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Portfolio of Compositions
and Thesis
1995-2000

Tommy Fowler

Submitted for the Degree of Ph.D.
at the University of Glasgow
September 2000

Volume I	Thesis
Volume II	Stri
Volume III	St Kilda
Volume IV (Part 1)	Flora (Scenes 1-5)
Volume IV (Part 2)	Flora (Scenes 6-9)

Accompanying document

Flora (Libretto by John Rodger)

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Volume I
Thesis

Abstract

The first chapter outlines the background to the composer's compositional technique. It provides a basis for discussing the definition of folk and traditional music and highlights two differing uses, by other composers, of the folk music idiom within the art music context. The next chapter deals with some particular aspects of composition related to the portfolio works. Techniques such as the use of simultaneous tempi and the application of change ringing systems are discussed. The third chapter focusses on each of the three portfolio works and the final chapter deals with the new areas of composition that have been suggested to the composer by the work on this portfolio. It should be stressed that the second and third chapters should be read in conjunction with the relevant scores.

Acknowledgements

It might be customary in some cases to save the best for last but I cannot begin these acknowledgements without recognising the unfailing and truly solid support I have received from my wife, Lesley. When I embarked on this work five years ago, we thought we knew the sacrifices we would have to make. Circumstances worked against my finishing this work in the proposed four years. Changes in our family, both happy and sad, at times drew me away somewhat from the level of concentration required to maintain a constant output. Nevertheless, despite these and other problems (not least of all my frustration-fuelled temperament), Lesley's support has remained constant.

The start of this work seems in the distant past now, yet only five or six years ago I developed an idea with Glasgow Royal Concert Hall's Celtic Connections Festival for three major pieces which would expand the musical interest of the festival. My supervisor at Glasgow University's Music Department, Prof. Graham Hair approved the composition of these three pieces as a complete portfolio for presentation as part of a Ph.D. submission. As it turned out, the Celtic Connections project as originally planned ran into serious financial difficulties and was halted midway. This, however, did not dissuade me from continuing with the composition and the related work. I must, however, acknowledge the festival for having sparked off the idea.

My work on *Strì* was enhanced by the collaboration with the band, The Iron Horse. I am particularly grateful to fiddler Gavin Marwick and piper, whistler, singer Annie Grace whose detailed assistance was invaluable. I am also grateful to some of the players in the Royal Scottish National Orchestra who offered helpful advice during rehearsals and to conductor Martin André whose marked score was a useful tool. With regard to *St Kilda* I must record the contribution made by Evelyn Glennie who, in a

remarkably short time, opened my mind to new instrumental and rhythmic possibilities. The opera *Flora* is inspired by John Rodger's terrific libretto and his infectious enthusiasm for the story. His brilliant ability to create atmosphere and presence through the manipulation of nuance in dialogue is fundamental to my approach.

For assistance and advice at various levels and at various times throughout the work I should also thank composers Edward McGuire and James McMillan and Alasdair Pettinger of the Scottish Music Information Centre.

Finally, I record my debt to my supervisor, Prof. Graham Hair whose remarkable musical intellect is an inspiration.

Tommy Fowler, September 2000

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CHAPTER 1

This chapter outlines the background to the composer's compositional technique. It provides a basis for discussing the definition of folk and traditional music and outlines two differing uses of the folk music idiom within the art music context. The chapter begins with an introduction.

Introduction

This thesis is written as an accompaniment to the scores of the three pieces with which it is submitted: *Strì*, *St Kilda* and *Flora*. The composer is of the view that while the scores of the three pieces stand alone as individual works, the thesis is not intended to do so and Chapters 2 and 3 in particular, should be read in close conjunction with the scores.

The thesis is divided into four chapters. Chapter 1 contains introductory material; Chapter 2 outlines some methods of compositional technique particular to the portfolio works; Chapter 3 has a detailed survey of the works and the brief Chapter 4 looks to the composer's future work. End notes are provided together with a bibliography and discography.

The aim of this thesis and the portfolio of compositions is to illustrate the compositional technique of the composer as applied specifically to the portfolio works. The three works in the portfolio are contrasting both in instrumentation and in genre type - orchestral, solo and operatic. However, there are elements of compositional technique common to all three. The core of the composer's work for these pieces centres around developing solutions to the problem of integrating Scottish traditional and/or national music materials and styles with contemporary compositional technique. These solutions themselves centre around a search, not only for the development of new musical material through manipulation and transformation but also the development of new contexts for old material.

Traditional / National Music

National and traditional music¹ one might think, may be safely stacked under the title of folk music. Or can they? It is not the purpose of this thesis to carry out a detailed examination of the definition of folk music. The thesis later examines how two composers have used folk music in their work; specifically Bela Bartok and Charles Ives. Some brief examination of folk music serves as a precursor to this discussion. The definition of folk music provided by the International Folk Music Council,² while not perfect, goes some way towards defining the boundaries. It states, firstly, that folk music is the music of the common people which is passed on from person to person by being listened to rather than learned from the printed page. This therefore must include such diverse items as playground rhymes and football chants not normally cited as examples of folk music. But there are three more factors which the council says help define folk music:

- continuity; many performances over a number of years
- variation; changes in the melodies and words either through individual interpretation or failure of memory
- selection; the acceptance of a tune by the community in which it evolves.

When folk music has been subjected to these processes its origin is often difficult to trace. For instance, a farm worker makes up a song and sings it. A couple of friends like it, memorise it and sing it elsewhere but one of them might forget words and makes some up to fill the gaps. Another friend, who is a much better singer, makes his own elaborations on the melody. If this happens a few times, there will be several different versions of the song existing at the same time. Eventually, the song's original composer is forgotten and it becomes common property; copyright is assigned to "Traditional".

It is this constant re-shaping and re-creation which is the essence of folk music. This is why modern popular songs and other published music,

even though widely sung by the common people, are not considered folk music. The music and words have been set by a printed or recorded source, limiting scope for further artistic creation. The songs' origins cannot be disguised and therefore they belong to the composer and not to a community.

The ideal situation for the creation of folk music is a non-literate rural community, having no contact with, for example, urban culture. In such a community folk songs and dances have a special purpose at every stage of human life; from childhood to death. Epic tales of heroic deeds, seasonal songs relating to calendar events and occupational songs are also likely to be sung. The occupational songs provide a work rhythm; for example Gaelic waulking songs and the sea shanty. The functional and seasonal songs are among the earliest types of folk music.

The type of community in which folk culture flourishes has virtually disappeared in Europe. There are a few places where traces of the old-style folk community can still be seen but the flow of city culture spread by the mass media will eventually infiltrate even the most isolated areas.

This, of course, is not a new phenomenon. In the Middle Ages the wandering troubadours sang all over Europe. On their travels they picked up tales, legends and ideas and spread them around thereby mixing folk themes with the more sophisticated court culture. The invention of the printing press and the development of international trade further helped the spread of information. Into this cultural melting-pot went the old ceremonial and task songs with their primitive one-line tunes and fragmented texts, to merge with rounded melodies and regular verse forms alongside the, now familiar, carols, narrative ballads and lyric folk songs.

Carols were originally dance songs (carole)³ which during the Middle Ages became associated with the Christian celebration of Christmas and lost their dance connections. The subject matter of the folk carols was frequently taken from the legends of Christ in the Apocryphal Gospels. Some, such as *The Holly and the Ivy*, display pagan origins which in pre-

Christian times were male and female fertility symbols. Other carols with a foot in the pagan past are those connected to the New Year and to May Day.

Narrative ballads tell of heroes or warfare and the majority of other ballads deal with romantic situations which end tragically. Although the ballads are probably the work of medieval clerics and minstrels, they were soon adopted by the common people and therefore underwent the pre-described folk process.

The largest class of songs is that of the shorter lyric folk song where the predominant theme is love; either true, false or frustrated. There are also dialogue songs, songs descriptive of country life, and songs of sailors and the sea. In rural folk songs there are, surprisingly to the urbanite, few complaints about a life which was very hard. However, in the songs that began to emerge from the cities in the wake of the Industrial Revolution, the gentler lyric songs gave way to bitter complaints against social injustice and harsh working conditions.

When definitions like these of folk-song are established, they provide only a framework within which collectors and scholars can work and they are not necessarily representing the most typical music of the "folk". In the 19th century, scholars realised that working people had a musical culture of their own. It included some old songs which were modal as opposed to major-minor. These old songs were labelled folk music and some musicians began a serious programme of collection. These included Cecil Sharp in England (and remarkably in the Appalachian Mountain of the USA where he found around 1,600 tunes which had been taken there by British settlers), Marjory Kennedy-Fraser in the Western Isles of Scotland and perhaps the most impressive in Scotland, the team of schoolteacher Gavin Greig and church minister James B Duncan collecting in the north-east. This was precise, scientific collection and they were meticulous in taking down songs from oral sources in shorthand and sol-fa.

However, these collections gave the impression that country singers sang only old folk songs which was not the case. Folk songs were only a part of

the common repertoire. The average singer's repertoire has been, for the last 200 years at least, a rag-bag of tunes and songs, some of them anonymous folk songs, but many of them learned from ballad operas, travelling shows and pleasure gardens; as well as those learned from the "broadsides"; printed song sheets or "penny dreadfuls". These, the equivalent of today's tabloid newspapers, featured songs dealing with the latest murder, disaster or political event.

The Scottish Folk Idiom

The diversity of Scotland's language and culture has had a direct effect on its music. Three languages are spoken in Scotland, Scots, Gaelic and English. The Scots and English are similar Germanic languages while Gaelic belongs to a different Celtic group which also includes Irish. However, other languages were widespread in Scotland around a thousand years ago; one of which, for example, was an early form of the present-day Welsh language. Historians⁴ believe the Picts, who lived in the northern half of Scotland, may have spoken a language similar to that and, because they never left the country, their culture was combined with that of the Gaelic speaking settlers from Ireland. Further to that there was the Scandinavian language, Norn, used in the northern isles which had an influence on the development of Gaelic. A final language mix was the Latin used by most of those with a formal education including, but not exclusively, the clergy.

Scottish music seems to have been fairly easy to identify from an early time. This is probably due to several musical features which have become generally recognised as Scottish and which can be traced to early Scottish music.

By far the most important of these features is the use of a gapped scale using five, six or in some cases seven notes. The pentatonic scale is discussed later; suffice at this stage to say that these scales provided a distinctive modal feel to melodic lines. The Inchcolm Antiphoner, which dates mostly from the 13th century but some of which goes back to the 7th and 10th centuries, is melodically distinctive in this way. Scots melodies are also wide ranging and often contain dramatic leaps. But almost equally, there is recorded also the construction of melodies from intervals of a third.⁵ As far as Scotland was concerned, this was more prevalent in the north and northern isles. The early Hymn to St Magnus from the Uppsala Manuscript is in thirds - rather than the fifths and fourths more common elsewhere.

A folk tune discovered on the fly-leaf of a 16th century book was a melody which uses the typically Scottish double tone centre.⁶ This is not to be confused with the feature of Scottish music where a melodic figure is based on one major or minor triad followed by a response in the major triad one tone lower.⁷ This feature may be derived from the scale of the Highland bagpipe which contains the triads of A major and G major.

Scottish music has another important characteristic in that it can have an elaborate form of decoration. This is particularly true with Highland bagpipe music and with psalm singing in the western isles. Bagpipe players are somewhat reluctant to describe the melodic grace notes of that instrument's music as mere decoration. These embellishments are for them so much an integral part of the melody that in fact the notes become inclusive rather than additional. In many cases the decoration can all but obscure the original melody.

The Scottish "snap", the rhythmic characteristic of a short note on the beat followed by a longer note, can be found in 17th century manuscripts. The main reason why Scotland's languages played such an integral part in the development of its music was simply because the earliest music was vocal music. The development of the music took into account the inflections of the spoken word. For example the pitch variations inherent in the Gaelic language, often itself described as singing tones, almost certainly had an influence on the wide leads in Scots melodies. The Scottish "snap" may derive from the tendency of Scots and Gaelic speakers to accent the first syllable of a word. However, not forgetting the dancing tradition, another possible source for the "snap" is the distinctively Scottish bowing methods used by fiddlers - in particular to accompany the strathspey.

Of course the question on what makes a particular piece of music Scottish is not always a musical one. It is necessary too to put the music into political and social context. For example, the Scottish aspects of Robert Carver's music can only be properly appreciated with a study of the music theory in 16th century Scotland. An understanding of late 16th century Scottish politics would throw light on the origins of some of William

Kinloch's virtuoso keyboard compositions. The Scots-led development of the Masonic movement influenced James Oswald's anthems and, on a more personal note, the orchestral style of the Earl of Kelly, although Mannheim influenced, was no doubt connected to his prowess as one of the top fiddlers of his day.

Historical context

At the turn of the century, art music was taking a new course - or perhaps it would be more correct to say it was embarking on several new courses. The path with which this thesis is most concerned here is that which involves the influence of folk music on art music. The elements of folk music idioms is only suggested in the works of Haydn, Mozart and Beethoven and elements of a national flavour are stronger in Schumann and Chopin. Perhaps beginning with Mussorgsky, the folk music idiom with its attendant emphasis on modality becomes important in the succeeding styles of, say, Rimsky-Korsokov, Copland, Vaughan-Williams and Bartok.

Before moving on to discuss some specific compositional methods relating to the portfolio works, this is an appropriate point to outline some compositional aspects of other composers' music which have been an influence when developing the compositional methods used for the portfolio. This refers specifically to the music of Bela Bartok and also to Charles Ives whose compositional style reveals two distinct different methods of using folk music material in art music. Although it is true to say that composers after Bartok and Ives (not least of those, Elliot Carter) have been a continuing influence on the composer, by examining several aspects of these composers' compositional styles, this thesis lays out the foundation upon which the composer of the portfolio works based his technique.

Bela Bartok

In terms of the combination of folk idiom with western compositional techniques, Bela Bartok is probably worthy of being described the most important nationalist composer of the 20th century. He was vitally concerned with the folk music of his native land and spent years in the field, collecting, recording and analysing this music.⁸ This was true Hungarian and central European folk music which had little relationship with the gypsy melodies which Liszt and Brahms used under the name "Hungarian". Bartok had no interest in civilised café presentations. He adopted the modal melodies, parlando rubato rhythms and primitive drive of ancient folk music culture with the contrapuntal tradition of the late baroque, the classical forms of thematic development and the 20th century concept of non-functional harmony. He did not simply force this eastern musical language into the traditional shapes and tonalities of western music, nor did he simply dress borrowed folk songs in western garb. Instead, as a result of vast pioneering research in ethnomusicology, he was able to fuse the spirit of this primitive folk music with the stream of western musical evolution. His composition and compositional thinking reveal an absorption in the actual music itself. His concerns with ethnomusicology and composition, therefore, are not mutually exclusive but demonstrate two sides of a single personality. Further, what a detailed study of his music reveals is that his creative work was not merely the arrangement of folk material. His music reveals not only the rhythms, melodies and harmonic ingenuity of Slavic folk music, but also a deft handling of the formal structures of the past and a keenly creative ear for sound. All of the following features of Bartok's music are important to the composer and, subsequently, to the music in this portfolio. While the portfolio works are not essentially in the Bartok mould, it is important to emphasise in this accompanying thesis, that these features are fundamental to the thinking behind the works.

Melody Bartok constructed melodies from modes and artificial scales - especially those scales which emphasised the tritone, part of the Asiatic influence in Hungarian folk melody. He used melodic motives and themes which consist of small intervals moving about a central note or chromatic figures combined with whole steps; for example the main theme of the first movement of his *String Quartet No 4* or the fugue theme in the first movement of *Music for Strings, Percussion and Celesta*. He sometimes constructed melodies using devices of an arbitrary nature; a pattern which is tonal or even visual. Short motives or figures are tossed around in an apparent non-thematic manner for the effect of mood or colour. He made wide use of the usual contrapuntal manipulations such as contrary motion as well as pounding repetitions of one or the alternation of two notes as a melodic feature.

Rhythm The constantly shifting rhythms, asymmetrical metres, rubatos and hesitations of Hungarian folk music are reflected in much of Bartok's music. This is exemplified within the very short piano bagatelle No 11 of the 14 Opus 6 works where in 88 bars there are over 40 tempo indications including metronome markings, "rits", "accels" and semi-quaver and quaver rests not in place of notes but at the bar lines. The primitive driving rhythms mentioned above are present in, for example, his *Allegro Barbaro* and *Rumanian Dances*. These driving rhythms often employed asymmetric combinations within the time signature such as dividing a bar of nine quavers into 4+2+3. The rhythms, inflections and accentuation of the Hungarian language are reflected in Bartok's rhythmic style. In contrast, Bartok also wrote improvisational or rhapsodic passages which are almost non-rhythmic or at least non-metrical for the sake of emphasis on timbre

Harmony Typical is Bartok's use of parallel chord structures to harmonise melodies; as seen in the same Opus 6 bagatelle cited above. He also doubled melodies in sevenths, seconds, fifths or some other specific interval as for example in the second movement of the *Concerto for Orchestra*. Chord clusters, complex dissonance, arbitrary harmonic clashes

resulting from the pursuit of a pre-conceived pattern all feature in his music; as does the non-functional use of chords and the use of polytonal sonorities. Bartok's characteristic melodic intervals are also emphasised in his chord structure - tritones, diminished thirds, minor ninths, diminished octaves and major sevenths (minor seconds). He also constructed chords from the simultaneous use of major and minor triads.

Tonality Bartok's music is tonal in the sense that certain notes, through repetition or other emphasis, form points of reference around which the music is organised. The tritone relationship between tonal centres is frequent. Historically, Bartok's work reveals that like Schoenberg, Prokofiev, Hindemith and others, many of his early and late works are more tonal in the traditional sense than works of the middle years when he wrote in an extremely harsh, complex and uncompromisingly astringent style.

Form In Bartok's music, classical formal designs are more frequent; sonata, rondo, scherzo and trio. There is a clear demarcation between formal sections. However, Bartok uses, say, the sonata design only as a framework on which to hang thematic material. The classic sonata form based on major-minor tonality does not exist in the Bartok sense of tonality. In other words, Bartok superimposes a different tonal organisation on the old framework of the sonata deprived of the dynamism of functional harmony. Further areas which concern us here include the use of arch and cyclic designs. Bartok imposed arch design on the relationship of themes within movements as well as to movements within a work. The cyclic principal, although less frequently used, is mostly indicated through the use of motto themes.

The manner in which Bartok developed rhythmic and melodic motives in the tradition of the Viennese classic school, especially Beethoven, taken together with his formal designs, should make him a neo-classicist. However, this term is not normally applied to him perhaps because the term itself is too limited by its almost exclusive application to the styles influenced by Stravinsky.

Actually, Bartok uses a great variety of tonal resources to encompass in his music a wide range of moods from savage emotion to tender nostalgia, from brutal irony to humorous parody. Complex atonal contrapuntal textures, especially canonic imitations, are placed beside simple homophonic settings. Passages of rapid harmonic change and vigorous rhythmic character are juxtaposed with static scenes in which instrumental colour predominates over a harmonically progressionless and rhythmically motionless texture.

Because of the common element of Asiatic influence in both Russian and Hungarian folk music and because of their contemporaneity, one can find certain similarities in the music of Prokofiev, Stravinsky and Bartok. Compare the melodic lines of Prokofiev's middle period (Piano Concerto No 2) with the melodies of Bartok's middle period (his violin and piano sonatas), or compare the Russian inspired works of Stravinsky with Bartok works in which rhythm is the prominent element. Though there was little direct influence between Bartok and the two Russians, the interest of all three in primitive resources produced some similar results.

Through Bartok's discovery and study of folk music, he gradually evolved a distinctive style and idiom of his own. His orchestral music shows a distinct line of development and increasing mastery, culminating in that joyous affirmation of life the *Concerto for Orchestra* of 1943 and the 1945 third piano concerto which is among the most lyrical and accessible of his music.

The *Dance Suite* was composed in 1923 to celebrate the 50th anniversary of the union of the cities which make up Budapest.⁹ The work consists of five dances with a recurring motive. In a letter to a friend,¹⁰ Bartok said the first dance is partially, and the fourth entirely, of an oriental/Arabic character. The recurring figure and the second dance are of Hungarian character. In the third dance, Hungarian, Rumanian and even Arabic influences alternate and the theme of the fifth he could only describe as having a primitive, peasant character and "any classification according to nationality must be abandoned". It is important to note that in this letter,

Bartok makes reference to the "character" and not the "origin" of the dances. In other words, no actual folk tunes are used; everything has been composed by him and yet one can hear how the very essence of folk music entered and transformed Bartok's own musical soul.

However, in conjunction with these new influences, Bartok's handling of the large orchestra is, on the whole, fairly conventional. Some contemporaries of his, most notably Webern, were concerned with the separate individual colours of instruments so that, in theory at least, the ear could distinguish every detail of the orchestration. But Bartok's practice was essentially the same as the late 19th and early 20th century romantics where individual voices were blended into the general orchestral texture. One is not meant to pick out individual instruments except in obvious passages where solos predominate. Nevertheless, his marvellous ear for sonorities produces some memorable and striking passages. In part of the third dance, the tune is played by piccolo and bassoon three octaves apart and there is a complex texture involving celesta, piano, harp and string harmonics. At the beginning each beat of the melody is echoed on plucked strings at half a beat distance; a very simple but effective contrapuntal device. Later he uses more sophisticated counterpoint.

Charles Ives

Unlike Bartok, Ives does not come readily to mind when one considers composers who have made use of folk music. However, even the simplest study of his style (if he has one) reveals that folk music¹¹ was a prominent part of Ives' musical dictionary. As with the previous section on Bartok's music, all of the following features of Ives' music are important to myself and, subsequently, to the music in this portfolio. While the portfolio works are not essentially in the Ivesian mould, it is important to emphasise in this accompanying thesis, that these features are also fundamental to the thinking behind the works.

The concept of style can only be applied to Ives' music with some difficulty and many reservations. His music is an incongruous and unpredictable sequence and mixture of tonal material, atonality, polytonality, clusters, impressionistic effects, ametrical and polymetrical rhythms, dissonance and intentional banality. Ives wrote music as an avocation¹² and as an outlet for his own mystical and philosophical nature: descriptive, nationalistic music which shows his unconcern for difficulties of performance, unity or consistency of style, or for any kind of musical convention or artistic restraint.

There are some particular aspects of Ives' style which are discussed here which have a connection both with his general style and with the particular way in which he used folk music.

Polytonality and polyrhythm Polytonality, or the simultaneous superimposition of more than two keys, involves chords or a melodic line which are firmly from one key centre being heard against chords or a counterpoint belonging to another key. Both groups are allowed to develop within its own key structure. Such independence of movement had been developed by Ives in his early training (by exercises such as playing a melody in one key and its accompaniment in another - a simple bitonal structure), but it was a technique which he deliberately cultivated.

At first it appears that his serious use of polytonality was derived from rhythmic thinking. He said he could hear in his mind five or six different rhythms simultaneously.¹³ It is, of course, only a small step from playing these independent group rhythmic patterns to asking the performers to play in separate keys also. Thus for Ives polytonal writing was not just a matter of combining chords or a melody in one key with those in another, it was the simultaneous superimposition of several complete musical entities - almost a type of collage.

So what is the difference between what Ives did and, say, Schoenberg in this respect? Schoenberg's polyphony, despite it being innovative, remained a polyphony of single lines.¹⁴ However Ives establishes a polyphony of groups. A polyphony in which the elements are not lines but complete musical entities which carry within themselves an independent harmonic and contrapuntal system.

In some of Ives' music this might even be carried a step too far for some ears so much so that his music becomes a complex seemingly chaotic effect within which the individual details are unimportant. This happens most often in his orchestral works, for obvious reasons, the songs and piano music tending to be somewhat clearer, but there are nevertheless good examples of polytonal and polyrhythmic effects in pieces like *Majority* and *An Election*. The close, and especially the opening, of *Majority* show the use of two independent polyphonic groups - basically the two staves of the piano part. Rhythmically they are quite distinct and when one made up mostly of black notes the other tends to stress white notes. The behaviour of the bass at one point is interesting too. Against a steady minim-crotchet flow, it gradually, and autonomously, speeds up from semibreves to triplet minims, crotchets, quintuplet crotchets and septuplet minims. The beginning and ending of *An Election* are similar in many ways. Polyrhythmic effects are supplemented with clear bitonal chord constructions. Another striking polytonal chord construction occurs in the second last bar from the end of *Majority*. Ives piles up a huge aggregation of Bb, B, C and Db triads. This brings me to a further aspect of Ives' style.

New chords and new structural relationships Ives produced various new chord formations by the introduction of smaller sub-divisions of the octave (including quarter tones), by the logical extension of the conventional system of thirds to create clusters and by the superimposition of a number of keys to produce composite chord structures. There were, however, a number of other techniques that he commonly used although no one formation could be singled out (as one might do with, say, Beethoven) as the typical Ives chord.

In his song *Soliloquy* (appropriately subtitled *A Study in 7ths and Other Things*) one can see a number of these alternative ways of constructing harmonic configurations all in the space of a single page. After a long, recitative-like bar accompanied by chords built up by the multiple superimposition of thirds, Ives begins a section in which the chords in the piano part are compilations of sevenths or (its inversion) ninths. Bars 6 and 7 then present a forceful display: a progression of chords built successively on minor sevenths, fifths, fourths, thirds, whole tones and, lastly, semitones. This series is then repeated in the reverse, expanding order. Despite their differing intervallic content, each of these chords has been constructed in the traditional way: subsequent notes have been added above a predetermined bass note and the chord is quite literally built up. Now, however, there are chords which have been made from the top note downwards. Once again they are constructed out of sevenths or ninths. The song concludes with a single chord that sums up the entire harmonic construction in one statement. It is a compilation of fourths, thirds, whole tones and semitones (which of course imply major sevenths and minor ninths).

Also worthy of note is the melodic shape of the vocal line and the structure of bars 2 to 11. The interval of a seventh is prominent throughout, making the shape very angular. The pitches are very varied; indeed bars 2-4 present a twelve-note set. The pitch selection in bars 5-7 and 8-10 is almost as rigorous. The chords in bars 8-11 are pretty well the same as those in bars 2-5, only in retrograde. The retrograde nature of bar 7 has already been noted. So, harmonically, the whole of bars 2-11 is

constructed as a palindrome. As in the vocal line the interval of a seventh, or its inversion the ninth, is the most predominant interval. In addition there is a logical rhythmic scheme which also form a palindrome. The time signatures, following the vocal part divide semiquavers thus: 5,6,7,8,5 - 5,8,7,6,5.

Taking into account the prominence of the seventh in the slow introduction too (the two pivotal chords are built on Db and D respectively), one can see that *Soliloquy* is very tightly constructed.

Ives was also interested in new kinds of tonality formed through relating chords, new and familiar, in original ways. He began experimenting with altered chord relationships following his stint as a church organist where he became bored with the three fundamental triads of hymn tunes. For the third movement of the *Set for Theatre or Chamber Orchestra*, Ives tried to find three chords which could be used in a parallel sense to the fundamental tonic, dominant, subdominant. The chord Db was taken as the main chord and for the other two he chose Bb, a tone above what would be the dominant and E which was a tone below the standard subdominant.

Use of folk tunes It has been noted earlier how Bartok assimilated folk music into his own style. On occasions there would be the direct use of an existing folk melody but more often than not, the melodic material would be original but possess a folk-like character. Ives, on the other hand, does not fall directly into this plan. His use of folk music, and it must be emphasised that folk music here is in its widest sense, was by direct quotation.

Ives had an in-built faith in the common man brought about by a variety of events and attitudes he encountered in his formative years. He followed his father's example and identified himself with the music of the common people from marching bands to hymn singing. He was especially attracted to hymn tunes not only because of his work as a church organist, but also because they represented for him a very real human experience. In his work he quotes over fifty hymn tunes and some favourites are

quoted more than once. Also quoted are popular songs, military tunes, religious/spiritual songs, college songs and patriotic songs. However, this process of quotation was not merely that.

Quotation for Ives was a complex process which was an integral part of his creative expression. The range of the material from which he quoted is very large indeed¹⁵ but the originality of Ives music lies not in the amount or variety of the material he used but in the complex combination of the tunes within his music. His use of the material is not only structurally and functionally justified but evocative and symbolic. It is not simply literal quotation but in his use of these tunes there is a deliberate purpose to allude to by association something in the American spirit; to stir the roots of memory and history. In describing his own music, Ives most often referred to this symbolic aspect than to the technicalities.

It could be suggested that Ives' use of quotation was the most striking anticipation of 20th century musical developments in his work. As noted earlier, these quotes are drawn from a wide range of material and this is consistent with Ives' attitude about the universality of music and the common roots of different kinds of music. But it does raise the question of why he chose specifically to *quote* such material and why he particularly favoured material that would be well-known to a wide audience. An answer to this question may lie in the problem facing composers following the breakdown of the tonal system.

Quotation may be considered a step towards a solution of this problem. If one were to ask what could form the substantial basic material of a composition after the former solid basis, the tonal system, was discarded, then there seems to be two optional answers available. Only two options that is if one were to seek a radical (i.e. non neo-classical) solution. Firstly, one could evolve a completely new kind of musical material. Alternatively, one could attempt to find radically new contexts for the old material. It is clearly the second answer which Ives headed for. (It is recognised that a similar problem and alternative solutions surfaced later in the century when composers considered the effects of total serialism.)

Whereas the main thrust of compositional activity in the first part of the 20th century was devoted to finding a way of reconciling new compositional content with traditional form, what Ives attempted was to develop a new kind of form for traditional musical content.

CHAPTER 2

This chapter will deal with some particular aspects of composition related to the portfolio works. Many references are made to examples in the relevant works and the chapter should be read in conjunction with the scores which accompany this thesis.

Pentatonicism

Pentatonicism, in the context of the compositional techniques in these portfolio works, means no more or less than the use of a set or series of five notes.

These are two examples in *St Kilda* of pentatonic melody.

1) At bars 970-1062 the unaccompanied bass kalimba presents a pentatonic melody enhanced by octave displacement and rhythmic variety.

2) At bars 790-879 the melody is for the voice therefore the restriction of range means that octave displacement can not be used to the same effect as in the section for bass kalimba. To provide variety in this fast section there are sophisticated rhythms and the accompaniment of a series of cymbals, cymbal discs, tam-tam and pedal gong.

Use of subordinate notes

- a) pentatonic decorations
- b) extra-pentatonic decorations

The melody of the Overton Whistle in *Strì* bars 82 - 125 is an example of the use of subordinate-note decorations both within and outwith the pentatonic scale as well as a combination of both. The pentatonic scale used is g a c d e with c and g alternating as tonal centres.

Most of the decorations come from within the pentatonic scale. One pitch from outwith the scale, B, is used in the decoration process and this is justified by the wish to link this melody to the accompaniment. The hexachord g a b d e f# is used for the accompanying strings and the use of b in the decorations helps tie melody and accompaniment. (The f# is not used in the melodic decorations as this note produced on the Overton Whistle is not of good quality).

This process provides a group of seven pitches (g a b c d e f#) of which four (g a d e) are common to both melody and accompaniment. The adding of the Fifth (b f#) to these four pitches for the accompaniment enhances the wide chord spacing required to construct a base upon which to superimpose the melody. The adding of the c to these four pitches forms the pentatonic scale for the melody. The inclusion of the accompaniment pitch b as a grace note in the melody further enhances the link between the two.

Simple states of melody - Evolved states of melody

One method of describing melodic evolution is to compare it with melodic variation. In variation development, each variation is derived independently from the original melody and embarks on a new direction. An evolved melody displays distinct connections in the process or processes used to vary the melody. That is, not only is there a variation link between successive soundings of the melody, but also there is a variation link between the processes which are used to construct or determine the variation sequence. For example, on each recurrence of the melody, the note values may be altered by a series of related processes - each time one note is halved - (minim-minim)(crotchet-minim)(crotchet-crotchet)(quaver-crotchet)(quaver-quaver).

Alternatively, the related process may affect the intervallic relationships. On each recurrence of the melody, some intervals, say every third interval, might be increased by one semitone.

The choice of the actual interval to be altered may also be determined by a predefined process such as a numbering sequence. Further, the choices of particular note and/or interval made by this process might also (or only) undergo other changes such as octave displacement, transposition or inversion. Of course, it is not necessary to restrict oneself to evolution without variation or vice versa

The pentatonic melody in *Strì* in the Overton Whistle from bar 82 is an example of how a melody may be developed using subtle combinations of melodic evolution and variation.

For clarity these melodies are referred to as W,X,Y,and Z. Melody W is nine bars long, X is seven bars, Y is six bars lengthened by two bars by the repeated opening phrase and Z three bars long; again lengthened by successive repeats of the opening phrase. There is an interjection of this phrase in bars 95-97 and successive repeats after bar 118. (This phrase is used in other contexts throughout the piece - see Significant Melodic

Figures). Reductions in the number of rests and the note values contribute to the decreasing melody lengths.

The simple state of the melody, Melody W, is in three phrases separated by rests - see bars 86-94.

In Melody X the rests are removed and the lengths of some notes reduced. However, the sequence of pitches remains the same - see bars 98-104.

In Melody Y there is also a reduction in note values but more significant is the introduction of two additional pitches to the sequence - still part of the pentatonic scale but additional to the common sequence of W and X. Further, three pitches of the sequence are omitted. Melody Y then is this at bars 106-113.

In Melody Z the sequence returns to that used in W and X but the note values are significantly reduced. What was a nine-bar phrase is now in three bars - 114-116.

Although octave displacement plays a small part in the variation of Melody Y, the processes most affecting this melody are concerned with note values.

The evolutionary process is applied so that the note values in the first phrases of each variation of the melody are reduced by two crotchets each time and the note values in the third phrases are reduced by six crotchets each time (taking into account the rests at the beginning of the phrase in Melody W)

Highlighting the variation process:

- 1) The second phrase, while being varied the second time only by the removal of rests at the beginning and end thereby merging it with the preceding and subsequent material, undergoes a variation process on its third and fourth soundings.
- 2) The endings and/or codas of each phrase are varied by differing repetitions (or in the case of Melody X no repetition) of the first four pitches.

Further, because there is no complete common evolutionary process across the entire sequence of four soundings of the melody, this is a variation process.

The pentatonic melody in *Strì* on the whistle at bars 269-277 is developed immediately in the viola solo bars 278-286. The pitches in both examples come from the same pentatonic scale and there are similarities in the progression of the pitches. For example the Bb C G F D phrase which opens the whistle melody, and is soon repeated, also opens the viola melody and appears, with a harmonically altered final note (D-C) towards the end of the viola section. Also the phrase F D C G, which is a retrograde form of the opening phrase, is present in both examples. However, in this case the evolution takes place more in the note values. If one divides the examples into four sections a,b,c and d for the whistle and e,f,g,h, for the viola, one can compare the similarities and the evolutions of the note values. (see diagram)

a b

e f

Detailed description: This system contains two measures of music. Measure 'a' (left) features a treble clef with a melodic line of eighth notes and a bass clef with a similar line. Measure 'b' (right) continues the melodic lines. Above the first staff, brackets labeled 'a' and 'b' span the respective measures. Above the second staff, brackets labeled 'e' and 'f' span the respective measures. Slurs are present over the melodic lines in both measures.

c d

g h

Detailed description: This system contains two measures of music. Measure 'c' (left) features a treble clef with a melodic line starting with a triplet of eighth notes, indicated by a '3' in a circle above the notes, and a bass clef with a similar line. Measure 'd' (right) continues the melodic lines. Above the first staff, brackets labeled 'c' and 'd' span the respective measures. Above the second staff, brackets labeled 'g' and 'h' span the respective measures. Slurs are present over the melodic lines in both measures.

In sections a and e, both containing ten pitches, the first eight pitches are the same and the final note is longer than the penultimate one. The four semiquavers and tied minim that begin section b are contrasted by four quavers and a tied crotchet in section f. These tied notes relate to those in the previous sections and this is highlighted by the following two semiquavers also present in a and e. The final notes of b and f are, like a and e, also longer than the preceding ones. Discounting the triplet in c as a repeated phrase, the four quavers are matched by the two crotchets, quaver and dotted crotchet in g. The only difference in the remaining notes is the matching of a quaver and dotted crotchet in c with two crotchets in g. The opening phrase four semiquavers in h is, like sections b and f, matched with four quavers in d although this time slightly altered. The remaining notes of d and h match except for the length of the final note.

Change ringing number systems

Before discussing how change ringing systems, or “methods” as they are termed, are used in the portfolio compositions, some background historical and technical information is helpful. The art of change ringing has evolved from the centuries-old method of bell ringing announcing either specific times for prayer or simply marking the hour. Bell ringing underwent several stages in its long history but in the 21st century there is a widespread culture attached to the art. Nevertheless, the art in its earliest forms still play an integral part in current performances. Grove says: “...a ringer from a Norfolk belfry in 1700 could take part today without difficulty in much of the change ringing heard every Sunday, even though he might be surprised at some of the more difficult methods performed by some of the more advanced bands of ringers.”

Before change ringing was introduced, a set of bells were rung in sequence, called rounds, from smallest to largest. A system of “call change” was introduced where one of the ringers called out instructions to the other to alter the order in which the bells were being rung. From that an elaborate system has been derived whereby compositions for bells can be written down. These are notated in lengthy vertical columns of numbers, each horizontal row indicating the order in which the bells are to be rung. The total number of changes (non-repeating sequences) possible on a given number of bells is mathematically fixed: from six on three bells to well over three million on ten bells.

Bell ringers have some basic rules:¹⁶ each composition begins and ends in rounds (the bells rung in descending sequence); each bell sounds only once in each change, a bell can move only one position at a time and no change is repeated with a sequence.

The basic principle of change ringing is called the plain hunt where the word “hunt” is used to describe the path of one particular bell through the sequences. In other words, in each successive change, a bell has two options: either to remain in the same position in the sequence or move one place to the left or right. To take this one step further, change ringing

is not confined to this simple plain hunt method. A plain hunt on three bells produced all six possible changes but a plain hunt on four bells produces only eight of the 24 possible sequences. Two methods are applied generally to vary the plain hunt; one for an even number of bells and another for an odd number where the last bell rung in the sequence stays in place as a fulcrum around which the others change.

The least complex of the methods for an even number of bells involves what is known as a plain bob. For example, as indicated previously, a plain hunt on four bells, starting in the order 1 2 3 4, produces a sequence of eight changes before returning.

1	1 2 3 4
2	2 1 4 3
3	2 4 1 3
4	4 2 3 1
5	4 3 2 1
6	3 4 1 2
7	3 1 4 2
8	1 3 2 4
	1 2 3 4

However, as the first sequence ends (1 3 2 4), it is prevented from returning to the beginning (1 2 3 4) by bells 1 and 3 remaining in position. In order to prevent repetition, this forces 2 and 4 to change position thus producing a new row 1 3 4 2. A plain hunt is then applied to that and a similar variation made as it, too, comes to an end. A further plain hunt then completes the sequence and all possible 24 changes have been rung.

1234, 2143, 2413, 4231, 4321, 3412, 3142, 1324,
 1342, 3124, 3214, 2341, 2431, 4213, 4123, 1432,
 1423, 4132, 4312, 3421, 3241, 2314, 2134, 1243, 1234

It is worth noting here the reason why bells move only one step at a time. That has more to do with gravity than mathematics! A swinging bell has properties in common with a pendulum. The timing cannot be easily changed. Some force is needed to make a pendulum of fixed length swing faster. Since each bell rings at a fixed rhythm which cannot be altered, tunes cannot be rung easily. However, once a ringer has learned to handle a rope well (a process which can take several months) the rope can be pulled so that the bell swings through 360 degrees and balances mouth up. The ringer whose bell follows immediately after can give the bell a lighter pull so that it does not quite reach the balance point and therefore rings sooner on the return stroke. In this way two bells can change places in the change or row. Because of the tentative nature of balancing a bell in this way, it is not practical for a bell to move more than one position at a time.

Applied change ringing systems

In the portfolio works, both existing and newly composed change ringing systems are applied to determine the order of single pitches, of groups of pitches and of groups of rhythmic cells. Systems are also used to affect texture by assigning numbers to instruments either solo or small ensemble. These systems are applied either alone or combined with other systems in a complex array where, say, one system determines the pitch order while another system, simultaneously applied, determines the rhythm. Change systems are also used in combination with other systems.

As indicated in the background introduction, a change system for ten bells produces over three million possible variations on the row. Therefore, the length of the possible row variations for 12 pitches precludes any composition to an appropriate length! It stands to reason therefore that the full working out of a system for this number of pitches or cells is not a practical option. It is therefore only in the systems where plain hunts or bobs are used on a small number of elements¹⁷ that the complete mathematical possibilities are worked out to the full. Where the more complex variations are applied to a greater number of elements, these tend to be terminated, before the mathematical possibilities have been fully worked out, by factors other than the completion of the change system.¹⁸

In *St Kilda* simultaneous change ringing systems are applied in the section bars 82 - 141. In this section near the beginning of the piece, the composer wants to create a sense of uncertainty while retaining some coherent rhythmic, choreographable structure. One complex change system controlling the position of 12 elements, determines the order in which the instruments are struck. The twelve instruments over three staves are: three cymbals, concert bass drum, five tom-toms, two bongos and a pedal bass drum. Another system operating simultaneously controls the order of a set of rhythmic cells.

A system determining the order of two sets of five pitches is applied in *Flora* (Scene 4 bars 40 - 62). The two sets of pitches are used in the accompaniment to a melody. The first set uses the five pitches of the

melody: a b d f g# and the other set the contrasting pitches of c c# eb e g. As the melody is around the pitch 'a', the g natural in the second set is altered to the leading note g# and thereby creates a link between both sets despite the marked contrast in the other pitches. The composer planned to use the pitches in pairs, one from each set, and number the pairs one to five so that a change system for five elements can be applied.

1 2 3 4 5

a b d f g#

eb g# c# e c

A sequence of nine changes is created on the row by allowing, in order, the first, third and fifth element to remain static while the others move. Therefore the first row of ten pitches in five pairs: (1, 2, 3, 4, 5) a-eb, b-g#, d-c#, f-e, g#-c progressed first to: (1, 3, 2, 5, 4) a-eb, d-c#, b-g#, g#-c, f-e and the sequence finished at: (2, 1, 4, 3, 5) b-g#, a-eb, f-e, d-c#, g#-c. This produces a sequence of pitches for one line of the accompaniment. However, apart from the cello which doubles the vocal line, the accompaniment in this section comprises the four violas so three further lines are required. These are produced by applying the same system with three different starting points other than the '1' of the first row. One line is produced by reading from the last row (2 1 4 3 5) back along the sequence to (1 2 3 4 5). The further two rows are produced by reading the first two in retrograde - i.e. from 5 4 3 2 1 and from 5 3 4 1 2. This produces four variations of the same sequence which, with some octave displacement, is played by the four violas. This creates a series of chords from the ten pitches. Because of the deliberate movement of the individual rows against one another, each sequence of ten chords has a particular shape in that four chords of usually three or sometimes four pitches are repeated on either side of chords comprising two or one pitches. This gives the whole section a feel of dense-thin-dense wave movement. Because the sequence making up each pair of pitches is drawn alternately from pitches within or outwith the melody pitch group, the chords also alternately combine or contrast with the melody.

In the section marked "Fast and Wild" in *St Kilda* from bars 151 - 189 a change system is combined with a particular rhythmic pulse. The rhythmic pulse 2-2-3-2 (which is used in other ways in other works, particularly *Strì*) is superimposed on the change sequence which is thus:

12\34\521\35//42\31\453\24//15\34\251\43//52\14\531\25//41\32\51
4\23//15\24\312\53//42\15\432\51//34\52\314\53//24\13\542\13//45
\12\431\52//41\32\514\23//51\24\532\14//35\24\153\42//51\34\523\
15//43\21\534\12//35\14\231\52//41\32\541\23//45.

The length of each note to be played is fixed at a semi-quaver. The number of notes to be played is determined by the number in the system. At the beginning of each 2 2 3 2 sequence an accent is placed on the note. At each division of the rhythmic pulse (\), a semi-quaver rest is placed. This system operates in combination with a system similar to that earlier described to determine the instrument struck.

Use of simultaneous tempi

Live digital or pre-recorded playback is used in *St Kilda* to create an opportunity for the use of complex simultaneous tempi when only one performer is available. In the context of the scenario, the simultaneous tempi represent contrasting visual activities. At the beginning of Scene 3 a set of tuned, frog-mouthed cow bells set up a 9/8 tempi. After 40 bars, the cow bell section is repeated using either an instant digital or a pre-recorded playback. Placed alongside this is a section for eight untuned Chinese gongs in a 4/4 tempo reinforced by a cymbal, large tom-tom and pedal bass drum - see bars 402-411.

Additional rhythmic variety is provided by the use of differing note groups. See, for example, the 5:6 bar 403; the 4:3 bar 405; the triplets in bars 406-7 and the 5:4 (10:8) in one part leading into the 5:3 in the other in bars 409-10.

In *Flora* three simultaneous tempi appear in Scene 5 (from bar 180) representing (a) the heroine in captivity, (b) the Jacobite prisoners and (c) the prison visitors. While Flora's lines are in 4/4 bars, the Jacobite prisoners' pulse is taken from triplet quavers across that giving a 3/2 feel. From bar 180 the prison visitors' rhythm is introduced - a triplet semiquaver dance rhythm in sharp contrast to the other two. This is further detailed in the forthcoming section on dramatic context.

Dramatic context

These three simultaneous tempi mentioned above in Scene 5 of *Flora*, are chosen specifically to represent the dramatic context into which they are placed. The basis upon which all three rhythms lie is, to facilitate performance, a straight 4/4 pulse - (a). It is within this pulse that the heroine, Flora MacDonald exists. In flashback, Flora is remembering her period of captivity on a prison ship in London. She was given a cabin on the deck while the hold of the ship was occupied by prisoners in squalid conditions (the male chorus). The contrasting rhythm of the male chorus

- three minims across four crotchets - is a form of extended, lilting waltz and, together with the pentatonic melodic content, conveys the emotions of the prisoners as expressed in a form constructed to resemble Gaelic psalm singing. This is a 3/2 rhythm - (b) - across the 4/4. Both these tempi are established simultaneously at the beginning of the scene following a short, unbarred introduction.

A further contrast is the presence of visitors anxious to meet the Jacobite heroine. These visitors (the female chorus) attempt to encourage Flora to dance with them hence the introduction of a triplet semiquaver reel-like tune - (c) - (essentially 24/16) across the 4/4 pulse - from bar 180. This tune is a version of *Prince Charles and Flora Macdonald's Welcome to Skye* from James Hogg's *The Jacobite Relics of Scotland* (see Appendix IV).

Tempi (a) and (b) are rarely separated and are reinforced by various parts of the ensemble. For example the cor anglais duo reinforces tempo (b) at bars 22-24 and the harp and cello reinforce tempo (a) at bars 34-8.

The composer wanted to have the prisoners' presence felt even when they are not heard. Therefore when Flora is singing without the men's chorus, other parts of the ensemble take up tempo (b). For example the horn and trombone in bars 67-71.

Before the introduction of the third contrasting tempo, (a) and (b) are allowed to consolidate as individual tempi. For example tempo (b) from bar 118-122 and tempo (a) from bar 156-161.

This consolidation of the two tempi sets up the introduction of tempo (c) - a dance of triplet semiquavers within the 4/4 pulse - which is allowed to appear initially on its own. Tempo (c) is invaded first by tempo (b) 170-3 and then by tempo (a) at bar 197 and at this point the three tempi are together for the first time 197-203.

Significant and/or cadence figures

Certain melodic or rhythmic figures in a composition may, because of the way in which they are manipulated, become additionally significant. This

enhanced meaning can be developed through several processes. For example the recurring use of a melodic phrase, in a variety of guises, can bind together music which might otherwise struggle to form a whole. As an extreme example, if one were to take all the variants of the motto theme (both melodic and rhythmic) out of the first movement of Beethoven's Fifth Symphony little would remain. These significant aspects can be formed in many ways. For example they can be melodic, textural or rhythmic (both in small detail and grand structure or both).

Significant rhythmic figure Rhythmically, the sequence 2 2 3 2, is a factor which permeates *Strì*. It concerns the overall structure which can be divided into four main sections comprising, in sequence, two, two, three and two sub-sections. These are constructed on a programmatic basis - the four sections loosely representing 1 - dawn, 2 - preparation for battle, 3 - the battle ending and 4 - the aftermath. The 2, 2, 3, 2 sequence also concerns rhythmic cells used in the piece - see the strings from bar 401; as well as rhythms - 784-6 (tom-toms) and time signatures 799+

Significant melodic figure (1) The melodic figure which appears at the end of the male chorus phrase in Scene 5 bar 6 is used at various points throughout the piece determined by the context. This phrase represents the Gaels' longing for a fresh start in America. It is used at appropriate moments either in the vocal line or the accompaniment. The first significant use of the phrase is in the harp part in Scene 2 bar 26. Other uses of the phrase are in the 2nd oboe part in Scene 4 bar 294 and in the voice in Scene 7 bar 318

Significant melodic figure (2) In *Strì*, the four-note figure which makes its first appearance at the beginning of the melody in the whistle bar 82 is used also as a harp accompaniment from 122, the voices from 315, the brass from 893, the string entries from 917 and the bagpipes from 960.

CHAPTER 3

This chapter has three sections each of which deals with one of the portfolio works. The sections on each work must be read in conjunction with the relevant score.

Strì

This is a piece for orchestra and Celtic band which was commissioned by Glasgow Royal Concert Hall for the Celtic Connections festival at which it was first performed in 1997. There is a programme note in the score which should be read at this point.

Instrumentation The piece is written for full orchestra and folk band - detailed instrumentation is in the score. In performance, the band was amplified in their standard format and sound levels controlled at a mixing desk. The composer was able to work with the sound engineer at rehearsals to fix balances and the composer's assistant sat with the engineer during performance to supervise the balance and the special echo effect used on one voice. The amplification was not especially used by the band members for this piece but is an integral part of their individual sound. That, and their natural abilities as individual performers with regard to improvisation, was well known to the composer at the outset.

Rhythms, pitch sets and melodies A strong binding element in this piece is the number/rhythm sequence of 2, 2, 3, 2. This is applied on both the large and small scale of the piece. For example on the large scale, the overall shape of the piece, which comprises an introduction and eight sections, is divided according to the narrative into four parts comprising 2, 2, 3, and 2 sections. In the small scale the most common pentatonic scale used is G A B D E and its transpositions; i.e. notes separated by 2, 2, 3 and 2 semitones. This rhythm sequence is applied in other ways in the middle ground which will be mentioned later.

This is how the narrative pertains to the sections. The first part, which comprises the introduction and first section, represents the dawn and the first signs of movement within the battle camps. Sections two and three represent the preparation for battle. Sections four five and six represent different stages of the battle; the prayer, the charge, the conflict. Sections seven and eight represent the aftermath and the conclusion.

The material for both melody and harmony is drawn from a series of pentatonic pitch sets.¹⁹ The composer selected three groups (titled A, B and C) of four sets which are used both in isolation and combination. The first note of each set as laid out below is taken as the tonal centre. It will be shown that different combinations of sets produce chords comprising different number of notes depending on the number of notes common to the combined sets.

The sets used are:

Group A:

(1) G A B D E: (2) E_b F G B_b C: (3) C D E G A: (4) E F# G# B C#

Group B:

(1) D E F# A B: (2) B_b C D F G: (3) G A B D E: (4) B C# D# F# G#

Group C:

(1) A B C# E F#: (2) F G A C D: (3) D E F# A B: (4) F# G# A# C# D#

The first melodic fragments were created also from a pentatonic set and in the style of Scottish traditional melodies using wide leaps. These eight fragments, taken from the composers notebook and containing also some counter-melody fragments, are illustrated here.

Handwritten musical notation for measures 1 and 2. The system consists of two staves. The upper staff is in treble clef and contains a melodic line with eighth and sixteenth notes, including some beamed pairs. The lower staff is in bass clef and contains a bass line with eighth notes and some chords. The number '1' is written below the first measure, and the number '2' is written below the second measure.

Handwritten musical notation for measures 3 and 4. The system consists of two staves. The upper staff is in treble clef and contains a melodic line with eighth and sixteenth notes, including some beamed pairs. The lower staff is in bass clef and contains a bass line with eighth notes and some chords. The number '3' is written below the first measure, and the number '4' is written below the second measure.

Handwritten musical notation for measures 5 and 6. The system consists of two staves. The upper staff is in treble clef and contains a melodic line with eighth and sixteenth notes, including some beamed pairs. The lower staff is in bass clef and contains a bass line with eighth notes and some chords. The number '5' is written below the first measure, and the number '6' is written below the second measure.

Handwritten musical notation for measures 7 and 8. The system consists of two staves. The upper staff is in treble clef and contains a melodic line with eighth and sixteenth notes, including some beamed pairs. The lower staff is in bass clef and contains a bass line with eighth notes and some chords. The number '7' is written below the first measure, and the number '8' is written below the second measure.

A melodic line (named Melody 1) is constructed from the fragments in this order: 1, 2, 5, 6, 3, 7, 8, 4. (See whistle and viola from bar 269).

The melodic line named Melody 2 is that which is seen in the Overton Whistle from bar 82 and the construction is described earlier in the section on evolved melody. However, there is a further aspect to this melody in that it begins with, and is constructed around, what is a significant figure mentioned earlier.

Introduction (Bars 1-81) There are three versions of varying length (short, middle and long) of the 2, 2, 3, 2 sequence laid across the introduction. The first four bars of 4, 4, 6 and 4 crotchets is the shortest of the sequences. However, those four bars are taken as the first '2' of a middle length sequence made up by the following bars (1-4), (5-8), (9-14), (15-18). That first middle length sequence is itself the first '2' of a long sequence made up by these bars (1-18), (19-36), (37-63), (64-81) which covers the whole introduction.

For the held notes in the brass, the players are asked to alter the vowel shape in the mouth (from aa to ee) while playing. This effect simulates the sound of early horns.²⁰ The pitches in the horns and strings are a building of a chord from the B3 set. The high woodwind flutters are from Melody 1 and their nine notes are a combination of 2+2+3+2. (The five note flutters are a variation) The F# added to the held notes at bar 23 makes a link between sets B3 and B1 which are combined to a six-note chord when the D is added at bar 41. From bar 37 the nine-note flutter undergoes expansion, with rests, and fragmentation emphasising the 2+2+3+2 aspect. Out of the first climax at bar 62, the timpani (played with side drum sticks for added precision and textural effect)²¹ mixes early echoes of rhythms to come with 2, 2, 3, 2 rhythms. The timpani rhythms and the held chord melds into Section 1.

Section 1 (Bars 82-140) The 2, 2, 3, 2 sequence of 4, 4, 6, 4 crotchets predominates. Melody 2 (referred to earlier) appears in the Overton Whistle and the length of the melody notes also allude to the 2, 2, 3, 2 sequence - see bars 86-88. At the beginning of this section the held string

chords over the next begins to break down with the introduction of grace notes followed by longer passing notes, all from within two new pitch sets which are combinations of sets B3+A3 and B1+C1. Both these combinations give six-note chords and the chords are spaced so as not to produce intervals less than a third. Four chords of the combination B3+A3 in bars 90-93 are repeated, with varied passing notes in bars 94-97. Four chords of the combination B1+C1 in bars 98-101 are repeated, again with varied passing notes, in bars 102-105. During these shifting harmonic patterns, the melody, and its counter-melody in the horn, continued to be based on the combination of B3+A3.

Melody 3 is introduced at bar 114 and moves through different instruments of the orchestra beginning on the clarinet. The harmony at this point begins a development stage with seven-note chords constructed from combining B3+C1 and B1+A3. The lower strings from bar 114 have the rhythm 2, 2, 3, 2. On this occasion the 2, 2, 3, 2 in quavers is marked by quaver rests. At bars 114-117 the harmony is B3+C1 and from 118 B1+A3. The harp at 122 has a series of chords (B1+A3) in a 2, 2, 3, 2 crotchet rhythm the top notes of which form the significant figure - g, c, e, a. At bar 130 a time signature sequence begins which continues into the next section. At bar 133 the woodwind take up the string rhythm in this transitional passage leading to the next section.

Section 2 (Bars 141-192) The time signature sequence which marks this section is another version of the 2, 2, 3, 2. The crotchet 4, 4, 6, 4 of the previous section is reduced to quavers - the two fours giving a 4/4 bar of eight quavers followed by 6/8 and 2/4 bars to make up the sequence. These three time signatures constitute a "2" and to make up a "3" bars of 3/4 and 3/8 are added. With this sequence already begun in the previous section, the start of Section 2, at bar 141, is signified by Melody 4 and the first use of the group of traditional instruments and the two voices. A held fifth in the strings at bar 192 is taken up by the woodwind as a brief transition to the next section.

Section 3 (Bars 193-268) In this section a melody (Melody 4) moving through the orchestra (as in Section 1) is combined with Melody 5 (derived from B4) on the traditional instruments (doubled in the orchestra for emphasis). Chords derived from Melody 4 are in the strings in 2, 2, 3, 2 formations. A wider 2, 2, 3, 2 time signature sequence also applies in this section with two 9/8 bars, two 4/4 bars and a 5/8 bar comprising a "2" (bars 195-199). Bars 239-242 is a link to a development passage in this section beginning at bar 243. A complex texture is achieved by combining various 2, 2, 3, 2 combinations of the melodies earlier stated. In the higher woods there is a semi-quaver sequence with each part separated by a quaver rest. The low woods have a 4, 4, 6, 4 crotchet sequence. The high strings have a 4, 4, 6, 4 quaver sequence and the low strings a 2, 2, 3, 2 quaver separated by a 2, 2, 3, 2 quaver rest sequence. The dense passage continues until a coda from bar 256 leads into the next section.

Section 4 (Bars 269-315) A tempo change and more open orchestration here for a change of mood although in the first four bars of the section (269-272) there are remnant of the previous section's semiquavers in the strings. Melody 1 is in the whistle with a counter-melody in the voice. The intermittent bass line (derived from the melody) on the bass clarinet is in a 2, 2, 3, 2 sequence with one bar of melody and one bar of rest making a "2". The antique cymbals (using Bb the melody's tonal centre and F the "dominant") are separated by a 2, 2, 3, 2, sequence of rests. When the viola takes up the melody at bar 278 a new counter-melody is created for the horn and whistle. Also at 278 the first use of electronic enhancement apart from mere amplification is used. The sharp exhale of breath in the voice is given a repeating echo. A further developmental working of Melody 1 appears in the two cor anglais from bar 287 and also at this time the solo strings are building the B2 chord. A link between solo viola and voice carries into the next section.

Section 5 (Bars 316-549) These next two sections are linked by three layers of 2, 2, 3, 2 sequences. These sequences are marked by 'events' in the music. For example, beginning at bar 316 the first short "2" lasts 13 bars and the beginning of the next two is marked by a trilled woodwind chord.

This device marks subsequent boundaries in the same series of sequences. For example the trill in bar 342. Melody 1 is fragmented and built in stages at the beginning of this section. The prevailing harmony here is C4 and this shifts to A2 in the wind at 375 with a contrasting combination of C4+A3 in the strings. This combination moves to the harp and wind at 401 and a version of Melody 1 based on harmony A2 is in the strings. The C4+A3 combination is highlighted in the brass from 425 but when the small pipes enter at 447 the C4 contrast is dropped leaving A3 to dominate in a clearer texture. The contrasting harmonies are reintroduced gradually to the texture. A4 dominates the winds from 491 and at the brass from 504 A2 alternates with the C4+A3 combination. Now pointing towards the Eb tonal centre of the beginning of the next section the Eb and Bb of A2 are emphasised in the horns and lower string pedal notes. During this the fragments of a melody, based on the small pipes melody, are given out by the high strings and winds and the brass emphasise the A2 notes.

Section 6 (Bars 550-783) This section allows the folk band to predominate and leans more towards the folk style. The melodies from the band, the prime melody and its three variations or responses, are in four-bar phrases from fiddle, whistle and eventually Highland bagpipe while the remainder of the band are given freedom to harmonise below. However, the orchestra continues to delineate sections according to the pattern begun in the previous section. The folk music and the orchestral pattern are layered with varying results from the juxtaposition. Sectionalising features include, for example, a single bar sequence of nine chords (2, 2, 3, 2) from the horns and bass clarinet based on a particular harmonic set. (e.g. bar 603 - C4). The tonal centre shifts to Bb at 673 for the Highland bagpipe and moves back to Eb as the folk band begins to become less prominent. The texture fragments under repeated voices echoing the significant figure mentioned previously. Further fragmentation leads to the dramatic beginning of the next section.

Section 7 (Bars 784-903) The section begins just as the previous section feels as though it might fall apart. It is a rallying call from four tom-toms and the folk band percussion in unison giving variations of the 2, 2, 3, 2

rhythm. At 799 a 9/8 (2, 2, 3, 2) rhythm is set up with a series of short sequences featuring melodic variations alternated between orchestra and band and marked by brass interjections. The harmony here is based on the predetermined sets but with different tonal centres - e.g. at 799 it is A2 with a Bb instead of Eb tonal centre. Once again there is an overall 2, 2, 3, 2 structure to the section and on this occasion the sections are also closely aligned with the harmonic changes. From the start of the 9/8, the first five bars are A2 with a Bb centre. The next five are A3 with a G centre and the next seven C4 Bb centre. This harmony covers the 9/16 bar (used to make the number of 16ths in the 2, 2, 3, 2 sequence absolutely equal) and into the next five 9/8 bars to the end of the sequence. The next sequence, starting at bar 822, is more dense with the combination A2+A3 G centre for the first five bars and A2+C4 Bb centre for the next five. A2 G centre brings that sequence to an end. In the next longer "3" sequence the folk band have a more formal part to play with melodic variants on fiddle, whistle and mandola. The harmony is static around B3+A3 with only the tonal centres shifting - D for the first five, A for the next and E over the following part bringing the sequence to its "2" length. The additional part, with the orchestra dominating, is harmonised with B3+C4 with the tonal centre very vague. This sequence ends in a 3/32 bar again to allow the number of notes in the sequence to be correct mathematically. It is also significant that from 863 the interval of a fifth is prominent and then when the final "2" sequence begins at 881 the interval of a fourth predominates and a melodic variant is woven into the folk band's texture. At this point the harmony is a A3+C4 combination with two contrasting tonal centres of C and Gb for the first 10 bars moving to D and Ab at 891 and combining with C and Gb at 899. The tonal centre becomes more uncertain until G begins to dominate. In this final "2" sequence the lower string have begun a variation in long notes of the significant phrase mentioned earlier transposed now to Bb, Eb, G, C.

Section 8 (Bars 904-964) This section begins with a full chord based on B3 and while the low strings continue with the significant phrase, various fragments of the melodic material survive both in the band (whistle) and

the orchestra (high winds then bassoon). At the end of the last repetition of the significant phrase, the basses begin the build-up of a string chord using shorter variants of the phrase. The chord brings the harmony back to A1 (G, A, B, D, E) and a climax at 935 links the significant phrase with the phrase which begins Melody 1. At bar 944 the tempo is halved as the harmony progresses B3 - C1 - A2 - A3 and ending on A2 with some decoration from C4. The first phrase of Melody 1 predominates the wide orchestration and the final statement of the significant phrase, transposed Ab, Db, F, Bb leads to the ending on Eb the tonal centre of A2.

St Kilda

The score is based on an outline for a dance piece in two acts. The outline is in the score and should be read now. The work was commissioned by Glasgow Royal Concert Hall as a dance piece, based on the St Kilda story, and for solo percussionist Evelyn Glennie. No performance date has been set.

The composer spent some time with Evelyn Glennie in her Cambridgeshire workshop before selecting the wide range of instruments used. Many of the instruments selected are non-conventional including instruments either from non-Western cultures or devised by Ms Glennie and her staff. An instrumentation list is in the score.

Although the piece follows closely the narrative in the outline there is an overall general shape in arch form. The predominating instruments move from untuned to tuned to untuned and in the order skin, wood, metal, voice, metal, wood, skin.

There are various significant points in the piece which can be drawn across the arch to make connections between different points upon it. The thin texture and metal chimes of the dawn at the beginning can be related to a similar texture at the dawn of the re-awakening near the end. The freeze when the man touches the spirit in the first scene is related to the freeze in Scene 7 as are the moments with the couple alone which follow. The death of the fisherman in Scene 2 is related to that of the principal character in the final scene. The ritual of the Love's Stone in Scene 3 is related to the ritual which precedes the principal character's death in the final scene. The magic of the island's repopulation by the Wise Old Woman is related to the magic she uses to bring out the principal character's spirit. This is also related somewhat to the mourning of the widow at the end of Scene 2 and the disaster of that scene is linked to the tragedy following the deception in Scene 5.

A significant factor in the composition of this piece is the extended use of bell-ringing change systems as described earlier with examples from St Kilda.

Also significant is that, except where abundantly obvious, bar lines are generally for guidance only as many rhythmic blocks move across the lines. The systems determining the rhythms of the piece more than often take precedence over the time signature.

Also used in the piece are two attributes from the previous portfolio work *Strì* - one melodic the other rhythmic. The melody called Melody 1 in *Strì* is used in this work as is the rhythmic sequence 2, 2, 3, 2.

All the scenes in each act run continuously.

Scene 1 - Awakening The first scene begins quietly with a thin texture depicting the dawn and gradually building in activity as the villagers appear. Although the predominating sound (particularly from 82) is that of drums, the cymbals and chimes are used to represent the spirits and the combination of textures represents spirits in the mortal world.

The rhythmic cells in this section are controlled by change systems as are the order of the instruments on which they are played. For example, from bars 21-80 a five element change system determines the order in which the tom-toms are struck. From bar 82 a 12-element system determines the order in which the instruments are played and a five-element system is used simultaneously to determine the order of rhythmic cells. However, on this occasion, two sets of rhythmic cells are used alternately. Each new cell according to *that* system is played on the next new instrument according to *that* system. The first set of rhythmic cell elements (in 1 2 3 4 5 formation) comprises the two rhythmic cells in bar 82, the two in bar 83 and the quaver rest in bar 84. The alternating set of rhythmic cells (in the first change position of 2 1 3 5 4 formation) comprises the two remaining cells in bar 84 and the three in bar 85.

As more and more spirits appear in the quiet of the man's prayer (143) a significant moment is indicated by the use of triangle beaters on the edge

of a tam-tam. This leads to the Fast and Wild section described earlier. This section also includes the first use of the amplified voice: here wordlessly as another percussive sound. It is intended that the performer will wear a hands-free radio microphone which will run through a mixing desk and be balanced during performance.

Scene 2 - Bereavement Fast and Wild becomes the storm which is represented by a suspended cymbal and the tam-tam (marked to be played constantly loud) while the other instruments represent the intense activity of the characters. As the villagers gather the Chinese dance drum joins the texture - not immediately significant but important for later. The instruments are used here in single lines apart from various sections (278-9) where they are struck in pairs to represent the deliberations of the "parliament" of men. In this section a group of 12 sounds is controlled by a change system - Chinese dance drum edge and centre, bass drum, five tom-toms, two bongos, Englehart crasher and pedal gong. A tam-tam stroke is silenced (330) as death is pronounced and although the storm continues it gradually abates from that point and as the body is brought in the Chinese dance drum is a solo instrument representing the widow's mourning. The slow widow's dance brings the second scene to an end.

Scene 3 - Betrothal The start of this scene has the first use of digital playback. Depending on the sophistication of the equipment available for any particular performance, the first section of this scene can be either pre-recorded or recorded in performance. The scene begins with the use of a quaver 2, 2, 3, 2 sequence as one element in series of rhythmic cells controlled by a change ringing system. This is then layered over another series of rhythmic phrases punctuated by loud passages for cymbal and one other instrument (409-410). The simtak²² brought in at bar 442 represents a young man of the island.

Scene 4 - The Couple The beginning of this scene also involves a playback section with metal beaters on metal instruments. The change-ringing system here is used to order a series of 12 phrases or rests which at the beginning are used in the order 1-12. The first is a crotchet followed by

a dotted minim; the second is two minims and subsequently 3 - triplet crotchet / minim; 4 - minim with two grace notes; 5 - four quavers; 6 - a minim rest; 7 - a semibreve rest; 8 - triplet minim; 9 - dotted crotchet / quaver repeated; 10 - minim / two crotchets / two quavers / crotchet rest; 11 - crotchet / minim / crotchet and 12 - dotted minim rest. As stated earlier, some change systems, particularly those involving many elements, are not worked out to their full. That is an understatement in this case because there is only time for three changes.

Sequence - 1 2 3 4 5 6 7 8 9 10 11 12

1st change - 1 2 4 3 6 5 8 7 10 9 12 11

2nd change - 2 1 4 6 3 8 5 10 7 12 9 11

3rd change - 1 2 6 4 8 3 10 5 12 7 11 9

However, as the change system progresses some of the elements are developed within themselves. For example the first element - crotchet / dotted minim becomes crotchet / dotted crotchet / quaver / crotchet in the second change and in the third dotted crotchet / quaver repeated four times. The dotted crotchet / quaver rhythm is set as a target for the development of other elements so that by the time the third change is sounded there are 19 repetitions of that rhythm. Two elements (5 - four quavers and 8 - triplet minim) remain the same throughout the changes.

The order in which the five instruments (cymbal, 3 cymbal discs, tam-tam) are struck is also controlled by a change system. The 1-5 order of cymbal, cd3, cd2, cd1, t-t is passed through the 29 changes of the Grandsire Doubles.

At bar 614 the voice is first used with a text.²³ The melody used is Melody 1 from *Strì*. A small section of playback is also used with the voice alone towards the end of the scene.

Scene 5 - Deception This scene begins with similar rhythmic cells to the beginning of the third scene. This represents the activity of village life which is abruptly interrupted by gongs (700) representing strangers. Single lines predominate until, as in Scene 2, instruments struck in pairs represent the "parliament". The voice is used (756+) to emphasise the

panic and the prayer. Following a single quiet tam-tam beat the tempo is more fixed for the sequence depicting the burning of the church. A text²⁴ is used here to emphasise the horror.

Scene 6 - The Wise Old Woman In the aftermath of the fire there is a slow tempo as the Wise Old Woman dances among the ruins. This is contrasted by the arrival of officials on the island and the explanation for the fire given by the strangers. The old woman's texture returns when she interrupts and reveals the truth and there is a brief combination of both textures as the strangers are taken away. This leaves the woman to work her magic and restore life to the village. Her magic dance is accompanied by a new texture, the bass kalimba²⁵ to which is later added percussive vocal sounds.

Scene 7 - Tourists At the beginning of this scene the texture returns to a single line cow-bell melody but the sound of a steel pan is added signifying a new event - the arrival of the tourists. Here (1180) the style of the piece is deliberately altered towards the rhythms and melodies of 1930s jazz.²⁶ The natural progressions of the jazzy sequence is broken only at 1365 when the tourists leave and the villagers begin a series of mocking actions where fragments of the jazz material are either "ironed-out" or integrated with fragments of the village life material. The texture and tempo alters abruptly at 1468 to a similar texture to that in the first scene when the couple dance together.

Scene 8 - Reawakening The texture here is enhanced by a muted simtak and softer beater on the cow-bells. The rhythms of the cow-bells and the other instrument group (cymbals, pedal gong, tam-tam) are combined as both couples merge. The simtak (unmuted) is used once again to signify the climb to the clifftop. The steel pan (1622+) uses a version of the bass kalimba melody from earlier as the Wise Old Woman uses her powers. Fragments of Melody 1 (1660+) accompany the spirits' return to the rock.

Flora

Libretto

This is an opera based on the libretto by John Rodger, a copy of which is submitted with the portfolio. The main thrust of the libretto is to explore the character of Flora MacDonald who is recorded as having assisted the escape from Scotland of Charles Edward Stuart, whose supporters were of the view that he should be on the Scottish throne. The composer was attracted to this libretto because of its approach to the story. The main character is placed in a series of personal and intimate situations and goes some way to extracting the legendary heroine from the metaphorical bog of Highland myth. The composer particularly liked the involvement of Johnson and Boswell whose writings about meeting Flora MacDonald are well documented. The situations around which the opera is centred are based on fact allowing licence in matters of time and detail.

Although the libretto is written in two acts, the composer is not entirely convinced where, if at all, the dividing line between the acts should be. In the work as submitted a first act ending is apparent but this may change in production. There are no firm plans at this stage for a performance but the composer intends to leave this point about the acts open until there are discussions with a stage director.

Instrumentation Some comment is necessary on the instrumentation used for the opera. The composer wanted to create a non-standard sound and therefore decided not to use violins in the accompaniment. The small string band therefore comprises four violas, cello and double bass. These are balanced by a small wind section, percussion and a harp. The real inspiration for the viola-based string sound came from the 1998 International Viola Congress in Glasgow which the composer attended!

There is no overture.²⁷

Scene 1 This is the first of four smaller scenes involving only Johnson and Boswell.²⁸ It begins with the music which is a motto representing the pair travelling. It is an original theme with altering rhythms signifying an

uneven pace in the rugged countryside. The composer in this instance (as well as at other points in the work) uses the horn to represent Boswell and the trombone (with characteristic glissandi) to represent Johnson. The altering rhythms are based on alternating descending even and ascending odd numbers of quavers: 8, 3, 6, 5, 4, 7, 2, 9.²⁹

The harmony is based on three seven-note sets with increasingly chromatic adjacent intervals.

Set 1: C(1)Db(3)E(1)F(2)G(1)Ab(3)B(1)

Set 2: C(1)Db(1)D(3)F(1)Gb(2)Ab(1)A(3)

Set 3: C(1)Db(1)D(1)Eb(3)Gb(1)G(2)A(3)

Set 1 is the set central to the harmony and always returned to. Sets 2 and 3 are used in an episodic fashion thereby giving a rondo-like feel to the harmony. A significant phrase here is the setting of the words; "The fifteen, the nineteen and the forty-five" at bars 26-8.³⁰ This rhythm on a single note setting is a motto (later referred to as the salute motto) representing the special feelings Johnson and especially Boswell may have towards these historic events. Call this motto A and the other parts B and the shape of the scene is as follows with the first bar of each part in brackets:

Set 1: A(27), B(31), A¹(38)

Set 2: B¹(43), B²(49)

Set 1: A²(55), B³(61), A³(67)

Set 3: B⁴(72)

Set 1: A⁴(77).

At bar 82 the travelling motto resumes to the end of the scene.

Scene 2 The harmony of this scene is determined by the use of two particular contrasting pitch sets, one for each of the two characters,³¹ and the development of those sets, by adding new notes, as the scene progresses.

At the beginning the harp³² “announces” Flora’s pitch set A, G, B, D, E and then immediately in retrograde. The notes of the following harp accompaniment are determined by applying a bell ringing change system. From bar 8 a C replaces the D in the set³³ and the same process is applied. From bar 13 additional note F# is added and the C is sharpened. From 16 the A, E and B are flattened as the short introduction to the scene, and to Flora, reaches a climax. At the climax point (25-6) the altered and added notes are dropped. The setting of the word “America” is significant in that these intervals are a motto for emigration.³⁴ The end of this introductory section (to bar 36) is linked to the beginning.

The pitch set assigned to Sandy is D, Eb, F, Gb, Bb against Flora’s contrasting G, A, B, C, E. The conversation between Flora and Sandy alternates between these pitch sets and the rhythms of the vocal lines are based on speech rhythms.^{35 36} At bar 57 the C in Flora’s pitch set changes to a D giving her one note in common with Sandy’s set. However, Sandy adds the C on to his set. Note the use of the travelling motto (62-4) when Flora mentions the visitors. Also note here that Ab and Bb are added to Flora’s accompaniment to link with the travelling motto.

The section of this scene from bars 68 to 131 is treated aria-like in three parts - A, B and C. Part A starts at 68, B at 85; C - 89; A¹ - 102; B¹ - 112; C - 117. The parts are linked with characteristic vocal lines and accompaniments. Of particular note is the melody which predominates the C parts. This is now called the Gael motto and is based on the Melody 1 devised for *Strì* and also used in *St Kilda*.

There is an abrupt change of texture at 132 as the recitative-like conversation returns.

Scene 3 This is the second of the Boswell/Johnson scenes and, as in the first, it begins and ends with the travelling motto music. The harmony also uses alternations of the same three pitch sets but on this occasion it is the more chromatic Set 3 which becomes the focus of the harmonic “rondo”.

Set 1: A(9), A¹(14), B(18), A²(21)

Set 3: C(25)

Set 2: B¹(38), A³(40)

Set 3: C¹(44)

Set 2: A⁴(57)

Set 3: C²(62)

Set 1: B² merging with A⁵(75)

Set 3: C³(83)

The C (or even chorus) sections have a particular 5/8 rhythm which also contrasts them with the other parts.

Scene 4 This scene with Flora and Alan contrasts two pitch sets: Flora G, A, B, D, E and Alan A, B, D, E, G# which, as can be seen, have four notes in common. As the conflict between the two increases, Alan is given more notes (e.g. C# and F#).³⁷ The few moments where Kate sings are set apart by giving her the pitch set Bb, C, D, Eb, F.

At the outset the percussion is controlled by two change ringing systems. An ostinato rhythm figure is set up by the three cymbals but the order in which the cymbals are struck is controlled by a short change system for three elements. Simultaneously, in the side drum, following the initial five-note phrase, the same three-element change system determines the order of three rhythmic cells. Similarly, there are two simultaneous five-element change systems controlling the order in which Alan's pitch set is played by the strings. One system controls the cello and bass with a rhythm the same as the cymbals. The simultaneous system controls the violas with a rhythm which fills in the gaps left by the side drum. As Alan's entrance comes to a climax (10-12) five percussion instruments³⁸ are controlled by a change system. The five elements of the systems are placed in semi-quavers across the beat and the cross-rhythm emphasised with accents. Also at this point the Gs in the harmony are now natural

according to Flora's set. From bar 13 the accompaniment is fragmented as everything begins to settle down a little.

From bar 24, as Flora begins to take control of the situation, the harp has two change systems running simultaneously - one controlling the order of rhythmic cells the other controlling the order of the notes of Flora's pitch set.

The system determining the order of two pitch sets from bar 40 is detailed in Chapter 2.

From bar 65 there is an aria passage in six sections. The first section (65-69) acts as a basis for development in the subsequent five sections: (70-72), (73-77), (78-84), (85-92), (93-108).

A recitative passage of thinner texture leads to another aria from bar 146 which has three sections and a coda thus: 1 - 146-154; 2 - 155-171; 3 - 172-186; coda - 187-191. Note the use of the Gael motto at bar 166. The string harmonies, based on Flora's pitch set, are controlled by a change system over sustained pedal notes.

A further recitative passage precedes another aria for Alan beginning at bar 202. The aria is punctuated by short recitative sections, for example at bars 211-212 and from bar 216 where the travelling motto is used. This motto is developed in this longer interruption to the aria until bar 247.

Flora takes over the aria at bar 278 following another recitative passage and when Alan resumes at 293 the string entries are twice as frequent to build the tension. These string entries are transformed to the Jacobite prison ship motto at bars 319-320. At 355 the frequency of the string entries is redoubled. The climax of the scene is at bar 378 when Alan strikes Flora and the wind section makes its first full appearance since the final bass clarinet notes at 141. A further statement of the Gael motto (389-390) leads to a string harmonic which holds until the end of the scene.

Scene 5 The harmony for this major scene is based on 16 six-note pitch sets - eight each for Flora and the male chorus. Later in the scene the female chorus uses the contrasting diatonic scale of Bb.³⁹

Flora's pitch sets are based on semitones and thirds while the male chorus' sets have mostly whole tones.

Set 1 Flora: C, Db, E, F, G#, A (131313)

Men: F, G, A, C, D, E (223221)

Set 2 Flora: D, F, Gb, A, Bb, C# (313131)

Men: Eb, F, G, A, C, D (222321)

Set 3 Flora: Eb, Gb, G, Bb, Db, D (313311)

Men: Db, E, Gb, Ab, Bb, C (322221)

Set 4 Flora: F, Gb, A#, B, C, Eb (131132)

Men: C, D, E, Gb, Ab, Bb (222221)

Set 5 Flora: G, Bb, Db, D, Eb, E (331113)

Men: Bb, C, Eb, F, G, A (232221)

Set 6 Flora: Ab, A, Bb, Db, E, G (113331)

Men: Ab, Bb, C, D, E, G (222231)

Set 7 Flora: A, C, Eb, Gb, G, Ab (333111)

Men: Gb, Ab, Bb, C, Eb, F (222321)

Set 8 Flora: Bb, B, C, Db, E, G (111333)

Men: F, G, A, C, D, E (223221)

It will be noted that Flora 2 is a transposition of Flora 1 and that Flora 5-8 are transpositions. In the male chorus sets 7 is a transposition of 2 and 8 is a transposition of 1.

The first aria passage for Flora has three sections A, B and C. After the initial bars of recitative the aria begins at 17. The sections are delineated as follows: Set 1 A starts at 17, B at 25, B¹ - 37, C - 47; Set 2 A¹ - 50, A² - 60, B² - 68, C¹ - 80; Set 3 B³ - 83, A³ - 94 Set 4 B⁴ - 103, B⁵ - 115, C² - 127-133.

Flora's vocal line is text driven and in contrast the male chorus vocal has a rising-falling shape which has a two-fold purpose. Firstly, it represents the

sway of the prison ship and secondly it alludes to the style of Gaelic psalm singing.

The next part of the scene deals solely with the prisoners and introduces solos from the male chorus. While the chorus continue in the same vein, the soloists have more florid vocal lines each with an individual character setting them apart from the others. However, the notes used remain within the prescribed pitch set. This reaches a climax at 169 and that leads to another section which brings in the third element of the female choir. Here three contrasting moods are juxtaposed - the despair and anger of the prisoners represented by passionate individual outbursts relating cruel treatment; the sharply contrasting pleasantries of the visiting ladies portrayed by their sycophancy and an apparent constant need to dance; and Flora's dilemma caught in the midst of it all. Flora's position is established (172-179) before the visiting ladies swamp her (180-185). The women's dance is penetrated by a description of a public whipping (186-195) and Flora's despair is heard again (Set 5) (195-200). The whipping continues as the ladies dance (201+) and the prisoners' despair edges to the fore. From 214 the three moods continue together (Set 6). Flora is momentarily left out of it, apart from an angry interjection (229) (Set 7), as the ladies' bright dance is played against the undercurrent of the prisoners' despair. Flora bursts through again (266) (Set 8) and for a moment she is able to push aside the bad memories but not for long. The whole ensemble climaxes in (277) with the woodwind taking up Flora's vocal line, the brass the prisoners' line and the strings the ladies' dance. This suddenly falls away (293) and in a tense, quieter passage, Flora has the last word before the complex juxtaposition, including voices, brings the scene to a chaotic climax.

Scene 6 This is a short interlude involving Boswell and Johnson in some light banter about what they call Highland manners. The three pitch sets assigned to the characters are used here in a verse/chorus format (V¹, C¹, V², V³, C², V⁴, C³) with Set 1 being used for the choruses (14, 31, 43) and the other sets alternating in the verses: Set 3 - 3, 20, 38 and Set 2 - 25.

Scene 7 This is a major scene involving complex interplay between the four characters Flora, Alan, Boswell and Johnson. The main impetus of the scene is Alan's efforts to explain, to Boswell and Johnson, the events surrounding the plight of Highland farmers and his efforts to introduce new farming methods. Laced through this is Johnson's pomposity and Flora's sensibility. Boswell, while he might appear a mere observer, is the catalyst for much of the ensuing discussion.

The characters are assigned basic pitch sets:

Alan: A, B, C#, E, F#, G#

Flora: F, G, Bb, C, D, Eb

Boswell: E, G, B, Db, Eb

Johnson: A, C, D, F, G#

and although these sets are adhered to in the main, the interplay between the characters is such that the borrowing of notes from another character's set is not uncommon during the course of a conversation: just as one might assimilate an accent or attitude in order to enhance the lines of communication.

The scene opens with the comic appearance of Alan, dressed in full Highland regalia, awaiting the arrival of the guests. There is a combination of jaunty themes in the woodwind based on Alan's set and, following Kate the servant's interruption, the themes appear in retrograde (9) picking up from her Bb. Adding to the comic nature of the passage, a line from the popular song *Coming through the rye* is inserted for effect (17-18 bass clarinet).

The travelling music is used (24+) for the visitors' entry and a recitative passage follows. Note the single note salute motto (47-8).

As the trio wait for Flora, Johnson begins his first aria⁴⁰ (55) characterised by a staccato figure at the outset.⁴¹ The aria has an introduction, four continuous sections beginning at 61, 68, 75 and 80 and a coda (90) which is a repeat of the introduction.

A recitative section featuring Alan leads to his first aria (120) with an accompaniment based on the voice. The vocal line is woven into an almost continuous harp line and the string harmonies are drawn from this by sustaining notes from the line. The aria has five sections with four developed from the first by the augmentation, sequencing, diminution and development of a series of melodic figures⁴². The first section (120+) has seven basic figures. These are expanded in the longest second section with the addition of an eighth and ninth figure (143-5) which is immediately repeated. The third and shortest section (152+) has only the first three figures and the fourth section only the first five. The fifth and final section expands to comprise figures 1-8.

Boswell's aria which follows immediately has two sections (starting at 178 and 188) the second of which is a repeated extended version of the first.⁴³

The characteristic staccato figure (199) announces another aria for Johnson the construction of which is similar to the first - A beginning at 199, A¹ - 203, B - 208, B¹-215, A² - 225.

Alan's next aria begins immediately and it is constructed in a similar manner to his first with the development of a series of melodic figures. Four figures make up the first section (228-234). In the second section (235-241) this is expanded to seven figures and in the third section (241-256) further expanded to nine.

A brief interjection from Boswell (it sounds as though he is starting an aria for his characteristics are there) is itself interrupted by Johnson who embarks on aria number three, a short one which has two clear sections starting 260 and 264. Boswell, salutes the argument (271-2) and Alan goes into his third aria passage (273). The first section of this passage has seven melodic figures and the next (287+) has five.

Boswell interrupts again but this time more substantially in the second of his short aria passages (296+) which is an extension of the last phrases of his first aria.

Alan resumes with his next aria passage (306+) a shorter one this time with one section comprising seven of the melodic figures. Johnson's following passage (322+) is an extension of the B section from his first aria and this is followed by Alan again (335+) with seven melodic figures the last being additionally expanded. Before Alan can continue, both Johnson (353) and Boswell (357) make an attempt at further interruptions but a climax when Boswell mentions America⁴⁴ allows Alan to take control.

Alan's final aria has a different accompaniment. Although the violas continue in his characteristic style, the lower strings have the prisoners' motto and the Gael motto and the clarinet melodic line is more erratic. The first section of the aria (361+)⁴⁵ has seven melodic figures and the second (373+) diminished to five. The third (381+) has six and the fourth (392+) has five but the fifth (398+) is much expanded to take in ten figures while the sixth and final section (416+) returns to seven figures.

A further climax (427-8) brings to an end this part of the scene and the orchestration is minimal as Kate brings in Flora.

From here on the pitch sets and/or tonal centres for all four characters have altered to:

Flora: Bb, C, D, Eb, F, G

Alan: A, Bb, B, C#, E, F#, G#

Boswell: B, C#, Eb, E, F#, G, G#

Johnson: A, B, C, D, Eb, F, G#

A much slower tempo and less agitated melodic lines completely alter the atmosphere from a few seconds ago. The recitative passage which follows has the visitors behaving extra gentlemanly towards Flora who turns the tables by suggesting they should be attending to Alan who had been injured. The wind section briefly replay (449-450) Alan's pacing and preening music from the beginning of the scene and Alan is left to try to explain the situation to the visitors; at first unaccompanied and then with a quietly wailing clarinet and string glissandi to emphasise the awkwardness. A playful recitative section follows as Flora and the visitors

try to break the ice. For example, the travelling motto is used (476+) as the visitors explain the unpleasant mode of transport.

Johnson tries to embark on another aria-like passage (489) but Boswell has other plans. He wants to steer the talk round to Flora's part in assisting Prince Charlie. Almost silent string chords (on Flora's pitch set) and the harp accompany Flora as she tells her story (514+).

Boswell's question (554+) breaks the spell; Alan's interjection angers him and a brief climax at the mention of the £30,000 reward (578) allows Johnson to step in with another aria passage (583+). In the recitative that follows the Latin quote and translation from the visitors is a precursor of the next scene.

However, the Latin sparks Alan into another aria passage again based on the development of short melodic figures. The first section (625+) has six figures and the second (632+) has four. The third section however (638+) is expanded to nine figures and here Alan angrily digresses with a passage of recitative (649-659) before returning to the aria style. The subsequent section has eight figures the eighth being taken up by Johnson as the music enters a passage where all four characters present a view simultaneously.

All four voices develop material each used earlier in the opera. For Flora material is developed from Scene 5 (267+); for Boswell material from Scene 1 (72+); for Alan material from earlier in this section (656+) and for Johnson material from earlier in the scene (215+). This reaches a climax when Flora brings the outbursts to an end (696) and ushers the visitors to bed. Alone in the room Alan paces about again (710) and then some of travelling motto is used where he tries to emulate the Englishman (713).

When Flora re-enters Alan once more launches into the argument (721) but the accompaniment is different with only a heavy bass line doubling the vocal line and some quiet, agitated wind chords. The music rises to a series of sharp climaxes as Alan and Flora struggle. The accompaniment mixes the characters' pitch sets in sweeping upward scales which diminish in volume leading to held chords as an introduction to the next scene.

Scene 8 This is the final short scene with Johnson and Boswell in three brief sections sandwiched between a repeated introduction and coda. The final chord of the previous scene appears at the beginning. The three sections begin at 7, 14 and 19.

Scene 9 The final scene is another nightmare episode on board a boat. However, the libretto does ask for some doubt as to whether or not the scene actually depicts Flora on her way to America. The music is divided into sections featuring Flora and others featuring the full chorus although the chorus is used at times as part of the accompaniment in Flora's sections.

The introduction, to bar 14, depicts a storm and the sections are divided thus: 1 - Flora (15), Chorus (26); 2 - Flora (53), Chorus (62); 3 - Flora (89), Chorus (102); 4 - Flora (125), Chorus (131); 5 - Flora (147), Chorus (164); 6 - Flora (183), Chorus (203), Flora (218). The six sections have six pitch sets:

1 - G, A, E, D, B

2 - G, A, E, B, C

3 - G, A, E, D, B, C

4 - E, G#, A, B, C, D

5 - E, G#, A, B, C#, D

6 - A, B, C#, D, E, F#, G#

The substitution of the D for C in the second set is the same process carried out in the first scene. The spacing of the first set read as a note row is the first five notes of the Gael motto (or Melody 1 from *Strì*).

The Flora and Chorus sections are further delineated by the use of different time signatures. An 11/8 time signature is predominant in the choral sections while 4/4 and later 7/8 are the main time signatures for the Flora sections. The chorus is usually doubled by staccato strings. Flora's final statements are constructed from fragments of the Gael motto but the Jacobite prisoners' motto is the theme which swamps the ensemble and finishes the work.

CHAPTER 4

This chapter deals with the new areas of composition that have been suggested to the composer by the work on this portfolio.

- 1) The composer's work on this portfolio has drawn inspiration from the complex relationships which can be developed between number systems, such as the change ringing system, and the manipulation of harmony in conjunction with rotating pitch sets. There is more work to be done on the use of systems like that involved with change-ringing and the construction of a coherent harmonic progression.
- 2) The composer is pleased with the non-lyrical, text-driven word setting in *Flora* and is anxious to do more work with natural dialogue, as opposed to poetic prose. The composer was encouraged in this by one advisor, an opera composer, who read the libretto and commented that he did not know how it could be set to music.
- 3) The composer's work (particularly on the *St Kilda* piece) has encouraged him to question his rhythmic horizons and he is anxious to take this further to enhance the body of works for percussion at a highly sophisticated level.
- 4) The composer's work on *Strì* has encouraged him to seek a greater sophistication in the combining of traditional instruments with conventional orchestral instruments. The composer takes the view that he should work towards the integration of these traditional colours within the orchestral texture rather than use the non-standard instruments as features to be highlighted and held up as something out of the usual - perhaps for effect.

Appendix I

Notes

Notes

Chapter 1

- ¹ Collinson makes the distinction that traditional music, that which is passed on orally, more or less ceased to be created around the end of the 18th century. He contends that the printed music which followed should more properly be termed national music.
- ² Cited in *The Book of Music*.
- ³ *Harvard Dictionary of Music* has it that the carole was a medieval French round dance apparently performed during the winter solstice. This pagan ceremony became merged with the celebration of Christmas.
- ⁴ According to Purser
- ⁵ Hoppin's *Medieval Music* cites the mss known as *Anonymous IV* which refers to major and minor thirds as being considered the best harmonies in the west country.
- ⁶ Purser
- ⁷ Collinson mentions this and berates its clichéd use as the "unfailing stand-by of the music halls when a bit of 'Scotch' music is in requirement". Although the music hall as a form of entertainment has all but disappeared, sadly this cliché has continued in the newer forms of public entertainment both on stage and in television. Consequently, from a global point of view, one could assert, however one might regret it, that this feature is one of the most significant indicators of Scottishness in music!
- ⁸ Kenneth Chalmers in *Bela Bartok* says that even after the songs and dance music of the peasants had been recorded, Bartok insisted that they be transcribed into stave notation and was forced to invent new symbols of notation to indicate every nuance of the music.
- ⁹ Chalmers
- ¹⁰ Quoted by John Emery on a 1982 radio broadcast for The Open University
- ¹¹ Folk music here for Ives is in its broadest sense including traditional and national music as well as popular music - music of the folk.
- ¹² William R. Ward, *Examples for the Study of Musical Style*

¹³ Charles Ives *Memos*

¹⁴ Rudolph Reti *Tonality in Modern Music*

¹⁵ Gilbert Chase in *America's Music* cites some 54 hymn tunes, 13 songs of a patriotic or military nature, 36 popular songs and "less numerous and widespread" college songs. Chase drew on a 1960 publication compiled by John Kirkpatrick "A Temporary Mimeographed Catalogue of the Music Manuscripts of Related Materials of Charles Edward Ives, 1874-1954, Given by Mrs Ives to the Library of the Yale School of Music, September, 1955".

Chapter 2

¹⁶ Web site <http://web.mit.edu/bellringers/www/html/change_instruction.html>

¹⁷ Element here, and subsequently in this context, means one note/instrument or a group of notes/instruments assigned to the corresponding movements of one bell. In other words for "elements" read "bells".

¹⁸ These factors can be, for example, the end of a prescribed phrase length, the completion of another number sequence which had been running in parallel and given precedence by the composer, or the final line of a text.

Chapter 3

¹⁹ It is also valid to say these are pentatonic scales because the notes are also used on those terms. When a pitch set is written out in this thesis, the tonal centre is the first note given.

²⁰ John Purser in his series of radio programmes *Scotland's Music* featured the electronically reproduced sound of several ancient horns. Purser suggested that horns of different pitches may have been played simultaneously at or around dawn by armies wishing to strike fear into the opposition camped a distance away.

²¹ Here the composer is continuing impressions of early instruments which begun with the vowel changes in the brass embouchures. The sound of a timpani drum played on the edge with side drum sticks simulates very well an early tambour in the distance.

²² The simtak was developed by Ms Glennie's technical staff. It comprises three short metal tubes of varying diameter welded together end to end in the sequence small, large, medium. The large tube is fitted with end plates containing holes equal in diameter to the small and medium tubes. Played with hard thin sticks, the three tubes of the simtak give different high pitched sounds with many high frequency overtones. When struck lightly it

is like a small bell. When struck loudly it is a piercing ring. The simtak can be heard on the Evelyn Glennie CD *Drumming*.

²³ The text comes from Tennyson's *The Splendour falls on Castle Walls* as published in *Poets' Quair* (Edinburgh and London. Oliver and Boyd 1950, eighth impression 1966).

²⁴ The text is adapted from Lewis Grassie Gibbon's *Sunset Song* (Edinburgh. Canongate Publishing, 1988. Pages 88-89).

²⁵ The kalimba is of African origin and is constructed using strips of metal fixed at one end over a wooden sounding box. The strips of metal are played by downward plucking at the unfixed ends with the fingers. The smaller kalimba is held in both hands and played with the thumbs. The bass kalimba is set on a table and has two rows of metal strips - for the right and left hands. The strips are tuned one tone apart. The left hand set is tuned from G# on the bottom bass line to F# on the top treble line. The right hand set is tuned from G on the bottom bass line to G at the top of the treble stave. This gives a complete three-octave chromatic scale from G on the bottom bass line to G at the top of the treble stave.

²⁶ Although this at first may seem rather unsophisticated and out of context, it is justified by the narrative. The composer has seen archive film of tourists visiting St Kilda and the differences between visitor and villager were very marked. The visitors' generally superior attitude towards the villagers and their totally different behaviour towards the presence of the film camera requires some heavy irony.

²⁷ The composer has mixed feelings about the use of an overture and leans towards the view that the action should begin immediately the house lights go down. However, should any opera company willing to stage a performance of this work have strong views on the presence of an overture, then the composer is not against writing one for that purpose!

²⁸ These scenes provide interludes, often of a lighter nature, between what might be termed the main action. The libretto at these points is based on the documented writings of the two men during their Highland travels. Often the libretto centres around Johnson's attitudes towards the Highlands and the culture and lifestyle of its people.

²⁹ The 9/8 bars are divided by the 2, 2, 3, 2 rhythmic motive: providing a link with the other two pieces in the portfolio. The odd/even alternating tempi is, of course, nothing new: see Stravinsky's *The Rite of Spring* (Figure 13) where a similar method is used to order the occurrence of accented chords.

³⁰ It is well to note here that the page numbers are continuous throughout the score, but the bar numbers are not and return to "1" at the beginning of each scene.

³¹ The assigning of particular pitch sets to one character is used in other scenes. This is particularly effective not only to add aural emphasis to one character's control of the conversation, but also to indicate one character's attitude towards another. For example when Flora wants to appease Johnson after an argument in Scene 7 she emphasises the notes from her pitch set which are common to Johnson's pitch set (bars 704-6).

³² Throughout the opera the harp is considered Flora's instrument. Even, for example, in Scene 7 when Flora is not present, the harp accompanies Alan indicating that her presence is very much with him.

³³ The C replaces the D only in the accompaniment. The vocal line continues to use D and this increases the overall pitch set by one note.

³⁴ This is not the only motto connected with emigration. The Gael motto (taken from Melody 1 of *Stri* and first heard in Scene 2) and the Jacobite prison ship motto all have a relationship with being on a boat and/or going to America.

³⁵ The composer has not used the recitative technique of stylised vocal lines and bland accompaniment. The shape and rhythms of the vocal lines throughout the opera are driven by the text and the context first with occasional recognition of melodic aria style at relevant points. The composer does not employ the standard recitative - aria forms, and the words "recitative" (or "recitative-like") and "aria" (or "aria-like") are meant only for comparison and contrast and not as an indicator of style.

³⁶ The melodic lines for Flora are constructed from note rows taken from tunes published in James Hogg's *The Jacobite Relics of Scotland*. The tunes used are *The Bonny Moorhen* (page 129), *Prince Charles and Flora Macdonald's Welcome to Skye* (page 172)(This tune is also used later in the work see Note 39), *The Lament of Flora Macdonald* (page 179) and *Lament of old Duncan Skene of Clan Donochie* (page 429).

³⁷ This means that Alan's eventual pitch set is the scale of A major and this is carried forward to other parts of the opera. This is deliberate to lean the harmonic argument towards Alan being the most ordinary of all the characters!

³⁸ Pedal bass drum, claves, cow bell, side drum, triangle.

³⁹ The melody used here is a Jacobite song entitled *Prince Charles and Flora Macdonald's Welcome to Skye* as published in *The Jacobite Relics of Scotland Vol. II*. (See Appendix IV).

⁴⁰ Aria here is defined as in Note 35. All three characters, Alan, Boswell and Johnson have solo passages which the composer has designated arias. Alan has five aria passages, Boswell has two and Johnson four. However, for example, Alan's five aria passages are all

based on the same vocal line so this could also be described as one aria with five separate passages spread throughout this section of the scene. The same applies to the other characters.

⁴¹ The orchestration here is important for it becomes characteristic of Johnson. An ensemble comprising the woodwind, the brass (with the trombone glissandi already mentioned), the bass drum and the double bass is Johnson's trademark. The sections involving Alan and Boswell are also given characteristic ensembles. Alan is allocated all the strings, the harp (Flora's presence as mentioned earlier) and single woodwind instruments; more usually the clarinet. Boswell is marked by the horn with the flute, trombone and plucked strings.

⁴² These melodic figures are treated very freely being cut or expanded according to the needs of the text.

⁴³ Now that all three characters have had solo passages, one can hear how by the use of characteristic pitch sets the pervading harmony of each character is remote from the other and this is emphasised by the characteristic orchestration (mentioned earlier) and varied tempi.

⁴⁴ Here the Jacobite prisoners' motto is contracted to provide the climax.

⁴⁵ "America" from bar 370 is set to the final phrase of the prisoners' motto.

Appendix II

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Appendix IV

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*The Jacobite Relics
of Scotland*

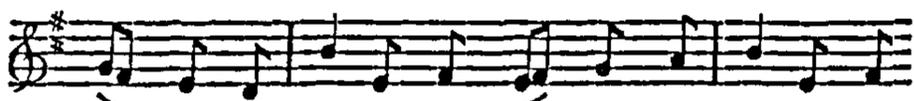
SONG LXXXVIII.

Prince Charles and Flora Macdonald's Welcome to Skye

SAID TO BE FROM THE GAELIC.



TERE are two pon-ny may-tens, And tree pon-ny



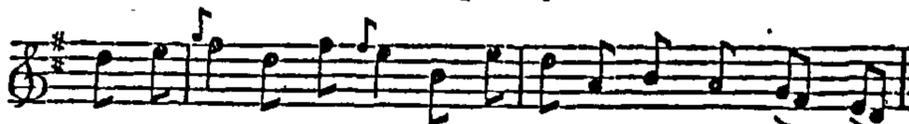
maytens, Come o-ver te Minch, And come o-ver te



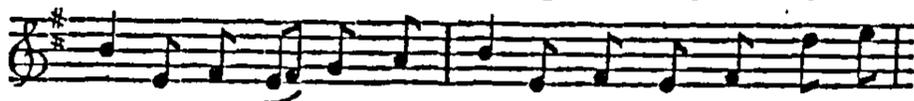
main, Wit te wind for teir way, And te cor-rei for teir



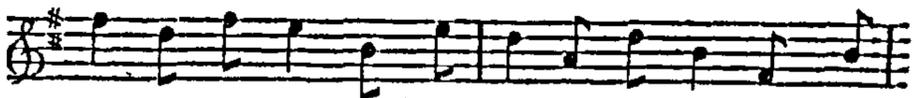
hame: Let us welcome tem pravely Un-to Skhee akain.



Come along, come along, Wit your poatie and your song, You



two pon-ny maytens, And tree pon-ny maytens; For te



night it is tark, And te red-coat is gane, And you're



pravely welcome To Skhee akain.