

**The Synthesis of Music and Dance: Performance
Strategies for Selected Choreographic Music Works by
Karlheinz Stockhausen**

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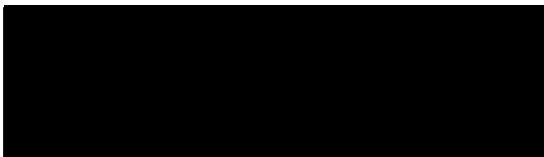
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1. Abstract

This research project focuses primarily on the physical and interpretative aspects of performing choreographic music with particular reference to Stockhausen's *Der Kleine Harlekin* (1975) and *In Freundschaft* (1977). For purpose of this research, choreographic music refers to the genre where the musician is required to carry out dance movement at the same time as performing on an instrument. Furthermore, the models of choreographic music as presented within this paper are confined to the Western art music paradigm.

Choreographic music, the synchronisation of instrumental performance with movement, is an art form that requires the musician to be multifaceted in their performance approach. With composers of choreographic music determining *both* bifurcations of music and movement, the genre seems to be generated solely within the domain of music. Yet as the choreographic musician amalgamates these two performance disciplines, a subsidiary effect is the incorporation of dramatic elements, necessary to certain pieces within the choreographic music repertoire. At times, the focus on dramatic elements is overt: Stockhausen's *Harlekin* (1975) and *Der Kleine Harlekin* (1975) exemplify this, with performance requirements stipulating specific costuming as well as character personification for the performer.

With choreographic music being essentially a hybrid of music, dance and drama, it is feasible that preparatory techniques leading up to performance should encompass extra-musical rehearsal strategies in an effort to enhance the overall performance outcome. This project aims to highlight physical considerations of combining choreography with music as well as to present discussions regarding the interpretation of choreographic music notation.

Acknowledgments

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Contrary to the conventional structure of the MA degree offered by Monash University, I was given the opportunity to study with a third supervisor. I had requested access to a dance instructor to assist me with the rehearsal strategies necessary to choreographic music, and was fortunate enough to obtain this assistance from Susan van Den Ham. Van den Ham has been indescribably helpful in instructing me in the art of movement, and how to articulate it in the most physically beneficial manner.

I would like to offer gratitude to Monash University for providing me with a departmental scholarship for the eighteen months of the MA degree, which allowed for unhindered dedication to this project. I would like to thank Marianne Gemperle at the Arts Graduate School for assisting me wherever necessary, as well as Craig de Wilde and Margaret Kartomi for demonstrating enthusiasm and support of the project.

I wish to acknowledge all who participate in the fieldwork I conducted at the Stockhausen Course 2004 in Kürten, Germany. Their willingness to share their experiences of performing choreographic music, particularly from the Stockhausen repertoire is greatly appreciated. I would like to thank Suzanne Stephens for her advice on performing *In Freundschaft*, as well as her encouragement to return to the course in 2005. I would like to thank Karlheinz Stockhausen for granting me a scholarship that will enable me to attend the course this year, furthering my involvement with choreographic music.

I would like to thank the ensemble members for *Maze Pieces Volume One* (2005), whom performed in the recital: Sean Albers, Justin Ashworth, Matthew Bush, Daniel Calabro, Ryan McRobb, Stephen Oates, Luke Richardson and Adrian Violi. I wish to also thank Matthew Bush especially for his lighting design in *Der Kleine Harlekin* and Paul Reeve for sound

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2. Introduction

With the aim of this research project being to explore rehearsal strategies most advantageous to the performance outcomes of choreographic music, data acquired through fieldwork has revealed the necessity of cautious and well-informed approaches to preparing works of this nature. In investigating the methods of preparation, the topic of primary concern that has emerged is the physical implications associated with choreographic music. In musical performance alone, there has been extensive documentation on performance-related injuries such as embouchure collapse and Repetitive Stress Injury (R.S.I.)¹. Fortunately, methods in body training for performers such as The Alexander Technique and Feldenkrais, both of which promote efficient and ergonomic use of one's physical self, can contribute to recovery of performance-related injuries. However, when movement is fused with instrumental performance for a choreographic work, the risk of injury is greater. Hence, performance preparation must be comprehensive in order to avoid inefficient body use and its likely consequence of physical discomfort.

The very fact that musicians undertaking choreographic music must incorporate physical techniques that are extraneous, and even sometimes contradictory to musical performance, heightens the likelihood that compromises are made in performance. For example, a musician may find it feasible to 'leave out' or 'modify' scored movements, gestures or facial expressions in an effort to cope with the physical demands. However, this research project hopes to demonstrate that the application of dance and music in synchronicity can be made possible with appropriate physical preparation. In doing so, the prospect of performance outcomes being an accurate reflection of the composer's stipulations is more likely. As well as this preparation, rehearsal strategies involving specific physical training are apt to foster control and ease in the synchronisation of movement and music performance. Through being conscious of one's physical nature when performing and preparing choreographic music, it is possible for any musician to perform dance and music confidently at the same time.

Performance strategies of choreographic music will be discussed with especial focus on selected choreographic works for clarinet: *Der Kleine Harlekin* (1975) and *In Freundschaft* (1977), both by Karlheinz Stockhausen. In analysing performance elements of these works, it is hoped to provide more information for potential performers who, due to the levels of physical coordination required, may be reluctant to attempt choreographic music. Methodologies for overcoming technical and physical difficulties associated with choreographic music will be discussed in this research project, with an emphasis on

¹ R.S.I. - A physical disablement that can occur through the sole act of playing an instrument

elucidating the physiological components involved with the execution of selected choreographic gestures. Drawing upon data collected in fieldwork research, this paper also reflects direct experiences with individuals who practise choreographic music, and their approaches to overcoming the physical challenges of this genre. Contributing to this study will be my own experiences of preparing *Der Kleine Harlekin* and *In Freundschaft*, and the necessary integration of physical training into my practise regime.

As with any example of music, the levels of technical proficiency required are wide ranging. This is especially true when one considers the varied repertoire of choreographic music. Yet with the fundamental aspects of choreographic music being to combine instrumental performance with dance movement, coordination skills and physical strength are of a primary concern. For the extant repertoire of Stockhausen's choreographic music, the complexity of the music alone may be factorial in the less-than-frequent performance of these works. Culminated with the incorporation of movement and the memorisation of the work, the repertoire is often considered to be of a specialist nature. Even Stockhausen himself surreptitiously acknowledges the difficulty of his choreographic works, offering an alternative for producing the percussive effects of the foot falls apparent in *Der Kleine Harlekin*, when he states that the piece '...can also be performed by a clarinettist and a drummer, or by a clarinettist and a dancer...' (Stockhausen, 1975: p. i). It is therefore understandable how musicians or composers may be apprehensive in proliferating this genre, or that the latter might have difficulty in finding people to perform their works. Nonetheless, the absence of literature pertaining to performance strategies of choreographic music is arguably a contributing factor to what may be considered stagnation in the development of this performance practice.

Without sufficient discourse² pertaining to performance strategies of choreographic music, the accessibility of information for musicians is insubstantial. With instructive literature regarding rehearsal techniques for choreographic music yet to come, seeking methods of preparation for performers occur on a practical level. The annual Stockhausen Course, held in Kürten, Germany, provides interested parties with an opportunity to practically source performance strategies for the repertoire of Stockhausen. I was fortunate enough to partake in

² As a means of ascertaining the existence of literature relating to choreographic music, investigations were carried in addition to the usual comprehensive catalogue searches, Internet site perusals, data bases, etc. This was achieved through querying many performers, composers and musicologists involved with choreographic music about any pertinent existential literature of which they were aware. With many of the interviewees being multi-lingual, the possibility of uncovering a text regarding choreographic music – albeit in a language other than English – was heightened. However, the results were negative: if a text *does* exist in another language on this topic, it is not to the present knowledge of the population interviewed.

this course in July and August 2004, and it was here that I conducted fieldwork, obtaining a large portion of data for this research project. This fieldwork included interviewing practitioners of choreographic music (see appendix for list of interviewees) as well as receiving practical instruction for performance approaches. Through this process, a variety of approaches to performance preparation and interpretation were revealed, assisting the research of performance outcomes of the selected choreographic works.

Subsequent to the fieldwork conducted in Germany, I received supervised dance training, which enabled a more comprehensive approach to performance preparation. Throughout the entire MA candidature, I maintained specific physical training, selected on the basis of relevance to the physical requirements of *Der Kleine Harlekin* and *In Freundschaft*. Advantages arising from this method of performance preparation will be elaborated upon in section five: 'Determining Rehearsal Strategies for Effective Performance Outcomes of Stockhausen's *In Freundschaft* (1977) and *Der Kleine Harlekin* (1975)'

Literature Review

As mentioned previously, research into the performance strategies of choreographic music seems to be non-existent, whether it be from the Stockhausen repertoire or otherwise. Due to this scarcity of source materials, fieldwork investigation the prime source of data for this research project, in spite of the numerous texts dedicated to Stockhausen's substantial choreographic compositional output. Perusal of these texts yielded no insight into possible rehearsal strategies or even the briefest of discussions regarding the performance aspects of Stockhausen's choreographic music. Instead, literature about Stockhausen appears to be predominantly from a musicological or biographical perspective, and to the knowledge of this author, there is yet to be a publication that comprehensively addresses aspects of performance outcomes and preparations required for performing Stockhausen's choreographic repertoire.

An effective substitution for researching the element of movement and gesture in choreographic music is to examine texts relating to the subject of dance. In the same way that it is essential for dancers to be knowledgeable about music as a fundamental means of understanding their craft, practitioners of choreographic music would undoubtedly benefit from making themselves familiar with dance practices. With countless books being written for the dance community readership, yet virtually no comparable literature on the subject of choreographic music, there is little wonder that most of the choreographic practitioners who I interviewed sought guidance from a dancer. This approach to performance strategy – that is, a musician creating a partnership with a dance instructor as a preparatory technique – will be discussed further in 'Section Three: Determining Rehearsal Strategies'.

In substantiating the suitability of selected dance literature for the musician attempting choreographic music, there is pragmatic value and greater accessibility for the musician in avoiding texts that are overindulgent in dance-related nomenclature. Teck (1989) fulfils this requirement, even though the text is intended for an audience of dancers. Discussions regarding phrasing and interpretation, paralleling musical terminology, dominate the text. For example, when Teck suggests that when ‘...dealing with a metered beat, you cannot give every movement exactly the same energy, or you have no phrasing...’ (Teck, 1989: p. 42), the language is directed in a very comprehensible manner. Although statements such as this arrive from a subjective viewpoint, a musician seeking guidance in choreographic music can easily understand the relationship between music and movement that is being elucidated.

However, Teck’s heavy use of citations, namely from other dance practitioners, diminishes her own approaches, which are delivered nearly apologetically. Nonetheless, Teck’s authorship throughout the text provides the reader with a clear, accessible presentation of musical terminologies, visual representations and descriptions of aural manifestation. Specifically, this book offers a good resource in discovering ways of relating music to movement and encourages the reader to consider their interpretation of dance and music.

Paramount to a successful choreographic music performance outcome is a conscientious approach to the physical development of this performance art. Blandine Calais-Germain’s *Anatomy of Movement* (1985) is an example of dance literature that assists this cause, as it provides substantial information regarding possible physical injury that may occur due to careless training preparations. Also intended for an audience of dance artists, the reader is provided with a plethora of muscular and skeletal actions and their relevant terminology that at first glance may appear to focus exclusively on the physiological components of dance. However, there are accompanying commentaries specifying actions as well as possible injury-inducing actions relating to most examples, with every description of movement accompanied by detailed illustrations. Calais-Germain (1985) provides direct and obvious comparison between body-efficient approaches to movement, with vigorous discussion of relevant muscle groups and skeletal components.

In similarity to Calais-Germain’s book, Mabel E. Todd (1937) focuses extensively on how to use the body correctly, avoiding unnecessary damage. Although it is tempting to question the relevance of a publication as old as Todd’s 1937 book, the thoroughness of the author’s writing has led to the book being ‘recognised as a profound study of biomechanics, anatomy, kinesiology and physiology...’ (Brackett, E.G., appearing in Todd, 1937: back cover/blurb). The foreword, also by E.G. Brackett, describes Todd’s *The Thinking Body* as dealing ‘...with

practical problems and the application of the principles which have been presented...' (p. xviii). However, the text is not limited to sheer physiological discussion, with Todd also exploring the more artistic aspects of dance. Of note, Todd highlights postural placement as being a major catalyst for character interpretation, suggesting that '...the explorer and pioneer stand up; the prisoner and the slave crouch; the saint leans forward, the overseer and the magnate lean back...' (Todd, 1937: pp. 1-2). This approach can be adapted to choreographic music, where portrayal of character or depiction of mood is often a vital component of choreographic composition.

In an effort to explore literature other than that intended for a dance readership, it seemed relevant to peruse performance-related publications regarding physical aspects for the musician. Although not intended for the application of choreographic music, Bruser (1997) produces in-depth discussion on body awareness for the musician. Pointing out that '...musicians don't usually think of themselves as athletes, but they are...' (Bruser, 1997: p. 67), the author effectively substantiates the seriousness of repetitive muscular activity due to playing an instrument. Bruser furthers this theme, shifting the attention of the text to postural detail. As this is predominantly linked to philosophies derived from The Alexander Technique, it seems that this text may be limiting for the choreographic musician, as choreographic music frequently requires execution of movement contradictory to The Alexander Technique methodology.

Bruser (1997) nonetheless offers a solid foundation for musicians wishing to incorporate more physicality into their playing. The entire third chapter (pp. 29-43) is devoted to stretching, warning the readership that '...health professionals find that musicians tend to be sedentary and out of shape...' (p. 30). In discussing the stretches, Bruser quotes advice from movement teacher Joan Campbell Whitacre, and illustrates the stretches with photos of yoga instructor Joni Yecalsik. Finally, Bruser provides a comprehensive list of relevant resources, addresses and phone numbers inclusive, for musicians interested in using their body more effectively. These include: Meditation Instruction, Arts Medicine Services, The Alexander Technique, The Feldenkrais Method, The Rosen Method, Laban Movement Analysis, Bartineff Fundamentals, Body-Mind Centering, Embodiment Education and Somatic Movement Therapy Training. However, it is unfortunate that these resources are almost exclusively restricted to the United States, leaving the international readership to their own devices in seeking contact with similar organisations.

There were many examples of literature that proved to be superfluous to the theme of pragmatically developing methods to enhance performance outcomes of choreographic music.

Contrary to what I expected, the texts I scrutinized on the composer Karlheinz Stockhausen ignored performance aspects of his music. Due to the fact that his works often feature choreographic elements, it seemed possible that there would be something written in regard to performance preparation. Maconie (1989), in collaboration with the composer himself; Harvey (1992); Kurtz (1975); and Cott (1974) focused largely on musicological and biographical aspects of Stockhausen rather than possible performance strategies of choreographic music. Even Stockhausen's own publication of his analysis of *In Freundschaft* (1977), entitled *Music, the Art to Listen* (2002) offers little on the topic of performance outcome, as its intention is that of a theoretical nature. However, being introduced to Stockhausen's biographical aspects helped to inform the context in which the pieces *Der Kleine Harlekin* (1975) and *In Freundschaft* (1977) were written.

With the literature written on Stockhausen sometimes focusing on genres of music that he wrote aside from that of a choreographic nature, authors such as Hanoch-Roe (2003) discuss Stockhausen's compositional devices of pieces such as *Moment-Form* (1963) and *Kontakte* (1959-1960). With these pieces coming into existence significantly before the focus compositions for this project, *Der Kleine Harlekin* (1975) and *In Freundschaft* (1977), this alone may dissuade the researcher of choreographic music from further perusal of this periodical. However, the opening of *Kontakte* incorporates choreographic elements, as the pianist is required to dramatically draw a circle with a triangle beater close to the outer perimeter of a large tam-tam – a visual gesture that combines movement and music. Nonetheless, comment on this aspect of quasi-performance practice was not forthcoming within the Hanoch-Roe article.

To further broaden text resources that could potentially assist in the performance development of choreographic music, I researched articles relating to artists of choreographic music. In particular, I focused on Suzanne Stephens, as her extensive activity in the performance of Stockhausen's choreographic music gave rise to the possibility of extant discourse regarding her performance strategies. However, although she is associated with Stockhausen in many texts, there unfortunately does not appear to be articles that focus exclusively on her performance practices.

In contrast, an artist with choreographic tendencies that has been the subject of extensive writing is Meredith Monk. Geleng (1991) examines her musical upbringing briefly before describing with considerable detail selections of her repertoire, and outlines the depth of

*Gesamtkunstwerk*³ used in Monk's compositions. However, with the article in question entitled: 'Voices Dance, Bodies Sing', it is reasonable that one might expect a discussion relating to the amalgamation on musical performance and dance. Nonetheless, while the article offers interesting insight regarding Monk's compositional approaches, the focus is, once again, musicological.

Outline of Chapters

As the succeeding chapters of this research project will demonstrate, the research as outlined will attempt to branch away from the musicological focus of the aforementioned literature. Instead, there will be greater emphasis on identifying definitive characteristics of choreographic music ('Section One: An Introduction to Choreographic Music'); the contribution and experiences thus far of selected choreographic music practitioners ('Section Two: Case Studies'); and practical application of the art form ('Section Three: Determining Rehearsal Strategies for Effective Performance Outcomes of Stockhausen's *Der Kleine Harlekin* (1975) and *In Freundschaft* (1977)').

³ *Gesamtkunstwerk* – the interplay of a multitude of disciplines into one performance ideal: the incorporation of acting, singing, instrumental music, dancing, lighting, costuming, etc. '...a form including all disciplines...' (Geleng, 1991: p. 17).

3. *An Introduction to Choreographic Music*

This section aims to provide examples of choreographic music, as well as to discuss subsidiary relations to this performance art, as exemplified by other fields that conjoin movement and music into one practice. Although the genre of choreographic music is still relatively new, the concept of amalgamating music and movement has been around for some time. Educational practitioners such as Dr. Moshe Feldenkrais (1904-1984) and Émile Jaques-Dalcroze (1865-1950) were central in helping to integrate body awareness into performance art education. While both Feldenkrais and Dalcroze disciplines focus on purposefully utilising the body for efficient musical production, gestures found in choreographic music may contradict these teachings if they physical challenge the choreographic performer.

Nonetheless, there can be benefit between these educational dance/music practices and choreographic music. For example, performance artist Meredith Monk trained in Dalcroze eurhythmics in her youth, which led to her finding equilibrium between music and movement in what appears to be a natural and genuine aspect of her performance practice. Renowned for her hybrid-like artistic endeavours, Monk creates works from perspectives of dance, film, singing or instrumental performance. Whilst the prospect of this may induce a sense of apprehension within the wider community of musicians, artists such as Meredith Monk make clear their perceptions that music and movement that yields 'no separation'. Stating that through '...doing Dalcoze eurythmics... a combination of music and movement' ensured that she always 'kept them [music and movement] together', Monk alludes to her performance approach as being one that integrates both disciplines equally (Duckworth, 1995: p. 349).

This adjacency of artistic disciplines – dance and music – infers that any hierarchical 'importance' distinguishing movement from instrumental performance redundant. Even though a genre such as choreographic music is exclusive to the field of music, the inseparability of dance from music dissolves this performance practice into a singular performance happening, reminiscent of a *Gesamtkunstwerk* approach. Certainly, with compositions such as Stockhausen's *Der Kleine Harlekin* specifying particulars such as costuming, spotlight projections and choreographic elements, a relationship emerges that links choreographic music to Wagner's famous philosophy of culminating a multitude of artistic forms into one performance practice.

Stockhausen's Development of Choreographic Music – A Brief Overview

The work of Karlheinz Stockhausen is wide-ranging: from pivotal electronic compositions such as *MOMENTE* (1962) and *POLE* (1969) to 'intuitive music',⁴ his compositional repertory, while paralleling certain concepts expounded by Cage et. al, seemed to challenge the highly determinate European new music paradigm. From there, Stockhausen expressed his interests in conceptualising compositions while using the parameter of space. At a lecture at Darmstadt (the biennial new music festival held in Darmstadt, Germany), the composer discussed *Raum-musik* (music-in-space), later saying he had made 'all kinds of different approaches to new situations of music in space' (Cott, 1974: pg. 183), citing the tri-orchestral work *Gruppen* (1958)⁵ as an example. In another method of using space as a component of music, the composer experimented with acoustical principles; at one point stating '...any point in space should be precisely defined with respect to where the sound occurs and how it travels from one point to any other...' (ibid.). Preceding this discovery, perhaps even informing it, Stockhausen developed the idea of 'walking and running music' as a means of manipulating acoustic properties in performance:

'...we've even thought of putting the musicians on swings in order to make the sound move, but this becomes too complicated... in the mid-fifties, I conducted a seminar in Darmstadt where we produced walking and running music – the instrumentalists and singers made movements while they were producing the music, going out of and coming into the room... we split the public into separate groups in order to give them different listening perspectives...'

(Cott, 1974: p. 187)

The evolutionary outcome of 'walking and running music' is perhaps exemplified best in the clarinet solo work *Harlekin* (1975), the first full-scale choreographic music piece by Stockhausen.

Examples of Choreographic Music

Originally part of *Harlekin* (1975), *Der Kleine Harlekin* (1975) became a separate piece, however undergoing slight alterations. The performance notes describe how the choreographic element differentiates between these two works differentiates:

⁴ 'Intuitive music' – improvisational music, where '...the musicians make qualitative decisions as to what to do [sic.] or what not to react to in order to create a really coherent organic music...' (quote by Stockhausen) (Cott, 1974: p. 181)

⁵ In *GRUPPEN*, there are three orchestras playing simultaneously within the same space, using different tempi, dynamic and harmonic inferences. Apparently, it is not uncommon for the orchestra members to outnumber the audience!

‘...to an even greater extent than *Harlekin*, *Der Kleine Harlekin* has a part in which the dance rhythms and the rhythms which are played by the clarinet are inseparably bound into a polyphonic unity and are equally important. The listener should therefore listen to the clarinet and footsteps with equal attention... (Stockhausen, 1975: p. i)

The notation used by Stockhausen throughout *Der Kleine Harlekin* typically comprises two staves: the upper displays the clarinet line, and the lower shows rhythmic material that is to be performed by the heels and feet. For longer notes in the lower staff, a ‘corresponding long movement’ (Stockhausen, 1975: p. ii) is to be made by the free leg of the performer. Rhythmically, both lines are often independent from each other, thereby intensifying the level of coordination necessary for performing this piece.

N.B. All musical examples within this research project are presented as they appear in the original score – i.e. in clarinet tuning (B-flat).

Fig. 1 – Excerpt from *Der Kleine Harlekin* (1975)

The image displays a musical score for two parts: Clarinet and Feet. The Clarinet staff is written on a five-line staff with a treble clef. It contains several measures of music, including a triplet of eighth notes marked 'vibr.' and a long note with a slur. The Feet staff is written on a single-line staff. It contains rhythmic notation, including a triplet of eighth notes and a long note with a slur. Dynamics like 'p' and 'ff' are indicated. The notation is in B-flat tuning.

(Stockhausen, 1975 p. 6)

While Stockhausen’s work for solo clarinet *In Freundschaft* (1977) is more understated in its choreographic elements than *Der Kleine Harlekin*, this piece nevertheless exemplifies choreographic music, albeit in a less dramatic way. Although there are no costume requirements or specified foot movement, *In Freundschaft* still offers substantial challenges for the choreographic performer. In this piece, the clarinettist must move his/her body from the waist-up and point their instrument in different directions while executing the melodic material at extreme levels of dynamic. Physically, the degree of difficulty is dependent on the ability of the performer: the higher the performer chooses to raise their instrument, the more intensified the action becomes.

The following example (Fig. 2) provides a comparison of selected choreographic works by Stockhausen. Taken from *In Freundschaft*, the execution of this example is contingent upon the directions within the performance notes, which state that the ‘...three musical voices (high

melody, low melody, trill in the middle) should be clearly indicated by pointing the instrument to one side, to the other side, and in front of the body respectively' (Stockhausen, 1977: p. 3 (Performance Notes). Pitch placement within this piece is indicated visually '...by moving the instrument up and down in proportion to the sizes of the intervals' (ibid). While it is not specified exactly which side the clarinet should be pointed, Fig. 2 depicts a common interpretation of how to present these gestures: appearing underneath the notation are the letters R (right) and L (left), representing to which side the clarinettist may point their instrument.

Fig. 2 – Excerpt from Stockhausen's *In Freundschaft* (1977)

Clarinet


(Stockhausen, 1977: p. 4)

In the following excerpt from *Der Kleine Harlekin* (1975) (Fig. 3), one can see that beyond the inclusion of dance rhythms, the intensity of movement as prescribed in written instruction exceed that which is required in *In Freundschaft*. The excerpt in Fig. 3 demonstrates that, in addition to creating polyphonic rhythms via the foot and clarinet notation, the performer is also required to move 'in the form of a large spiral' (Stockhausen, 1975: p. 6). While this naturally enhances the visual effect of the piece, sound transformations occur as the ever-changing acoustic environment (due to the performer's movement) manipulates the aural outcome.

Fig. 3 – Excerpt from Stockhausen's *Der Kleine Harlekin* (1975)

The image shows a musical score for two parts: Clarinet and Feet. The first system features the Clarinet playing a 'VERY BROAD' trill and a 'March dance SLOWER' section. The Feet part includes a 'raise right leg' instruction and a 'Humorous "marsh dance" in the form of a large spiral, breast pushed far forward - walking quite rapidly - gradually becoming dance-run - nearly falling over, bent far forwards'. The second system shows the Clarinet playing a trill with a 'vibrato' instruction and the Feet part continuing the dance movements.

(Stockhausen, 1975: p. 6)

An example of how movement may affect sound is demonstrated clearly with phenomena such as the Doppler effect⁶. *Der Kleine Harlekin* (1975) exemplifies this effect; with the opening instruction requesting that the clarinetist (also referred to as the character *Harlekin*)⁷ ‘...dances, entering from the right, turning in fast, circular movements to his right, until he reaches the front of the stage...’ (Stockhausen, 1975: p. ii). With this instruction to be carried out whilst playing a ‘colour’ trill on concert G-flat 6⁸ [] the constantly changing direction from which the sound emanates, in combination with the colour trill in the altissima register, results in not only panning effects but also pitch variations similar to the Doppler effect.

Other sounds consequential from dance – such as feet falling on the floor; or sliding one’s foot along the ground – contribute additional rhythmic and timbral qualities to a choreographic music composition. These aspects require attention and careful preparation if the performance outcome is to reflect a choreographic composition faithfully. For example, the request in *Der Kleine Harlekin* for the performer to ‘make a corresponding long movement’ with the free leg in the case of ‘...longer durations (tied notes)’, (Stockhausen, 1975: p. ii) produces an effect where it is equally visual as it is aural. The following example

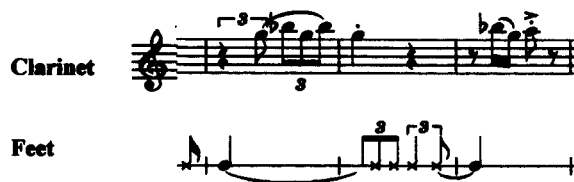
⁶ Doppler Effect: ‘...the apparent change in frequency and wavelength... of sound or light waves if the distance between the source and the receiver is changing’ (Delbridge et. al, 1982: p. 279)

⁷ Translated in English, this becomes “Harlequin”.

⁸ Clarinet B-flat transposition: A-flat 6. 

(Fig. 4) demonstrates the notation where this instruction would be applicable, with the tied minims in this instance requiring this request to be carried out.

Fig. 4 – An example of notation where the instruction ‘...corresponding long movement’ may apply



(Stockhausen, 1975: p. 6)

An instruction such as this offers a point of debate – exactly *what* movement would constitute fulfilling this request? Not surprisingly, interpretation differs from person to person in the quest for understanding choreographic music. An instruction such as ‘...the free leg makes a corresponding long movement...’ suggests that the leg itself would need to move, perhaps even elevate in the air. It is not stated whether the leg movement should occur with the foot still on the floor in a sliding motion, or whether the foot should dangle mid-air. Nor does the instruction suggest a direction that the leg should be angled at, or whether the leg should aim its movement in a certain way. However, as the master-classes conducted by Suzanne Stephens at the Stockhausen Course 2004 demonstrated, an axiom had infiltrated the convention of performing this instruction. Here, it became evident that Stockhausen’s ‘corresponding movement’ invariably involved sliding the foot of the ‘free leg’ in a circle along the floor for the duration of the rhythm, as was illustrated by a performance of *Der Harlekin* (1975), in which the instructions for the feet are the same as that of *Der Kleine Harlekin* (1975). The performer in this instance, Marcelo González from Argentina, interpreted this instruction by sliding his foot along the floor in a circular way. This was certainly accepted by Stockhausen himself, who approved highly of Marcelo’s performance. In this example of choreographic music, it seems that an ‘unwritten’ performance practice had been established.

It is easy to see that physical limitations or abilities may in fact, inform interpretations of movement instruction. Prior to witnessing Marcelo’s performance, I had interpreted this movement – making the free leg correlate to longer note durations – as one where the leg would dangle in the air, perhaps moving slightly. This interpretation was informed largely by the fact that at the time of initially practicing *Der Kleine Harlekin*, no other movement occurred to me as being an alternative.

Nonetheless, this suggests that the understanding of choreographic music to date, in particular the compositions of Karlheinz Stockhausen, has been influenced by well-established practitioners' own interpretations, allowing standardisations such as these to become an accepted reproduction of the composer's instructions. With more research conducted in the field of choreographic music however, performer interpretation may become better informed, enabling performers to relinquish the obligation to follow convention. This may consequently allow the choreographic music practitioner to present fresh ideas in this performance practice, particularly from the perspective of interpretation. This idea will be expanded upon in section four, 'Case Studies', which includes a discussion of interpretative issues as expounded by choreographic musicians, as well as their discoveries of preparatory performance strategies.

4. Case Studies

This section will focus on three aspects; performance artists who practise choreographic music; the conceptual design of choreographic music in the Western art music tradition and its development; as well as an exploration of performance preparation techniques as commended by various practitioners. Acquired through fieldwork investigation, much of the data pertaining to performance technique was derived from interviews conducted at the Stockhausen Course 2004, as well as observations gathered from attending master-classes, rehearsals as part of the course, as well as individual tuition I have received since.

Artists of Choreographic Music

Performers who have actively propagated the choreographic music output of Stockhausen include clarinettist Suzanne Stephens, flautist Kathinka Pasveer and Marco Blaauw. These artists are just some of the many who work with Stockhausen on a regular basis, recording and performing his pieces, many of which are choreographic. Trumpeter Marco Blaauw, who first performed with Stockhausen in 1993 and has been working regularly with him since 1998, associates the craft of music as ‘work[ing] on your person through working on your instrument’. In an interview conducted at the Stockhausen course (2004), Blaauw discussed his incorporation of movement into music. According to him, ‘there are not many composers who dare’ to delve into choreographic composition’, which did not deter the trumpeter from occasionally including movement in some pieces nonetheless. Blaauw states: ‘sometimes you play a recital in a beautiful building or church or whatever, and it’s sometimes really appropriate for the piece and for the audience for me as a performer to just move... to some other space and play the next bit from there, and play the next piece from that side...’

The Experience of the Practitioner

With a significant amount of Stockhausen repertoire featuring choreographic elements, it is little wonder that many of the participants at the annual Stockhausen Course 2004 had developed their own performance strategies of choreographic music. Widely regarded in Austria for her extraordinary abilities on the clarinet, participant Petra Stump has recorded and performed for Stockhausen, inciting her to discover her own methods of efficient movement. When interviewed, Stump commented in particular on tension in the body and its effects on choreographic music. Relaying her own experiences pertaining to this matter, Stump explained that in order to move effectively in choreographic music, one must avoid being physically ‘tight’. Finding it astonishingly easier to perform when tension was avoided in the body, Stump cited this approach as being successful: ‘...you have to be loose if you

want to move... I started to learn to get loose always'. In addition to being purposeful in choreographic music, this 'looseness' elucidated for her a universal performance application as a more relaxed body awareness, born out of necessity due to choreographic music preparation, replaced a previously less efficient body use.

Within the interview, Stump also commented on the interpretation of choreographic music. It seemed that the assumed conventions oftentimes present in the performance of Stockhausen repertoire were not synonymous with Stump's initial interpretation of instruction:

'...sometimes I look at the music and think, oh yes, it is very logical to do this now, and then I also... thought I shouldn't move like that because I feel something else'.

Obviously feeling a desire to be as faithful to the composition as possible, Stump actively sought advice from musicians who have worked directly with Stockhausen on certain pieces in order to achieve accuracy:

'...usually when you talk to someone, because the pieces are written for special people [for example, pieces such as *Xi* (1986), which is dedicated to Kathinka Pasveer] maybe for them it's quite clear [the movement instructions]...'

Stump found upon querying authoritative performers of the Stockhausen repertoire, such as Suzanne Stephens, that flexibility is allowable in the interpretation of movement instruction. Creating greater ease in the execution of instruction for the performer, Stump found that '...you are allowed to change something, so if you don't feel well with something [*sic.*]'. This comment infers how interpretation can be influenced and in fact determined by physical limitations of the musician. Indeed, it is possible to achieve a vast variety of physical movements in choreographic music, as the process of interpreting written instructions for gestures may provide leniency in the physical outcome. For example, when Stockhausen asks the clarinetist to 'raise right leg' (Stockhausen, 1975: p. 6) in *Der Kleine Harlekin*, he does not state exactly how high – obviously, the higher the leg lift, the more physically demanding this movement might prove to be. However, the performer could legitimately choose to lift that leg only a few centimetres, without actually contravening the written instructions.

Economy of movement – arguably a vital component of technical proficiency on any instrument, at any level of ability – may be a factor for further influencing the development and interpretation of choreographic music. In relation to choreographic music, there is benefit in applying principles of moving economically to extra-instrumental movement⁹, simply as a

⁹ Extra-instrumental movement: i.e., movement that is not a direct product of playing one's instrument

means of gaining the most productivity from the physical self. However, it would seem that many musicians, upon commencing pieces from the choreographic music repertoire for the first time, often find that the physical challenge of moving in an extra-instrumental fashion leads to physical discomfiture as economy of movement is overlooked, superseded by the desire to achieve synchronicity of movement and music. What may appear to be an obvious method of movement in a choreographic music piece may in fact utilise muscle groups that do not properly support certain movements in an economical manner.

Trumpeter Marco Blaauw finds value in collecting informative advice on performance from a multitude of sources. Blaauw, who views himself as ‘...not a natural gifted player’, used this somewhat disheartened approach as a strong factor in encouraging himself ‘to figure out every single step on the trumpet’. Whether or not it was due to his work with Stockhausen, or whether he developed an interest in these areas as a matter of coincidence, Blaauw has sought training from ‘tai chi teachers, singers, yoga... all kinds of different stuff’. Furthermore, he has had training in Feldenkrais, has worked with choreographers, to which he likened to an ‘experiment’ of ‘moving with the music’. As well as this, Blaauw has been known to include movement in compositions that did not necessarily request it:

‘... I played pieces, and the composers, they didn’t ask for movements, but I just added to them because I felt like it...’

Blaauw’s openness to experimentation and discovery is perhaps the major reason as to his successful career and reputation for being able to recreate a piece of choreographic music accurately. When asked whether he utilises mental visualisation away from the instrument in preparation for a choreographic composition, Blaauw claimed that although incorporating such a practice would be ‘ideal’, in fact, it is ‘always back and forth... it’s directly with the instrument, then mentally’. Continuing in his explanation of his preparation process:

‘...after a while you start playing from heart, and then it’s... it’s kind of... it seems not an extra effort to start movement...’

In terms of committing a choreographic composition to memory – a factor that can overwhelm many musicians, Blaauw commented:

‘... I think that... learning music, combining it with movement sets a lot faster in your brain, so physical action is actually a good thing for... the long term memory... for music, maybe it’s short term memory first, you practise, and then you soon feel like moving...’

The aspect of committing a piece to memory is an important factor for consideration, as this demand can often deter potential performers of choreographic music. Literature regarding the performance practice of musicians such as Bruser (1997) acknowledges this aspect, citing the 'need for precision' as being instrumental in performance nerves. In addition to this, the fear of 'blanking out or making blunders in front of an audience' can often be a motivation for 'musicians to overpractice... afraid of not practicing enough, they injure themselves by practicing too much' (Bruser, 1997: p. 18). By taking short cuts in preparation or utilising one's body in an unskilled way, the danger of injury is very real, and will be extrapolated upon in greater detail in the following chapter: 'Determining Rehearsal Strategies for Effective Performance Outcomes of Stockhausen's *Der Kleine Harlekin* (1975) and *In Freundschaft* (1977)'.

5. Determining Rehearsal Strategies for Effective Performance Outcomes of Stockhausen's Der Kleine Harlekin (1975) and In Freundschaft (1977)

This section aims to examine rehearsal strategies most beneficial for a choreographic music practitioner. Aside from helping to avoid preventable injury, investigation into the rehearsal techniques of choreographic music has revealed the necessity of 'cross training' in preparation for this genre of music performance. It is through the inclusion of physical training as part of a musician's practice regime that can provide performers with substantially greater control of the body – a crucial element to a convincing choreographic music performance. While there is benefit in studying renowned forms of body training such as The Alexander Technique, Feldenkrais or Dalcroze, the end result of such training focuses on enhancing one's posture, and to essentially find better ways of accommodating for the body's natural position. Such instruction was not intended for purposes such as the manipulation of one's body while proficiently performing on an instrument, however, the fundamental ethos of perfecting one's posture is an invaluable tool in successful body training. In being conscious of one's posture when preparing some of the more physically exerting components of choreographic music, a significant contribution is made toward minimising the chances of injury, as well as greater success in performance.

The incorporation of physical training as a rehearsal strategy allows for the performer to focus on elements vital to choreographic music such as stamina, cardiovascular fitness and muscular/skeletal development. A series of interviews conducted by the author of this project investigated performance strategies of choreographic music, with many of the interviewees emphasising immense value in maintaining physical fitness. Many musicians included activities such as jogging, swimming and yoga amongst their training activities, often citing that stamina and strength were greatly enhanced through this method of performance preparation – both of which are fundamental in effectively performing choreographic music. The level of stamina required for choreographic music is more often than not at a much higher level than conventionally performed music, similar to the level of exertion required for sporting activities. With a performer dancing and playing at the same time, it is to be expected that stamina levels will be reduced in the event of choreographic music. This inexorably necessitates performance strategies that can compensate for this loss, such as meticulous physical preparations.

Muscular strength is another necessary element for the choreographic musician; enabling greater control, therefore persuasive interpretation, it is also effective in avoiding injury. In strengthening the body, the muscles are able to become more adaptable and supportive of the posture. Calais-Germain's text *Anatomy of Movement* (1985) points out that the *deltoid* muscle – located in the upper arm region, giving the shoulder “its characteristic round shape” (p. 126) actually acts as a “shock absorber to protect the joint from impact”(ibid). This undoubtedly becomes more effective in accordance to the strength of the muscle. However, a secondary reason to focus on strength in developing performance strategies of choreographic music is often a matter of consequence, with pieces such as *Der Kleine Harlekin* and *In Freundschaft* requesting actions that unavoidably require strength and control. Some examples of choreographic music ask the performer to assume positions that may test muscular strength, often utilising postural stances that are foreign to conventional performance practices.

In order to thoroughly explore questions such as strength, stamina and even balance, this section will discuss preparatory techniques for each selected choreographic music technique in three sections. The first part, **Action**, explains the basic movements required for selected examples of choreographic music, the second section, **Musical Excerpt**, exemplifies the movement in question, and is followed by a **Physical Overview** which goes into further detail regarding the muscular and postural elements associated with the movement. Many of these actions were selected on criteria such as the degree of extraneousness to conventional clarinet playing, as well as the level of difficulty in accordance to my own playing ability.

Action: Alternately pointing clarinet from left to right, up and down while playing.

Toward the end of *Der Kleine Harlekin*, the player is required to alternate the direction of where the clarinet is pointed in accordance to the melodic material. Here, melodic fragments that comprise a low tessitura are to be performed with the clarinet pointing to the left, and consequentially, melodic material of a high tessitura is to be performed with the clarinet pointing to the right. In addition to this, the instrumentalist must point the bell of the clarinet in accordance to the height or depth of the note being played, meaning that throughout this section the clarinet is in a state of constant transit. The issue of strength in choreographic music is pertinent here, with specific muscle groups becoming active that are not usually present in conventional music performance. In examination of these muscle groups in order to better inform oneself of beneficial approaches in rehearsing choreographic music, there is value in initially isolating and understanding functions of the muscular regions that may be utilised. Primarily, it would seem that the most obvious physical focus for the section in *Der Kleine Harlekin* as demonstrated in Fig. 5 would be the arms. As the clarinetist lifts and

points the instrument sometimes at extreme heights, different muscles are forced to assume the weight and control of the clarinet as the instrument is lifted and pointed in its various directions.

Musical Excerpt

This musical excerpt from *Der Kleine Harlekin* demonstrates not only the extremity of movement with the clarinet pointing in different directions, but also posits the question of balance as the choreography requires alternation of weight from one foot to the other. Given that one foot may be assuming the entire weight of the body, with the upper torso and arms also extended, balance and coordination become important factors in rehearsal techniques.

Fig. 5 - Alternately pointing clarinet from left to right, up and down while playing

MARCH DANCE
(J on 112)

the low pitches to the right,
the high pitches to the left

Clarinet

Feet

Clarinet

Feet

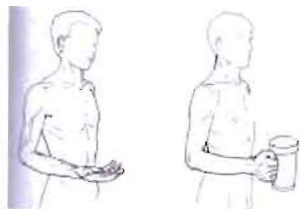
poco rit.

(Stockhausen, 1975: p. 7)

Physical Overview

With moving the clarinet in such a way as aforementioned, the placement of the arms undergo a radical change from what may be expected in a conventional playing style. With the clarinet normally played with the arms relatively close to one's torso, much of the weight of the instrument is assumed primarily by the *biceps brachii* (frontal upper arm), the *brachioradialis* (inner upper arm, just above the *humerus* (elbow), extending down to forearm) and the *brachialis* (inner upper arm, extending down to inner *humerus*):

Fig. 6a – Everyday poses similar to holding a clarinet



Note: the arm is close to the torso; the elbow is bent in a similar position to how one may hold a clarinet.

(Calais-Germain, 1985: p. 21)

Fig. 6b – *Biceps Brachii* – (posterior view)



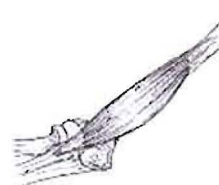
(Calais-Germain, 1985: p. 138)

Fig. 6c – *Brachioradialis*



(Calais-Germain, 1985: p. 139)

Fig. 6d – *Brachialis* (anterior view)



(Calais-Germain, 1985: p. 139)

Blandine-Germain describes any weight that counters the contraction of a muscle group as **resistance**, stating “...the brachialis and biceps brachii... can be opposed by several types of resistance” such as “the weight of the forearm itself... the weight of some external object [such as a clarinet] attached to the forearm...” (p. 21). Both of these are pertinent, if they are not movements of *abduction* (moving away from one’s physical median plane), as the position of the clarinet is normally confined to a *proximal*¹⁰ position, such as that illustrated in **Fig. 6a**.

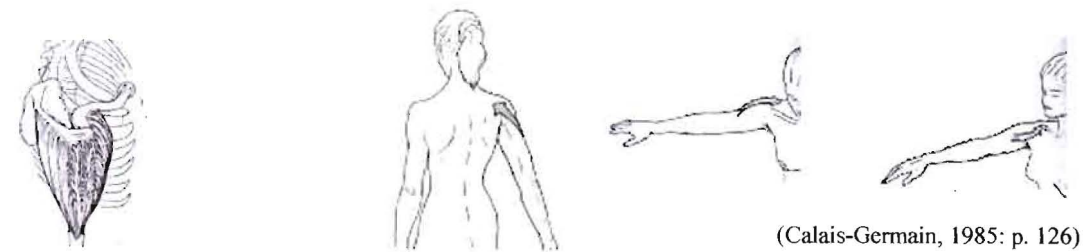
The application of choreography within the musical excerpt in **Fig. 5** requires that the placement of the arms, instead of being in a *proximal* position (see **Fig. 6a**) must undertake an action known as “*flexion*”¹¹ of the shoulder” (Blandine-Germain, 1985: p. 2). The term *flexion* indicates a part of the body that moves forward and away from the median plane. However, because the movement requires the clarinet to be pointing upwards when playing in a high tessitura, the action is deepened, becoming an *abduction* (moving away from one’s body) of

¹⁰ Definition of *proximal*: “closer to the trunk, or some major joint” (Blandine-Germain, 1985: p. 6)

¹¹ “...the median, or midsagittal plane divides the body into symmetrical right and left halves. Any plane parallel to the median plane is called a sagittal plane. A movement in a sagittal plane which takes a part of the body forward from anatomical position is called **flexion**” (Blandine-Germain, 1985: p. 2)

the arms. While the weight is still undertaken by those muscles aforementioned, there is a noticeable shift to muscles in the upper shoulder/neck area, such as the *deltoid* muscle (Fig. 7a), *pectoralis major* (Fig. 7b) and *trapezius* (Fig 7c):

Fig. 7a – Deltoid Muscle and associated movements



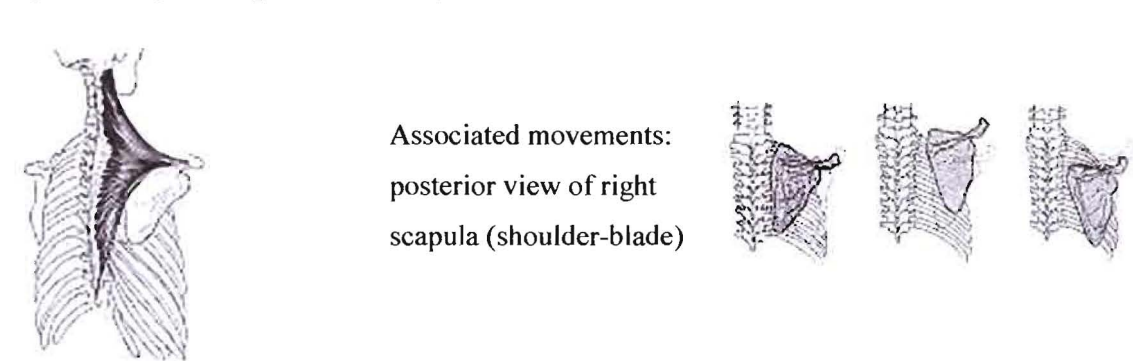
(Calais-Germain, 1985: p. 126)

Fig. 7b– Pectoralis Major (anterior view) and associated movements



(Calais-Germain, 1985: p. 124)

Fig. 7c – Trapezius (posterior view) and associated movements



Associated movements:
posterior view of right
scapula (shoulder-blade)

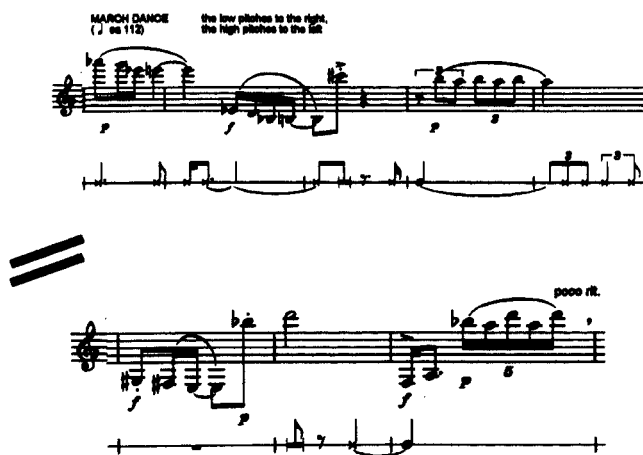
(Calais-Germain, 1985: p. 118)

In the case of the *trapezius* muscle (neck/shoulder area), there can be a tendency to contract the muscle further when moving the clarinet in an upward direction. Throughout preparation of not only *Der Kleine Harlekin* (1975), but also *In Freundschaft* (1977), I found that in order to relieve discomfort from tensing under-used muscles, my body would react by contracting muscle groups together, resulting in incorrect muscle usage and subsequently, slight pain. However, with minimising tension as much as possible, the muscles appeared to find a natural way to assume the weight of holding the clarinet up high. The result was that the larger

muscles in the back, such as *latissimus dorsi* were assuming the majority of the weight. Breath flow was steadier due to this, with the diaphragm and adjacent frontal torso muscles becoming more effective in maintaining strong support:

To identify which muscle groups are used, one can practically determine this with a simple exercise. Standing up, imagine that you are holding a glass of water in either your left or right hand. Ensuring that the arms are in a proximal position to your body, allow the elbows to hang down comfortably, in a normal position. With your other hand, apply pressure onto the forefinger and thumb – the top part – of your ‘glass-holding’ hand. Notice which muscles in your arm are feeling resistance – initially, it should be felt in the *biceps brachii*, the *brachioradialis* and *brachialis* (see Fig. 6b, 6c and 6d – p. 22). Next, raise your ‘glass-holding’ hand (as in Fig. 6a) right up, keeping the pressure steady from the other hand. You should feel some resistance now in the *triceps brachii*, *deltoid*, *pectoralis major*, and *trapezius* (see Fig. 7a, 7b and 7c – p. 23). These two actions accurately re-enact the movement of the clarinet that is required in the musical excerpt of Fig. 5 (p. 21), replicated as follows:

Fig. 8 – Notation from Fig. 5

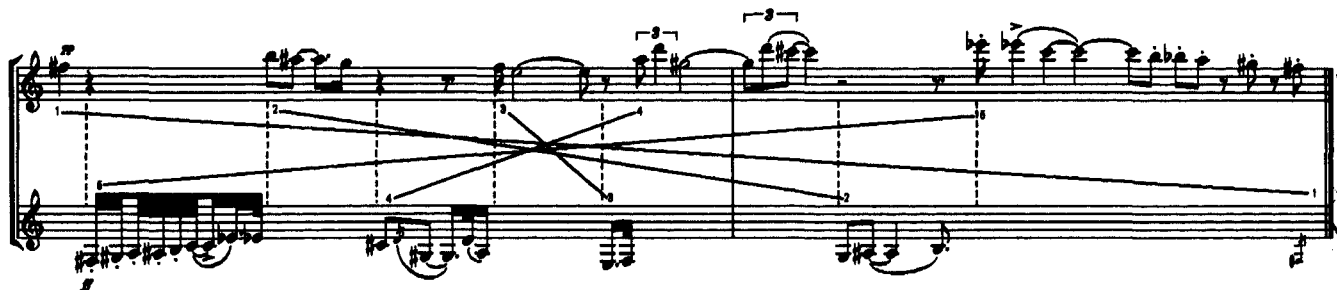


(Stockhausen, 1975: p. 7)

Stockhausen's *In Freundschaft* (1977) extends the idea of tessitura-defined movement as presented in the excerpt from *Der Kleine Harlekin* (1975) (Fig. 5 and 8). In fact, with the majority of the piece based on pointing the clarinet to the left when playing in a lower tessitura and vice-versa, the repetitious nature of these actions perhaps demand more from the aforementioned muscle groups in *In Freundschaft* than they do in *Der Kleine Harlekin*. The piece itself is derived from a formula that Stockhausen created as a preliminary to the composition of this work, which outlines the tessitura division, and therefore the direction in

which to point the clarinet for each portion of the melodic material. The formula is divided up into five sections, and that which appears in the higher tessitura also appears in the lower tessitura, but backwards. This is made clear in Fig. 9, where each staff is partitioned into five sections, represented by a broken bar line. For purposes of elucidation, each portion of melodic material within each of the five sections is allocated a number: the top staff is labelled 1 through to 5, whereas the bottom staff is labelled 5 counting backwards back to 1. Each melodic portion is the same in both the lower and upper staves; however, all melodic portions on the bottom staff are presented in retrograde, and in reverse order to the top staff. This formula is repeated sequentially throughout the piece, undergoing many transpositions and other transformations in its progression. The following example (Fig. 9) is the notation for the formula to *In Freundschaft*, but appears in the score as the exposition of the theme:

Fig. 9 – Formula for *In Freundschaft* – Applying dynamic via tessitura consideration



(Stockhausen, 2002: p. 2)

Action: moving clarinet straight up and down at extreme angles

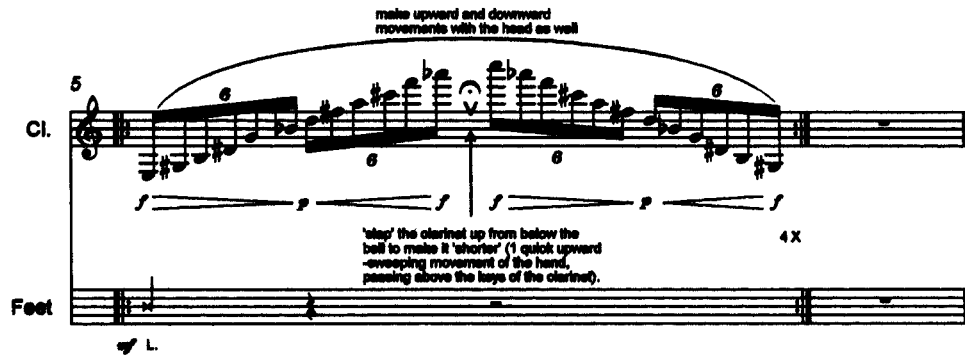
Similar to the actions as per discussed in reference to the excerpts of Fig. 5 and Fig. 9, The opening section of *Der Kleine Harlekin* asks that the clarinettist moves their instrument up and down in accordance to the intervallic structure. However, this is not an *abduction* movement (moving away from one's body), but rather a *flexion* movement as the clarinet moves up and down in front of the body only.

Musical Excerpt

The difficulty with this section is not only muscle strain in the arms as previously discussed, but also other physical regions such as the throat and neck. For example the tessitura of the excerpt in Fig. 10 demonstrates an extremity of intervals, ranging from the lowest note on the clarinet (concert D3) to the altissima range (concert B-flat 6). As the top note of this musical passage is one of the highest notes on the clarinet, there is an implicit suggestion that the action of moving the clarinet up and down in accordance to intervallic structure should be exaggerated to its utmost. Given this, the clarinet, when playing the highest note in this

section, could end up nearly vertical, potentially incurring discomfort and constriction in the throat and neck.

Fig. 10 – *Der Kleine Harlekin* – moving clarinet up and down in accordance to intervallic structure



(Stockhausen, 1975: p. 1)

In moving the instrument up and down in extreme measures, it is not only the element of potential discomfort for the performer that is of concern, but also how this action may affect the overall sound. In an interview with Petra Stump (2004), it was revealed that the added element of moving the clarinet as required in the opening of *Der Kleine Harlekin* (Fig. 9) heightened the difficulty of attaining the already hard-to-attain altissima notes:

“...in the beginning it was very hard to me... in the little harlequin you have to go very high with your clarinet, and I couldn’t play up there, and I couldn’t play high notes...”

Stump’s experience is symptomatic of the difficulties of the opening of *Der Kleine Harlekin*. The instructions to play this passage in synchronicity of pointing the bell of the clarinet either directly up or down may incite the performer to a preoccupation with the mere combination of movement and music. The prevailing reason for this focus on synchronising movement and music in this passage in particular is simply due to the fact that the height and depth of the movements are extreme, as is the pitch range. Henceforth, if a musician does centre entirely on this aspect of performance preparation, allowing the priority to be solely focused on achieving the passage in question, the unfortunate consequence that may occur is that considerations of physical efficiency could be overlooked. In the same way that dancers sometimes ignore slight physical discomfort only to discover later that there has been irreparable damage caused, a performer of choreographic music may find greater susceptibility to unnecessary pain if correct applications of posture are not initiated as a preventative measure.

Physical Overview

Sharing a similar experience with Petra Stump, my own preparations of this passage of *Der Kleine Harlekin* heralded moments of discomfort. In pointing the clarinet bell in extreme directions such as necessitated by the passage in Fig. 10, the most immediate example of physical pain was a straining of the neck. However, another interview, this time with trumpeter Marco Blaauw at the Stockhausen Course, 2004, elucidated a strategic approach to alleviating neck strain. Blaauw's own performance preparation techniques provided a basis for his suggestions, as he has been an active purveyor of applying gesture with music in his performances for a number of years. Asking me to demonstrate the action in *Der Kleine Harlekin* that prompted my own experience of neck strain, Blaauw requested I sustain the most extreme pose within this action: that is, with the bell of the clarinet straight up in the air. He then showed that if I were to imagine being pulled down from the upper area of my back as opposed to my neck, my stomach muscles became active in supporting the weight of the torso and clarinet, therefore not affecting the neck posture at all. In relying on the midriff region of the body for support, it was evidenced that this action was now much easier to facilitate, as long as it was recognised that indeed the abdominal muscles were responsible for supporting the weight.

In the same *Der Kleine Harlekin* excerpt (Fig. 10), to 'move clarinet up and down parallel with the intervals being played' (Stockhausen, 1975: p. ii), also means that the gesture must point the bell of the clarinet to the other extremity – that is, toward the floor. This requires the clarinettist to bend down toward the ground in an effort to portray the deepening intervals of the melodic section. The following example (Fig. 11) features three comparative illustrations that emulate this movement. The first, a photographic illustration, was taken from a live performance of a choreographic work, *Earth* (2003), for clarinet and dancer by Karen Heath. The succeeding two diagrams depict the simple action of picking up a ball – however, the adopted stance is identical to that of the clarinet performance photograph. The first two pictures reveal a curvature of spine – known in this instance as a “‘loaded’ vertebral flexion” or “flexing the lumbar spine while lifting a heavy object” (Calais-Germain, 1985: p. 39), which puts inefficient pressure on muscles. The succeeding illustration is a better adaptation of posture for the same action:

Fig. 11a – Comparison of movement:

Incorrect stance:



and



Correct adaptation
of same action:



(Photo credit: Felicity O’Dea, 2004)

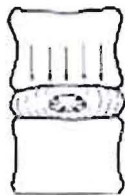
(Calais-Germain, 1985: p. 39)

(Performer: Karen Heath)

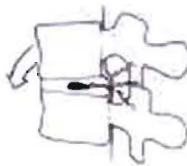
The first illustration in **Fig. 11** demonstrates how it may appear appropriate in performance to assume poses that may in fact hinder physical efficiency. It is worth noting that at the time of performance (2004), I was unaware of the physical repercussions that could possibly in adopting such poses. According to Calais-Germain, it is through actions such as that exemplified in **Fig. 11** that may incur a “herniated or ruptured disc” due to fluid escaping from regions in the back, thereby “compressing the nerve roots such as the sciatic nerve which exits from the lumbar region, where pressures on the vertebral column are most intense” (Calais-Germain, 1985: p. 38). The following illustrations elucidate the impact a loaded vertebral flexion may incur for the delicate spinal discs:

Fig. 12a – Vertebral Flexion

Where the
disc is located
between the bones
of the spine



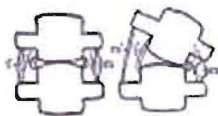
Profile view
of vertebral
flexion



(Calais-Germain, 1985: p. 38)

Fig. 12b

anterior view of
vertebral flexion



(Todd, 1937: p. 79)

Action: Stamping feet as part of the choreographic movement

An interview with clarinettist Roberta Gottardi (participant – Stockhausen Course 2004) revealed an example of physical discomfort she experienced when rehearsing for *Harlekin* as well as *Der Kleine Harlekin*. When asked whether or not she had experienced any injuries whilst preparing these pieces for performance, Gottardi cited that she found that some of the footwork in these Stockhausen pieces had resulted in pain:

“...for example when practising the dance, you have to stamp with the feet, no? And also, a lot with the heel, and after a while it hurts so much, and you just have to stop for a few days...”

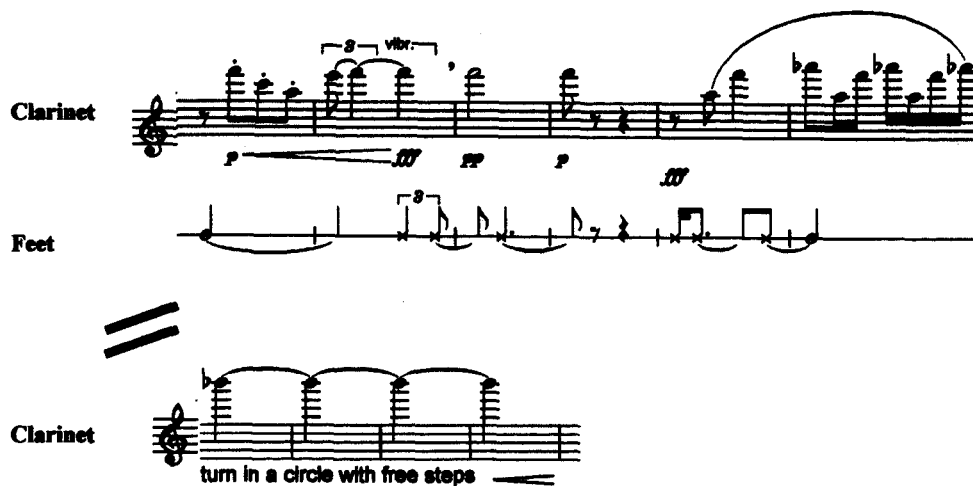
While Gottardi's discomfort was by no means debilitating, it is worth acknowledging the potentiality for further complications if, for example, Gottardi were to ignore the pain. If she were to not stop her rehearsals “for a few days” to allow for recovery of the feet and heels, an inevitable augmentation of injury would more than likely occur.

However, there are other considerations concerning Gottardi's experience of foot and heel pain during her preparations for *Der Kleine Harlekin* and *Harlekin*. First of all, the velocity that is required from the performer when stamping or placing the heel upon the ground varies depending on the dynamic instruction. It is essential to remember that while the visual aspects of the choreography within these two pieces require technical consideration from the performer, the foot movements also function as a crucial component of the overall sound. Rhythmically, the foot movements do not necessarily correlate to the melodic movement of the clarinet line; therefore clarity in both parts is needed in order to produce an accurate reproduction of the polyphonic ‘duet’ between the feet and clarinet.

Musical Excerpt

The following example (Fig. 12) demonstrates the differentiation of rhythm between the foot and clarinet lines, as well as dynamic factors that imminently influence how hard one may thrust the foot or heel into the ground. Taken from *Der Kleine Harlekin*, the following excerpt presents a wide range of dynamics, from *pianissimo* to triple *forte*. These dynamic differentiations affect both the clarinet and foot notation.

Fig. 13 – Foot movements in synchronicity with musical performance



(Stockhausen, 1975: p. 6)

The instruction “turn in a circle with free steps”¹² has the potential to invite an interpretation of a fluid movement, particularly as the musician must “move in a circle” (Stockhausen, 1975: p. 3). In order to produce a convincing representation of fluidity and smoothness of movement, it may be necessary for the clarinettist to disengage the rhythm of the foot work from the inherent pulse of the music.

Physical Overview

Remembering that the dynamics for the feet (lower stave) are to be the same as the dynamics of the clarinet, there is a great deal of volume variation in this excerpt alone. For the instances where the rhythms are short, the velocity of the footfall determines the dynamic differentiation. However, the longer notes require an altogether different technique, as the foot is to continue its sound by sliding along the ground. If the dynamic is *piano* (such as the first note for the feet in Fig. 13), then the foot slide can be of a moderate to slow speed. Conversely, if a *forte* dynamic is applied to the same rhythm, the foot must slide faster in order to achieve a comparable volume.

Another consideration with longer rhythms in the lower stave is that although the foot is to slide in order to produce sound, the commencement of such a note still requires a definite start. This was pointed out to me by my supervisor Peter Handsworth (clarinet), who suggested a most effective performance strategy of defining the articulation of the long notes in the lower stave: to initiate each note by tapping one’s foot lightly. After much experimentation, I found that by tapping with the balls of my feet (whilst wearing dance

¹² Translated from the original German: *mit beliebigen Schritten im Kreis drehen*

shoes), I was able to effectively create the desired sound. Otherwise, using the heel as a means of commencing a note merely resulted in a dull noise that was painful to produce. I also attempted using the toes, however, through this medium I was not able to generate the resonance needed to project the sound in performance.

Conjoining this technique of 'foot slapping' as a means of articulating the foot slides for long rhythms, was the crucial element of balance. In performance preparation, it became clear that absolute control of the foot taps and slides were only possible if the supporting leg was completely stable. One's entire body weight had to be placed on the supporting leg; otherwise the foot slides would be hindered by weight imbalance. Susan van den Ham (dance supervisor) assisted me a great deal in overcoming this dilemma, administering body-weight shifting exercises that focused exclusively on the balance of the body. Namely, these exercises were derived from Feldenkrais technique, and comprised of walking with a slow movement from one end of the room to the other, while paying particular heed to one's shifting weight on either foot. This in turn prompted a rehearsal strategy of practising such weight transitions in the context of the notation within *Der Kleine Harlekin* with extreme slowness, allowing the balance to be completely stable before initiating the next movement.

Conclusively, the research indicated a number of aspects to consider when rehearsing a choreographic work; in particular, the most efficient methods of movement are not always the most 'obvious' or 'everyday' gesture that one should utilise. Even with this knowledge, the assistance of a dance practitioner is invaluable – it seems common for musicians to adopt inefficient acture that initially feels acceptable at the time but will create inevitable complications with prolonged use. In addition to this, finding ways to utilise the larger muscle groups – particularly the core stability section within the torso – assists in efficient and strong body use.

Another aspect to this is learning to train one's body in accepting these moves and remembering them in the course of performance preparation. As a means of kinaesthetic preparation, it is effective to initially learn movements very slowly, being aware of every weight shift that may occur. This will elucidate also exactly which muscle groups are in action at the time, providing the choreographic dance practitioner with knowledge of how to most effectively use their body.

6. Conclusion – Future Developments of Choreographic Music

‘...THE LITTLE HARLEQUIN is a roguish, exuberant dance musician and a bubbly performing artist, who could inspire a **more versatile**¹³ kind of musician for the future’

(Stockhausen, 1975: p. i)

Stockhausen’s supposition that *Der Kleine Harlekin* may encourage greater versatility from musicians is apposite; while choreographic music performances are currently far from prolific, there is great potential yet for this genre to develop. The combined elements of choreography, memorisation as well as execution of musical material, all contribute to a challenging mode of performance. The culmination of these elements could stimulate more musicians in the future who, in applying choreographic aspects to their art, find themselves with greater body cognition and good health, thereby avoiding the stigma of the sedentary musician.

In researching various rehearsal techniques for Stockhausen’s *Der Kleine Harlekin* and *In Freundschaft*, it became evident that the incorporation of all the aforementioned aspects was paramount to a successful performance outcome. The necessity of training specifically for choreographic music challenged pre-conceived notions I had of my own physical limitations, and eventually induced a substantial change in my approach to rehearsal strategies. Furthermore, the knowledge that a certain level of fitness had to be maintained throughout my performance preparations prompted better eating habits, constant posture awareness and an overall healthier lifestyle. Undoubtedly, it seemed that every action undertaken in day-to-day living had a certain impact on my practise efficiency, thus catalysing an enhanced awareness of health and body.

As I sought to find ways of physically coping with the demands of both *Der Kleine Harlekin* and *In Freundschaft*, new possibilities for interpretation were revealed that paralleled my own physical capabilities. Consequently, as physical training intensified throughout the course of preparations for the recital¹⁴, interpretations for both *Der Kleine Harlekin* and *In Freundschaft* altered drastically, depending on the strength, stamina and flexibility I retained at the time. For example, in the initial stages of learning *Der Kleine Harlekin*, I found it a

¹³ This is how the sentence appears in the performance notes of *Der Kleine Harlekin*. Therefore, the bold font is Stockhausen’s own.

¹⁴ The recital, *The Synthesis of Music and Dance: Performance Strategies for Selected Choreographic Music Works by Karlheinz Stockhausen*, was performed at 6.00pm, July 15th 2005 at Monash University, Melbourne.

most strenuous task to maintain the very first note - a 'colour' trill on concert G-flat 6 - for its duration of approximately 30 seconds, while running around in circles on the stage. Recognising that the hindrance to this opening note having a successful performance outcome was of a cardiovascular nature, I trained with a focus on strengthening my stamina in that arena. In short, this entailed aerobic work, running and cycling. Also, as my cardiovascular abilities improved, I intensified my training method by incorporating these activities directly into my clarinet practice: eventually, my rehearsals would include having to quickly run around, and then to jump up and down on one spot while playing the opening trill note of *Der Kleine Harlekin*. This definitely made it easier for the eventual performance execution – with the fact that my training had been so vigorous in preparing for this note; the level of cardiovascular activity in the actual recital seemed rather minimal.

As my rehearsal methodology focused increasingly upon the element of physical training, it seemed that my resulting interpretations were becoming more disparate to axioms already established by practitioners of Stockhausen's choreographic music. For example, in the opening note of *Der Kleine Harlekin*, it was apparent that many choreographic musicians of Stockhausen's clarinet music danced on stage calmly while moving in slow, circular foot steps. Ostensibly, this is a most effective method of conserving energy, however, my preference for interpretation was of a fiendishly manic nature, one that required more active movement. Basing this comparison on the observations I had made during the Stockhausen Course 2004, it emerged that as my level of fitness heightened throughout the course of my research, I was able to exaggerate the choreographic elements of the Stockhausen pieces, in particular *Der Kleine Harlekin*. Undertaken with the assistance of my dance supervisor Susan van den Ham, the amplification of gesture wherever possible resulted in a more theatrical performance outcome. Nonetheless, it remained a priority to avoid an inaccurate rendition of the directions prescribed in the score; something which I felt was achieved in the recital as the descriptions pertaining to the intensity of movement is rarely specified within the notation.

While I felt there were many successful outcomes in the recital proper due to the training practices instilled within my rehearsal strategies, there were elements that I felt could be improved. Notably, this involved my sense of balance, which proved to be a weak area of my performance outcome. Certainly, any difficulties I might have experienced in my balance and stance were augmented by the fact that a spotlight was used for the performance of *Der Kleine Harlekin*, thereby diminishing my visual sense of perspective. With the spotlight cast upon my person in performance, I was unable to see the floor of the stage as clearly as before, which ultimately lessened my awareness of space. For future preparations of *Der Kleine*

Harlekin, I have learnt that it would be beneficial to dedicate more time to rehearsing with a spotlight in context with the instructions of the score.

I found it significant that the outcome of my own performance development demonstrated further possibilities for combining music and movement. Aside from the potentialities of performance that this genre can provide, choreographic music could have other applications: even as a tool through which younger students may improve their overall dexterity. With aptitude in coordination skills, strength and stamina all being rudimentary components of choreographic music, the notion that this genre could contribute to the educational arena of music performance is a topic that begs additional exploration. With the success of Feldenkrais and Dalcroze, it is possible that choreographic music could contribute to the teaching of body awareness and effective movement. From a physiological perspective, co-ordination would be strengthened if it were to become a part of instrumental music programs: curricular inclusion of performing *with* an instrument and dancing at the same time would be likely to augment the abilities of school students. Furthermore, understanding concepts such as rhythm, tempo and phrasing may be better comprehended with the assistance of body movement, similar to the Dalcroze method. Finally, if this were to become an established aspect of musical training, the idea of 'choreographic music' would not be a category belonging only to elite performers and that of 'new' or 'avant-garde' music, but a musical application available for *everyone* at all levels.

Choreographic music such as that found in Stockhausen's repertoire could have greater presence within the concert platform if these potentialities are embraced. However, training techniques for this genre would need to find their place in performance-related musicological discourse, helping to mitigate greater acceptance by musicians. Hopefully as a result, choreographic may become more accessible, particularly so if more composers embrace the genre and create new works for performers of varying abilities. Currently, works that include choreographic aspects include musical material of a high standard, which in turn establishes an elitist association with choreographic music. Yet, in the event of choreographic music finding a presence within educational practices, there would undoubtedly be a need to expand the repertoire to include beginning choreographic music practitioners, thereby making this genre accessible for all musicians.

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for purposes of this research project.

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Appendix B: Informants¹⁶

A heartfelt THANK YOU to all of the following informants and advisors that have assisted in making this research possible.

Ashworth, J.

2004

Composer of choreographic work *SPider Words* (2004) – a piece dedicated to me that I shall perform subsequent to the conclusion of the MA degree

Bittencourt, P.

2004

Saxophonist; Stockhausen Lectures, Kürten; July 26 – August 1
(Stockhausen Course – Interviewee and Informant)

Blaauw, M

2004

Trumpeter; Stockhausen Lectures, Kürten; July 26 – August 1 (Stockhausen Course – Interviewee and Informant)

Branson, A.

2004

Composer; Stockhausen Lectures, Kürten; July 26 – August 1 (Stockhausen Course – Interviewee and Informant)

Dunstan, T.

2004

Composer of choreographic work *Box Modula* (2004) – a piece dedicated to me that I shall perform in my MA recital (July 2005)

Handsworth, Peter

2004-5

Clarinetist; Primary Solo Performance Lecturer, Monash University

González, M.

2004

Clarinetist; Stockhausen Lectures, Kürten; July 26 – August 1 (Stockhausen Course – Informant)

Gottardi, Roberta

2004

Clarinetist; Stockhausen Lectures, Kürten; July 26 – August 1 (Stockhausen Course – Interviewee and Informant)

¹⁶ Definitions:

- 'Informant' in this instance describes an individual who has contributed to this research project via either imparting to me formal training of dance or clarinet performances. This is noted as 'individual lesson' or 'solo performance lecturer' in parentheses. In addition to this, the term 'informant' is also applicable to informal or indirect instruction; i.e. verbally contributing ideas to my performance outcomes as displayed in the master-classes throughout the duration of the Stockhausen Course.
- 'Interviewee' refers to a subject who, as part of the necessary fieldwork research, agreed to be interviewed specifically for the purpose of this research project.

Marelli, Michele

2004 Clarinettist; Stockhausen Lectures, Kürten; July 26 – August 1 (Stockhausen Course – Interviewee and Informant)

Mason, C.

2004 Composer; Stockhausen Lectures, Kürten; July 26 – August 1 (Stockhausen Course – and Informant)

Meyer, Wolfgang

2004 Clarinettist; Solo Performance Lecturer, Karlsruhe Hochschule für Musik, Germany; August 17 (Individual Lesson)

Miller, P.

2004 Viola player; Stockhausen Lectures, Kürten; July 26 – August 1 (Stockhausen Course – Interviewee and Informant)

Runnels, J.

2004 Composer; Stockhausen Lectures, Kürten; July 26 – August 1 (Stockhausen Course – Interviewee and Informant)

Schubert, Robert

2004 Clarinettist; Solo Performance Lecturer, Monash University

Sota-Klemm, Rumi

2004 Clarinettist; Stockhausen Lectures, Kürten; July 26 – August 1 (Stockhausen Course)

Stephens, Suzanne

2004 Clarinettist; Stockhausen Lectures, Kürten, Germany; July 20 (Individual Lesson) July 26 – August 1 (Stockhausen Course)

Stump, Petra

2004 Clarinettist; Stockhausen Lectures, Kürten; July 26 – August 1 (Stockhausen Course – Interviewee and Informant)

van Den Ham, Susan

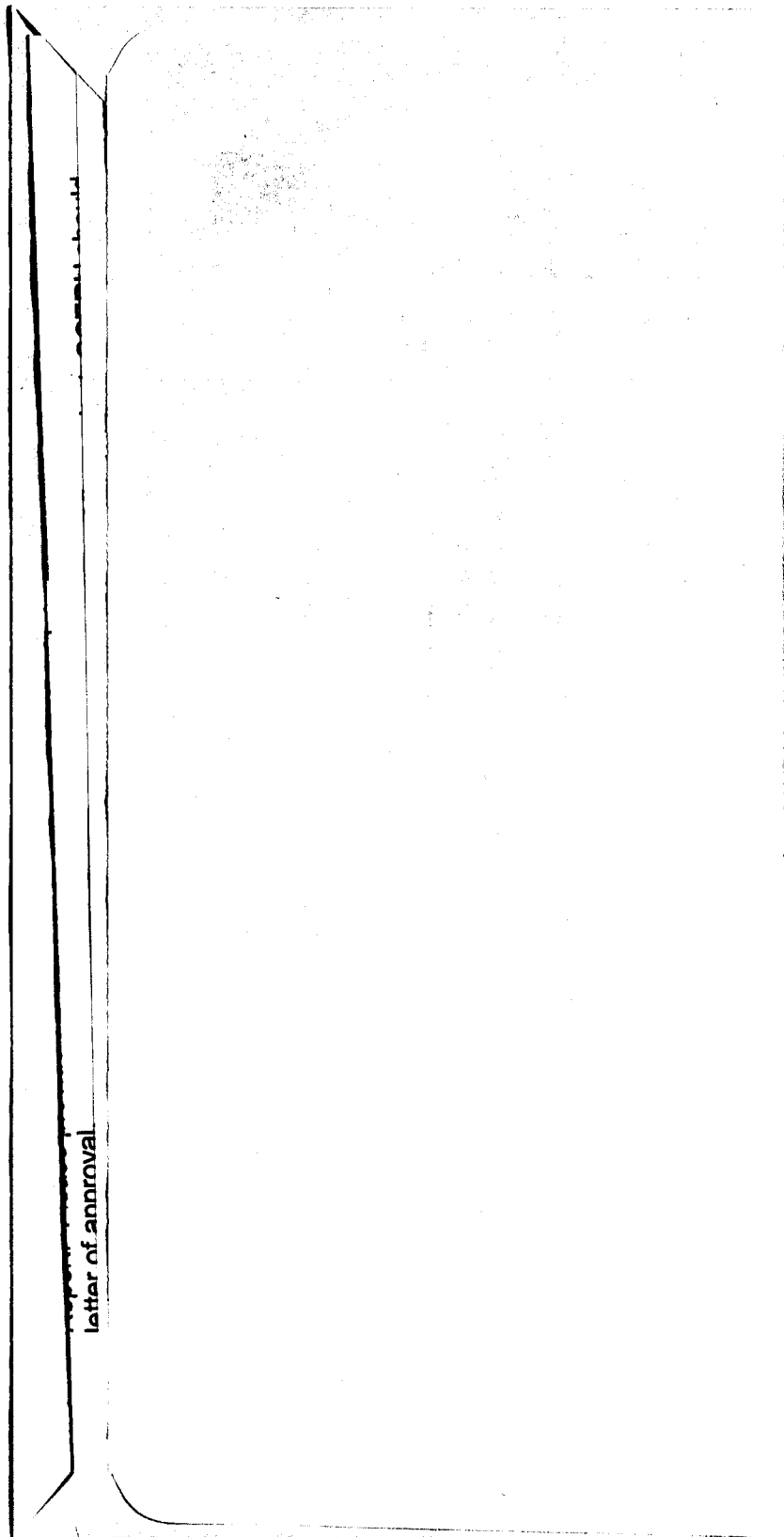
2005 Dance Artist; Solo Performance Lecturer, Monash University

Wolf, B.

2004

***Sound Engineer [assistant to Stockhausen]; Stockhausen Lectures, Kürten;
July 26 – August 1 (Stockhausen Course – Informant)***

Appendix C: Ethics Approval for Fieldwork Research





Standing Committee on Ethics in Research Involving Humans
Research Grants and Ethics Branch
2 August 2004

Dr Joel Crotty
School of Music
Clayton Campus

Ms Karen Heath
School of Music
Clayton Campus

2004/560EA - Physiological aspects of performance, focusing on Karlheinz Stockhausen's In Freudschaft

The above research project has been considered by the Standing Committee on Ethics in Research Involving Humans (SCERH) and, as requested, Expedited Review has been given. Approval for this project has been granted. This approval will be ratified at meeting B5/2004 on 24 August 2004. It is possible that issues may be raised by the Committee at that meeting. If you do not hear anything further you may assume that approval for the project is confirmed.

Terms of approval

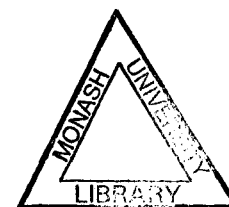
1. This project is approved for three years from the date of this letter and this approval is only valid whilst you hold a position at Monash University.
2. It is the responsibility of the Chief Investigator to ensure that all information that is pending (such as permission letters from organisations) is forwarded to SCERH, if not done already. Research cannot begin at any organisation until SCERH receives a letter of permission from that organisation. You will then receive a letter from SCERH confirming that we have received a letter from each organisation.
3. It is the responsibility of the Chief Investigator to ensure that all investigators are aware of the terms of approval and to ensure the project is conducted as approved by SCERH.
4. You should notify SCERH immediately of any serious or unexpected adverse effects on participants or unforeseen events affecting the ethical acceptability of the project.
5. The Explanatory Statement must be on Monash University letterhead and the Monash University complaints clause must contain your project number.
6. **Amendments to the approved project:** Changes to any aspect of the project require the submission of a Request for Amendment form to SCERH and must not begin without written approval from SCERH. Substantial variations may require a new application.
7. **Future correspondence:** Please quote the project number and project title above in any further correspondence.
8. **Annual reports:** Continued approval of this project is dependent on the submission of an Annual Report. Please provide the Committee with an Annual Report determined by the date of your letter of approval.
9. **Final report:** A Final Report should be provided at the conclusion of the project. SCERH should be notified if the project is discontinued before the expected date of completion.
10. **Monitoring:** Projects may be subject to an audit or any other form of monitoring by SCERH at any time.
11. **Retention and storage of data:** The Chief Investigator is responsible for the storage and retention of original data pertaining to a project for a minimum period of five years.

All forms can be accessed at our website www.monash.edu.au/resgrant/human-ethics

We wish you well with your research.



Dr Andrea Lines
Human Ethics Officer (on behalf of SCERH)



Appendix D: Program Notes

**The Synthesis of Music and Dance: Performance
Strategies for Selected Choreographic Music Works
by Karlheinz Stockhausen**

Karen Louise Heath
BMus (Hons), BEd (Monash University)

Submitted in partial fulfilment of the requirements for the degree of Master of Arts
(Music Performance)

Monash University, Clayton Campus
15th of July 2005
6.00 pm

PROGRAM

STOCKHAUSEN:
Der Kleine Harlekin (1975)

STOCKHAUSEN:
In Freundschaft (1977)

DUNSTAN:
Box Modula (2004)

HEATH:
Maze Pieces Volume One (2005)

Choreographic Music

'Choreographic music' refers to the genre within the Western art music paradigm where the musician is required to carry out dance movement at the same time as performing on an instrument. The term itself – choreographic music – was developed within my Master of Arts – Music Performance research project, *The Synthesis of Music and Dance: Performance Strategies of Selected Choreographic Music Works by Karlheinz Stockhausen* (due to be submitted late July 2005). Exploring techniques of rehearsal preparation, performance approaches as well as interpretive issues, this research project revealed possibilities of physiological discomfort and injury for a musician attempting choreographic music without sufficient body awareness. As a means of preventing such unbeneficial performance outcomes, this research project investigated physical movement promoting optimal body efficiency, and its direct application to excerpts from Stockhausen's *Der Kleine Harlekin* (1975) and *In Freundschaft* (1977).

While select examples of dance literature provided useful information regarding acture¹, the lack of extant resources pertaining to choreographic music necessitated extensive data collection via fieldwork. This took place at the *Stockhausen course 2004* in Kürten (Germany), where I was fortunate enough to receive individual tuition from Suzanne Stephens – an exponent of Stockhausen's clarinet literature and life partner to the composer. As well as this, I performed *In Freundschaft* (1977) in the clarinet master-classes held at the *Stockhausen course 2004*, where I was given many helpful performance suggestions by Stephens as well as other course participants.

Pertinent data accrued at the *Stockhausen course 2004* supported my hypothetical notion of utilising physical training as an integral part of performance preparation, with many choreographic music practitioners expounding the advantages of training specifically for a choreographic work. Chiefly citing activities such as jogging, swimming and yoga as an effective method of performance preparation, many of these interviewees also postulated the benefits of dance instruction. This was confirmed with my own performance preparations, which incorporated karate, yoga, swimming, jogging, gym work and weights into my practise routine. In addition to this, Monash University kindly granted me specialist dance instruction that assisted my abilities in strength, balance and cardiovascular fitness.

¹ Acture: A term developed by F.M. Alexander relating to the stance and posture of movement.

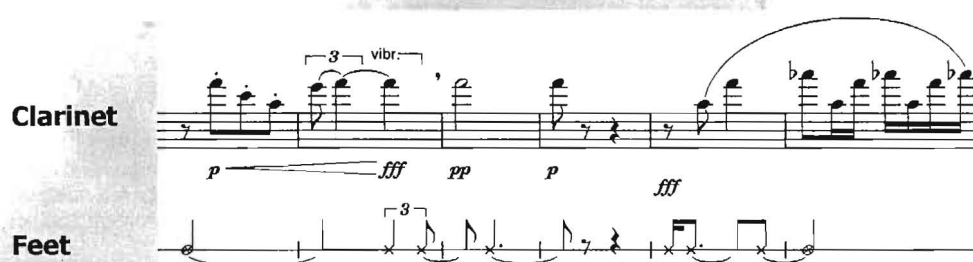
KARLHEINZ STOCKHAUSEN: *Der Kleine Harlekin* (1975) (*The Little Harlequin*)

Originally part of *Harlekin* (1975), *Der Kleine Harlekin* (1975) became a separate piece in its own right, however altered slightly². The liner notes describe how the choreographic element differentiates between these two works differentiates:

'...to an even greater extent than *Harlekin*, *Der Kleine Harlekin* has a part in which the dance rhythms and the rhythms which are played by the clarinet are inseparably bound into a polyphonic unity and are equally important. The listener should therefore listen to the clarinet and footsteps with equal attention...'³

The notation used by Stockhausen throughout *Der Kleine Harlekin* typically comprises two staves: the upper displays the clarinet line, and the lower presents the foot rhythms and movements of the heel:

Fig. 1 – Example of notation: *Der Kleine Harlekin*



Stockhausen, K. *Der Kleine Harlekin* (score) (Kürten: Stockhausen-Verlag, 1975) pg. 6

The velocity that is required from the performer when stamping or placing the heel upon the ground varies depending on the dynamic instruction. It is essential to remember that while the visual aspects of the choreography within these two pieces require technical consideration from the performer, the foot movements also function as a crucial component of the overall sound. Rhythmically, the foot movements do not necessarily correlate to the melodic movement of the clarinet line; therefore clarity in both parts is needed in order to produce an accurate reproduction of the polyphonic 'duet' between the feet and clarinet. In considering the use of *fff* within the foot rhythms, the performer needs to be mindful of avoiding discomfort that may arise from stamping excessively, thus hurting one's feet. This proved to be an issue for some practitioners of choreographic music, with Italian clarinettist Roberta Gottardi commenting on this element of performance as featured in *Der Kleine Harlekin*:

"...when practising the dance, you have to stamp with the feet, no? And also, a lot with the heel, and after a while it hurts so much, and you just have to stop for a few days..."⁴

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The discourse within *The Synthesis of Music and Dance: Performance Strategies of Selected Choreographic Music Works by Karlheinz Stockhausen* however extends beyond discussion relating to possible injury arising from performing a choreographic work without proper preparation. Perhaps even more significant than the distinct relationship between physical training and positive performance outcome, is the potential for choreographic music to develop further as musicians become more adept at synchronising dancing and playing. The

² Stockhausen, K. *Der Kleine Harlekin* (score) (Kürten: Stockhausen-Verlag, 1975) pg. i

³ *ibid.*

⁴ Heath, K. *The Synthesis of Music and Dance: Performance Strategies of Selected Choreographic Music Works by Karlheinz Stockhausen* (Monash University, 2005) pg. 26

idea of evolving music performance to a more advanced level of multitasking is also suggested by Stockhausen, who includes in the performance notes of *Der Kleine Harlekin* a description of the character 'Harlekin' as a 'roguish, exuberant dance musician and a bubbly performing artist, who could inspire a **more versatile** kind of musician for the future'⁵.

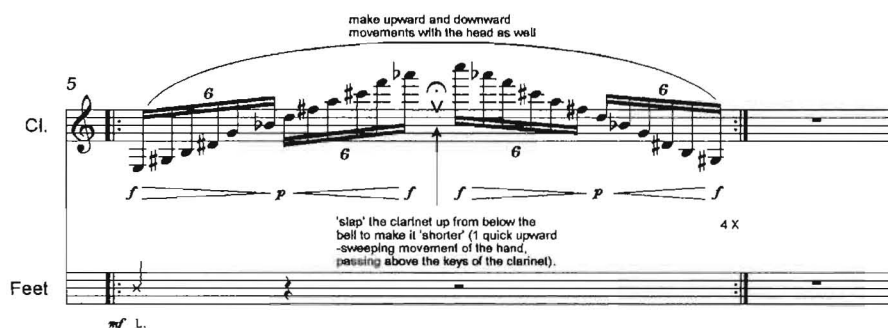
Stockhausen's comment undoubtedly refers to the demanding physical component of *Der Kleine Harlekin* and the coordination required for a successful performance outcome. With the score prescribing the musician to dance in a 'ravishing' or 'racy' manner, 'bent far forward, almost falling over' or even to move with 'stilted leaps from one foot to the other', it seemed appropriate to research selected excerpts in isolation as a means of determining preparations for successful performance outcomes. In *The Synthesis of Music and Dance: Performance Strategies of Selected Choreographic Music Works by Karlheinz Stockhausen*, excerpts from both *Der Kleine Harlekin* and *In Freundschaft* were divided into the categories of **Action**, **Musical Excerpt** and **Physical Overview**:

'...**Action**: The opening section of *Der Kleine Harlekin* asks that the clarinettist move their instrument up and down in accordance to the intervallic structure.

'...**Musical Excerpt**: The difficulty with this section is not only muscle strain in the arms, but also other physical regions such as the throat and neck. For example the tessitura of the excerpt in demonstrates an extremity of intervals, ranging from the lowest note on the clarinet (concert D3) to the altissima range (concert B-flat 6). As the top note of this musical passage is one of the highest notes on the clarinet, there is an implicit suggestion that the action of moving the clarinet up and down in accordance to intervallic structure should be exaggerated to its utmost. Given this, the clarinet, when playing the highest note in this section, could end up nearly vertical, potentially incurring discomfort and constriction in the throat and neck.

'...In the same *Der Kleine Harlekin* excerpt, to 'move clarinet up and down parallel with the intervals being played'⁶, also means that the gesture must point the bell of the clarinet to the other extremity – that is, toward the floor. This requires the clarinettist to bend down toward the ground in an effort to portray the deepening intervals of the melodic section.

Fig. 2 – Moving clarinet up and down in accordance to intervallic structure



Stockhausen, K. *Der Kleine Harlekin* (score) (Kürten: Stockhausen-Verlag, 1975) pg. 1

'... **Physical Overview**: The following example features three comparative illustrations that emulate this movement. The first, a photographic illustration, was taken from a live performance of a choreographic work, *Earth* (2003), for clarinet and dancer by Karen Heath. The succeeding two diagrams depict the simple action of picking up a ball – however, the adopted stance is identical to that of the clarinet performance photograph. The first two pictures reveal a curvature of spine – known in this instance as a "'loaded' vertebral flexion" or "flexing the lumbar spine while lifting a heavy object" (Calais-Germain, 1985: pg. 39), which puts inefficient pressure on muscles. The succeeding illustration is a better adaptation of posture for the same action:'

⁵ ibid. Bold font appears in Stockhausen's performance notes.

⁶ Stockhausen, K. *Der Kleine Harlekin* (score) (Kürten: Stockhausen-Verlag, 1975) pg. ii

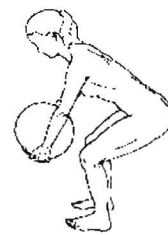
⁷ Heath, K. *The Synthesis of Music and Dance: Performance Strategies of Selected Choreographic Music Works by Karlheinz Stockhausen* (Monash University, 2005) pg. 25



(Photo credit: Felicity O'Dea, 2004)



(Calais-Germain, 1985: pg. 39)



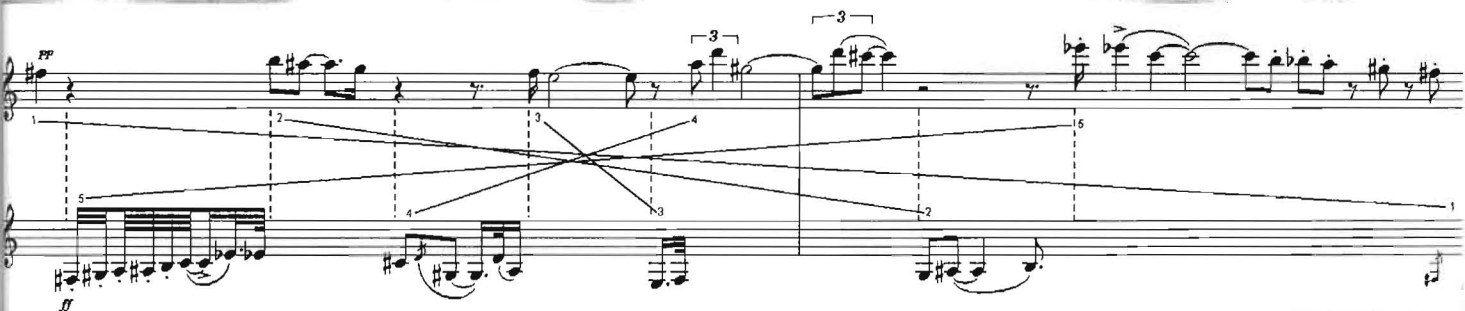
(Performer: Karen Heath)

This analysis of physical detail was central to informing all movements of this nature. Hence, in any instance of bending down, the performance thereof focused on using the strength of the upper legs and torso, while keeping the back straight. Central to the performance outcome of *Der Kleine Harlekin* that aims to be expressed in today's recital is that thorough physical preparations are rudimentary for the balance, flexibility and cardiovascular fitness necessary to this work.

KARLHEINZ STOCKHAUSEN: *In Freundschaft* (1977)

In Freundschaft (In Friendship) was originally entitled by Stockhausen as *The Art, to Listen*. In this piece, movement and gesture act as a visual manifestation of the music. After an exposition of theme and introduction, the performer is then required to 'draw' the contours of the music through positing their instrument in a specific manner. There is a formula upon which the piece is based, which undergoes many variations through sequential alterations and rhythmic displacements. The notation of the formula comprises a top staff indicating a higher tessitura and *pianissimo* dynamic, and conversely a lower staff upon which the melodic material is marked at *fortissimo*. Movements accompany this theme throughout *In Freundschaft*: gestures synchronous to the top staff are to be carried out on one side of their body, with the bell of the clarinet pointed fairly high. The height of the bell varies however, as it must visually represent an approximation of the pitch. The bottom staff acts in the same manner, however, the movements are to be carried out on the *other* side of the body, again, approximating pitch through moving the bell of the clarinet higher or lower. The formula is as follows:

Fig. 3 – *In Freundschaft*: The Formula



Stockhausen, K. *The Art, to Listen* (Kürten: Stockhausen-Verlag, 2002) pg. 2

There are a further 5 segregations on each staff, totalling in 10 separate melodic contours. These sections, referred to as 'limbs' by the composer, are labelled as 1 through to 5. Close

inspection reveals that 'limb 1' on the top staff correlates to 'limb 1' on the bottom staff: they are the same pitch simply placed in different octaves. The other limbs also directly correlate; however, the notation appears in retrograde, is placed in disparate octaves and is rhythmically altered.

As the piece progresses, the limbs become further altered through octave displacement, meaning that a limb that originally appeared in the top staff may be posited in a lower section of the clarinet's tessitura. While the bell of the clarinet should accordingly 'draw' the melodic shape, the *side* of the body that the limb was formerly placed does not necessarily need to change. This is the interpretation I shall present in the recital: that being to place the limbs of the formula on the side of the body that they occur in the initial exposition, regardless of tessitura modifications.

The performance strategies surrounding this piece have primarily centred on maintaining efficient posture and acture. With the placement of the clarinet at various heights all throughout *In Freundschaft*, a concerted effort to avoid straining the neck muscles unnecessarily – instead seeking support from the torso region – has been paramount to the performance outcome of this work.

THOMAS HARRY DUNSTAN: *Box Modula* (2004)

Karen Heath: Clarinet, Ryan McRobb: Fishing Rod Detail

In the composer's own words, this piece is comprised primarily of 'co-dependent variables'. Written for clarinet solo, the piece requires a second 'performer', who contributes to the visual environment of the work. This second performer must lift a box up into the air slowly and consistently throughout the piece, using a fishing rod that is attached to the top of the box. As the box rises upward, it reveals a vacuum cleaner, which should be no surprise really, as it is switched on at the commencement of the piece. The clarinettist, who is dressed up as a housewife from the 1950s, is to move around the box while performing the musical content of the piece.

The element of choreography comprises the performer having to move in accordance to the melodic material presented with the work. Consequently, one of the primary performance outcomes is to have the movement of the clarinettist reflect the shapes within the notation. The bell of the clarinet must track along and follow the edges of the box. As the box moves upwards, the clarinettist must direct the bell accordingly.

Acoustically, the piece undergoes considerable harmonic transformation: the sound of the clarinet is altered drastically when the vacuum becomes more prominent in the aural space. The dynamics of the performance is also dictated by the presence of the vacuum, with the performer being required to interpret pianissimo instructions in relation to the volume of the obstinate domestic appliance. The end result is an interconnectivity of activity, with the movement and visual display affecting the performance outcome of the music itself.

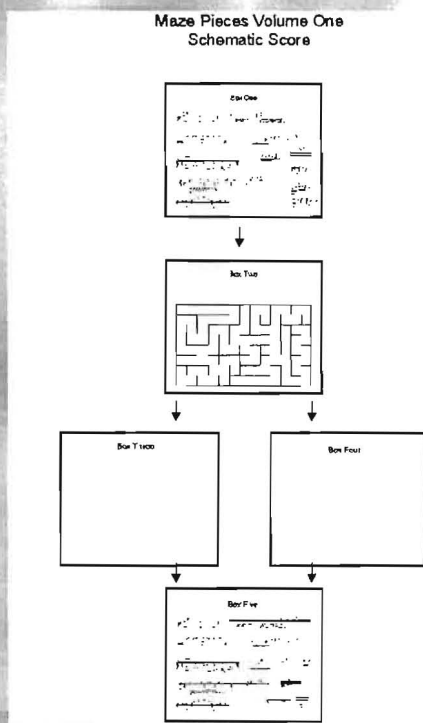
KAREN HEATH: *Maze Pieces Volume One* (2005)

Sean Albers: Percussion, Justin Ashworth: Bass Guitar, Daniel Calabro: Guitar, Karen Heath: Clarinet, Ryan McRobb: Guitar, Stephen Oates: Bass Guitar, Luke Richardson: Double Bass, Adrian Violi: Percussion

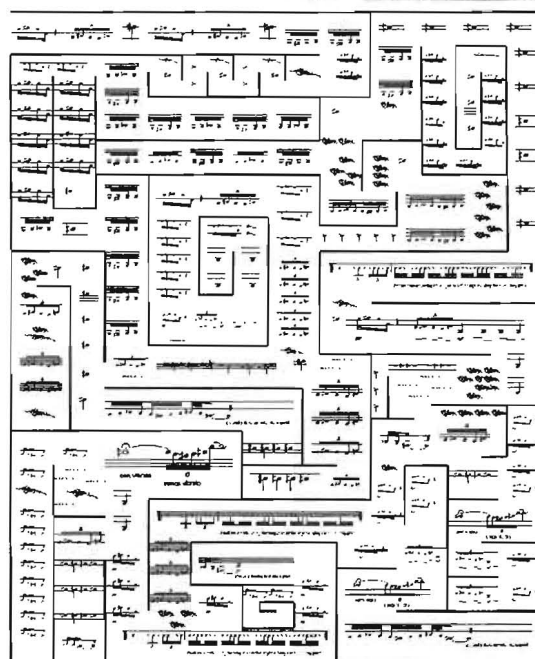
Planned as only the first instalment of a series of 'maze pieces', this work is characterised by contingent and indeterminate compositional processes. While the majority of notation within the piece is specifically pre-determined with only a few instances of graphic notation, the piece relies heavily on breath as a timing device as well as performer interaction.

Maze Pieces Volume One is divided into five separate 'boxes' as clearly delineated sections. 'Box Two' is in the shape of an actual maze, from which the performers have to 'escape'. It is of course preferable that the performers are not too familiar with the layout of the maze so that navigation through this section is spontaneous and genuine. Performers are to operate through the maze steadily, fulfilling every notational instruction that appears in the maze travel. In the event that a performer ends up at a dead end throughout the course of 'Box Two', the player must trace back through the maze, thus working backward through any melodic material that is presented horizontally. There are two exit points: 'Exit a' leads to 'Box Three' and 'Exit b' leads to 'Box Four'. With an indeterminate number of performers arriving at 'Box Three' and likewise for 'Box Four', these two boxes end up being played simultaneously. Essentially, boxes three and four are the same piece, however, each box presents different possibilities for performance through rhythmic and melodic variables. As it cannot be predicted which performer will end up at which exit, the formal outcome is indeterminate.

Fig. 4
Form of *Maze Pieces Volume One*



Example of 'Box Two – The Maze' (clarinet in B-flat⁸)



This piece is the only item within the recital that does not feature choreography in any way. Instead, the performance outcome is focused on the integration and communication between the performers as they execute tasks of indeterminacy while maintaining a meditative quality to the piece.

⁸ Transposed for B-flat clarinet

Karlheinz Stockhausen (1928 -)

The work of Karlheinz Stockhausen is wide-ranging: from pivotal electronic compositions such as *MOMENTE* (1962) and *POLE* (1969) to 'intuitive music',⁹ his compositional repertory, while paralleling certain concepts expounded by Cage et. al, seemed to challenge the highly determinate European new music paradigm. From there, Stockhausen expressed his interests in conceptualising compositions while using the parameter of space. At a lecture at Darmstadt (the biennial new music festival held in Darmstadt, Germany), the composer discussed *Raum-musik* (music-in-space), later saying he had made 'all kinds of different approaches to new situations of music in space'¹⁰ citing the tri-orchestral work *Gruppen* (1958),¹¹ as an example. In another method of using space as a component of music, the composer experimented with acoustical principles; at one point stating '...any point in space should be precisely defined with respect to where the sound occurs and how it travels from one point to any other...'¹². Preceding this discovery (perhaps informing it), Stockhausen developed the idea of 'walking and running music' as a means of manipulating acoustic properties in performance:

'...we've even thought of putting the musicians on swings in order to make the sound move, but this becomes too complicated... in the mid-fifties, I conducted a seminar in Darmstadt where we produced walking and running music – the instrumentalists and singers made movements while they were producing the music, going out of and coming into the room... we split the public into separate groups in order to give them different listening perspectives'¹³

The evolutionary outcome of 'walking and running music' is perhaps exemplified best in the clarinet solo work *Harlekin* (1975), the first full-scale choreographic music piece by Stockhausen. In this piece and many subsequent others, the score includes specially notated foot rhythms and detailed movements, as well instructions for lighting design and costume, paralleling Wagner's philosophy of *Gesamtkunstwerk*¹⁴.

Currently, Stockhausen resides in Kürten, Germany where he still composes daily and holds courses every year. As well as this, he frequently tours his compositions all over the world, sound engineering the performances.

Thomas Harry Dunstan (1981 -)

Tom Dunstan has been working as a composer and performer in Melbourne for the last two years. After completing a Bachelor of Music at Monash University and Tasmania conservatorium of Music, Tom has worked in various different settings including film music, multimedia and music tuition. The majority of Tom's work has focused on the mix between instrumental music and live electronic performance. In 2004 Tom travelled to Sweden to study at the music school in Piteå and worked with Jan Sandström, exploring the collaborations between electronics and traditional forms of orchestration. This association resulted in several works including a choral work for a 25-piece choir and an eight-piece wind ensemble, both of which were performed with electronics. Tom is currently composing and performing in Melbourne with various ensembles including Canvas City and The Croupiers. These groups focus on experimentation, narrative, theatrical performance, new media and improvisation.

⁹ 'Intuitive music' – improvisational music, where '...the musicians make qualitative decisions as to what to do [sic.] or what not to react to in order to create a really coherent organic music...' (quote by Stockhausen) (Cott, J. *Stockhausen – Conversations with the composer* (London: Picador Books, 1974) pg. 181)

¹⁰ Cott, J. *Stockhausen – Conversations with the composer* (London: Picador Books, 1974) pg. 183

¹¹ In *GRUPPEN*, there are three orchestras playing simultaneously within the same space, using different tempi, dynamic and harmonic inferences. Apparently, it is not uncommon for the orchestra members to outnumber the audience!

¹² *ibid.*

¹³ Cott, J. *Stockhausen – Conversations with the composer* (London: Picador Books, 1974) pg. 187

¹⁴ *Gesamtkunstwerk* – the combination of many art forms into one performance practice.



Karen Heath (1981 -)

Currently a candidate for the Master of Arts – Music Performance degree, Karen's research focuses on combining physical movement with the performance of instrumental music. With both of these acts being performed by the musician, she has coined the term 'choreographic music' to describe this performance genre. This exciting form of music has led her to collaborations with Australian composers who have either commenced or completed choreographic music compositions for Karen to perform, such as Tom Dunstan and Thomas Reiner. Karen conducted fieldwork on choreographic music in 2004 when she participated in the annual Stockhausen Course, held in Kürten, Germany. During her time in Germany, she received tuition from renowned clarinetists such as Suzanne Stephens and Wolfgang Meyer, and has since accepted a scholarship from the Stockhausen Foundation to return in August this year to again participate in the course, where she will perform the composer's 1977 work *In Freundschaft*, allowing her the opportunity to work with Stockhausen personally. She has very recently been asked by Suzanne Stephens to perform *In Freundschaft* at an art gallery in Germany before the course commences.

Karen is involved in various ensembles, and regularly performs with Sunwrae Ensemble and The Grand Silent System. She has also performed with new music ensembles such as The Croupiers, and The Libra Ensemble (2003), where she performed Messian's *Oiseaux Exotiques* and Dominik Karski's *Streams Within* at the Iwaki Auditorium. She has also been involved in a number of recordings, including albums released by *Move Records* and *Shock* record labels. After her Masters degree in performance, Karen looks forward to commencing a PhD in composition.

Appendix E: CD Recording of Masters Recital, July 15, 2005

Music CD

