may be contrasted by some hyperactive instrumental passages. Clearly, then, we cannot talk of a dancer's movement as accurately prescribing what is to be played. Nevertheless, there is a subtler sense in which we could see the dancer functioning as a score.

The interesting point is how a purposeful, expressive and highly interactive visual stimulus, such as a dancing performer, can work in 'holding' a piece together by providing a reference point for the whole ensemble. Even more interesting is the fact that, in the case of an improvising dancer, this 'score' is a highly interactive one. A two-way communication process is at work by which the dancer re-processes the musical material on the spur of the moment while, in so doing, simultaneously stimulating fresh musical gestures from the instrumentalists.

This kind of process is, of course, essentially identical to what generally happens between instrumentalists alone. But the extension into the visual domain clearly adds enormous potential to the creativity of the performers who, while translating the spatial relationships articulated by the

dancer into musical material, are witnessing how their musical gestures are turned by the dancer into further spatialisation. In other words, they see their musical gestures having an effect, which greatly enhances the feedback-feedforward process.

What I see in this is a corroboration of Klee's dictum that 'space itself is a temporal concept' (see this Thesis at sect. 1.6). It is the relationship of mutual implication between the two domains, time and space, that accounts for the viability of this kind of operations. 'Movement takes time', as Klee observed, just as music unfolds in time; and music provides a stimulus to movement through its spatial metaphors and its intimate connection to physical gesture.

A simple improvised session establishing music-to-movement interaction, as the one here discussed, may be seen as an instance of Music-Theatre at its most basic. It exhibits a seamless integration of music and action, it inhabits the visual and aural domains simultaneously, and unfolds according to a musical logic even as it articulates gestural and spatial relationships.

It is therefore often profitable to integrate sections of controlled improvisation into larger works, as this strategy can guarantee a high degree of interactivity and cohesion between music and action. This is, for example, what happens in *Captive*, (discussed in a previous section), which does make use of controlled improvisation within a well defined macrostructure prescribing action goals and soundworld.

BEGINNINGS OF...

Tape Solo, 21'21

This is a studio elaboration of Beginnings, acousmatic by choice, rather than fate(!).

The entire work has been processed in nine different ways, so that what we hear at each moment is a different combination (mix) of some of the ten stereo tracks (nine plus the unprocessed original). Thank to its 'organic' origins, the result is a work which sounds refreshingly 'live' even as it is clad in an electronically loaded soundworld.

This experiment has also been useful as an exploration for some of the live processing that I have subsequently incorporated in my works for live performance.

Acousmatic Works

Powerful Machine 11' 00 – tape solo

The title of this piece is subtly sarcastic. At first, it may sound as a celebration of the machine (age); but the true and disturbing meaning is revealed well into the piece, at 8' 43...

As the programme note for this piece reads:

a surreal soundscape portraying nature, man and machine competing with each other, juxtaposed and intermingled into an indissoluble whole which suggests the irreversibility of the process of mechanisation and de-humanisation.

It is not difficult to predict the outcome of this dangerous game

This piece was composed to accompany an exhibition of paintings by David Whittaker, whose work portrays, in expressionist tones, the human/nature alienation typical of contemporary societies (September 2001, Galleria Excalibur, Stresa, Italy). My contribution is acknowledged in the colour catalogue of the exhibition.

The piece was then selected by the ISCM° for performance at the World Music Days 2003. Slovenia.

- Considerations in Metal - 1 2' 52 - tape solo

- <u>Considerations in Metal - 2</u> 2' 47 – tape solo

These works use as their source material samples of Derek Shiel's sonic sculptures, and were composed to function as interludes to a live 2-hour concert given by the 'Sculpted Sound Ensemble' (to which I belong) at the Colourscape Festival, 22 September 2001, Clapham Common, London.

Having composed (from the same sources) Sadhaka, in which lavish sound processing and dramatic gestures feature largely, in these two pieces I felt the need to redress the balance by seeking a somewhat more 'restrained' approach.

As their titles implies, the two compositions are related in many ways; beside the source material and time of composition, their relation is also one of complementarity.

⁹ International Society for Contemporary Music.

Considerations in Metal - I unfolds as a pointillist piece in which each event presents a different sound. These events are only subtly processed, and are placed in an uncluttered time-frame replete with silences and subtle resonances to allow each event to be savoured in itself as well as in its relationship to the others.

Considerations in Metal - 2, by contrast, concentrates on a single sound re-proposed in many different transpositions and vertical (harmonic) combinations. Here the discourse is to an extent carried by pitch relationships, though timbre remains important.

Threnody [after N.Y. 11 Sep 2001] 8' 24 - tape solo

A further work using samples of Derek Shiel's sonic sculptures; this time, using only bowed metal as its raw material.

The programme note for this work reads:

dedicated to the innocent victims, of any nationality, hit by the terrorism and military actions -evident or occult- of criminal individuals or governments

This work was selected for performance at the IV International Contemporary Music Contest "Città di Udine", Italy, 25 October 2002,

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