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Traditional Irish Music: A Path to New Music

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TRADITIONAL IRISH MUSIC:

A PATH TO NEW MUSIC

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ABSTRACT

This dissertation is divided into four sections. The main focus concerns the presentation of a body of new music I have composed which brings elements of traditional Irish music together with elements of contemporary classical music. The compositions were primarily generated from three aspects of traditional Irish music: Instrumental Characteristics, Rhythm and Pitch. Discussion of these aspects is found in Chapter 3 in order to prepare the reader for the commentaries in Chapter 4.

Chapter 2, 'The Notational Dilemma,' is dedicated to discussing one of the main focuses of my research. The dominance of aural learning in the dissemination of traditional music and conversely the visual aid of sheet music in classical music has meant that many of the essential characteristics of traditional Irish music have rarely, if ever, been analysed or notated in the detail that is expected for classical music. This results in great confusion when those with a stronger background in classical music attempt to analyse and/or learn about traditional Irish music. On the other hand it is a great challenge for many traditional musicians to perform music that is notated in more detail than they would be used to. I offer some possible solutions to this notational dilemma in this section.

The various research methods used are detailed in the Research Methodology. Central to this research were a number of discussions with musicians and composers who have expertise in some or all aspects of the topics discussed. I believe these discussions are of particular scholarly value as they bring together, in one resource, the views of some of the most notable living Irish composers and musicians. Selected transcripts and recordings of the interviews are provided with the supporting material.

ACKNOWLEDGEMENTS

There are a number of individuals without whom this dissertation could not have been possible and it is important that their contributions are acknowledged.

Firstly, I must express my profound gratitude to my supervisor Dr. Jane O'Leary for the dedication and thoroughness she applied to supervising me through this dissertation.

Peter Browne's role as traditional music consultant was invaluable. His encyclopaedic knowledge about traditional music was of great benefit to my research.

I would like to thank the staff of the *Dublin Institute of Technology* for their assistance on administrative and formatting matters, particularly Dr. Brian O'Neill, Dr. Kerry Houston and Dr. David Mooney and the graduate research and music library staff members.

The staffs of the *Contemporary Music Centre* and the *Irish Traditional Music Archives* in Dublin were always very helpful in answering my multiple queries.

I owe a great debt of gratitude to all the composers and musicians who generously gave their time to my research queries. I owe particularly gratitude to the musicians who collaborated with me on my compositions.

Some of the compositions presented with this dissertation would not have been possible without the generous support of the *Arts Council of Ireland, RTÉ, The Galway Music Residency* and the *Contemporary Music Centre*

Finally, I would like to thank my partner Eileen and all my friends and family for providing great moral encouragement to help me complete this dissertation. My Aunt Dolores deserves special mention for applying her proof-reading skills to this dissertation.

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1.1 Research Philosophy

Prior to commencing the research for this dissertation I had composed a number of concert works which were largely inspired by traditional Irish music. The most significant of these include *String Quartet No. 2 – The Cranning* (2004-2005) and *Music for the Departed* (2006) for fiddle, violin and guitar. The main goal of my research for this dissertation was to enable me to continue to refine my approach of creating original compositions that are inspired by aspects of traditional Irish music, contemporary classical music and other styles.

It is important to emphasise the fact that my engagement with traditional music is a natural one derived from my role as a performer of traditional music. I use elements from traditional music purely because I have a great love of traditional music. It would be very dishonest of me to exclude this influence from my concert works. So I have chosen to embrace it as fully as possible by deeply immersing myself in the study of traditional music. The research period for this dissertation has been the most intensive in this regard.

The main concentration of my research has been to thoroughly investigate the aspects of traditional music which interest me most. This is primarily instrumental dance music and slow airs as performed on the *uilleann* pipes, flute and fiddle. I have developed the compositions from techniques and sounds I have discovered within traditional music and in many cases I have written music for traditional musicians and instruments.

I have also researched methods by which other composers have utilised elements of traditional music in the context of concert compositions. This was done in order to provide a scholarly account of how other contemporary composers have engaged with

traditional music and musicians. This analysis assisted me in ensuring my compositions are original.

Ultimately my intention was to produce a significant body of new concert works which draw upon aspects of traditional Irish and contemporary classical music in an original way.

1.2 Research Methodology

The research methodology involved a number of processes which were necessary to gain a broad understanding of my fields of study. There were two main fields of study: traditional Irish music, with a particular focus on instrumental traditional Irish music and classical music, with a particular focus on contemporary classical music.

Prior to undertaking this research I gained substantial knowledge of both fields through academic and personal studies. My main aim in this research was to further explore areas of interest within these fields in order to discover new methods with which to create new compositions. Whilst I had reached a reasonable level of understanding of traditional Irish music I felt I needed to more thoroughly explore the tradition. I also felt it necessary to more thoroughly explore Irish contemporary classical music, particularly those works which have been influenced by traditional Irish music. I evolved a number of methods by which to conduct this research.

1.2.1 Field Research at Music Festivals and Events

Perhaps the most important aspect of my research has been my attendance at numerous music festivals and events. Traditional music festivals are the equivalent of conferences in other fields of research. It is at these events that the most prominent musicians and academic experts on traditional music congregate for formal discussions, concerts and informal music making. It is mainly through these events that I have discovered musicians, musical styles and repertoire of interest. The informal contact I made with various individuals at these events has ultimately led to professional work with them or

direct inspiration for some of my compositions. It was at festivals such as these that some of the most important interviews I conducted took place.

I also attended numerous events featuring contemporary classical music. One of the main benefits of this was that it enabled me to hear new and unrecorded works which featured a traditional music influence. By this method I experienced new music by a number of Irish composers before it was archived in the *Contemporary Music Centre*. Attending these events also enabled me to discover cutting edge contemporary music from around the world. This inevitably had an influence on my own compositions; ironically the strongest influence most of these performances had on me was that they encouraged me to follow my own path rather than to adapt to any of the new styles I encountered.

1.2.2 Interviews with Musicians and Composers

One of the initial tasks I undertook in my research was to draw up a list of possible musicians and composers to interview. I felt that interviews with experts in traditional music would prove fruitful for exploring some of my theories about traditional music and for assisting in the composition process. I focused on musicians who have a particular expertise on certain instruments or who have a particular style in which I was interested. The traditional musicians I interviewed are **Harry Bradley (b.1974)** (flute, tin whistle, fife and other wind instruments), **Peter Browne (b.1953)** (*uilleann* pipes, flute, tin whistle, broadcaster and producer of music for RTÉ), **Paddy Glackin (b.1954)** (fiddle, broadcaster and producer of music for RTÉ), **Martin Hayes (b.1961)** (fiddle), **Claire Keville** (concertina, tin whistle, keyboards, broadcaster for Clare FM), **Dr. Charlie Lennon (b.1938)** (fiddle, piano, composer), **Mick O'Brien (b.1961)** (*uilleann*

pipes, tin whistle, low whistle, flute), **Caoimhín Ó Raghallaigh (b.1979)** (fiddle, *uilleann* pipes, flute, tin whistle), **Siobhán Peoples** (fiddle, composer).[1]

In the field of classical music I primarily concentrated on interviewing Irish composers. The primary reason for concentrating on composers is because in classical music composers are the main creators of the music; performers generally try to recreate the composers' intentions. In traditional music the process of performance and composition is less separated, all composers of traditional music are also performers. All accomplished traditional musicians are in many respects composers too because they tend to make tunes their own through the process of variation. For this reason I would correlate the best performers of traditional music with the best composers of classical music. They hold equal importance in their traditions in that the music they create profoundly influences the music in general. In other words, Martin Hayes has had as profound an impact on contemporary traditional Irish music as the American composer Steve Reich (b.1936) has had on contemporary classical music.

My methods for interviewing composers were less detailed than for interviewing traditional musicians. The main reason for this is that the aspects of my dissertation relating to the works of contemporary Irish composers are minimal compared to my general analysis of traditional music. It was sufficient in some cases to send questionnaires by email to the composers; indeed some composers expressed a preference for this method of interview. Following initial research at the *Contemporary Music Centre* to identify composers who had most engaged with traditional music, I interviewed the following either personally or through emailed questionnaires: **Frank Corcoran (b.1944)**, **Donnacha Dennehy (b.1970)**, **Roger Doyle (b.1949)**, **Michael Holohan (b.1956)**, **Rachel Holstead (b.1978)**, **Eric Sweeney (b.1948)**. I also had brief

[1] Further information on each musician is found on the supporting DVDR 2 which contains interview transcripts and recordings. I do not have dates of birth for Claire Keville and Siobhán Peoples. I thought it would be rude to ask them!

email correspondence with **John Buckley (b.1951)**, **Raymond Deane (b.1953)**, **Peadar Ó Riada (b.1955)** and **Benedict Schlepper-Connolly (b.1985)**.[2]

The links between traditional music and Baroque music are often commented upon, so I thought it would be useful to investigate these links by interviewing a musician with expertise in Baroque music. **Claire Duff**, the first violinist of the *Irish Baroque Orchestra* graciously agreed to an interview. The interview proved very interesting and ultimately confirmed my thoughts that Baroque music and traditional music performing practices are not so closely linked to each other. This is discussed in Chapter 2.4.

I also asked **Ioana Petcu-Colan (b.1978)** to answer a questionnaire. Ioana is a violinist of Romanian heritage from Cork. She is one of the leading Irish violinists and her work encompasses many styles. I have collaborated with her on a number of pieces including *Music for the Departed* (2006) and *Tar Éis an Caoineadh* (2007).

Upon completing the first few interviews I set about transcribing them. This proved to be a very time-consuming process that was distracting from the general research and so I came to the agreement with my supervisor that further interviews would not be transcribed in their entirety. Rather I would listen through them and only transcribe sections which could prove useful as quotations in the thesis. The total word count of the transcribed interviews is nearly seventy thousand words, so it was agreed that the transcripts and recordings of all interviews would be included on a DVDR to accompany this dissertation rather than be included as a printed appendix.

[2] Some composers whom I contacted did not wish to be interviewed.

1.2.3 Studying Literature about Traditional and Classical Music

An essential aspect of any academic research project involves consultation of literature about the research subjects. To this end I consulted many relevant books, articles, theses and other such writings. These resources are detailed in the bibliography. I discovered these resources by consulting library catalogues in Universities and Colleges including the *Dublin Institute of Technology*, *University of Limerick* and *Trinity College Dublin*. The *Irish Traditional Music Archive* and *Contemporary Music Centre* in Dublin were other invaluable resources. The internet was also a useful resource. I was careful to check the validity of any internet sources I refer to.

Through this research I was able to determine the originality and validity of my theories about traditional music and its reception within the context of classical music. I was also able to determine how some aspects of traditional music had received inadequate or inaccurate academic attention. Such aspects include the notation and general understanding of traditional music ornamentation and perceptions surrounding pitch and rhythm in traditional music. This assisted the decision as to what aspects of my research were most worthy of inclusion in this dissertation.

This research also greatly assisted in determining contemporary concert works of importance which feature aspects of traditional music. I was able to locate interviews with composers I was unable to interview and academic analysis of a number of relevant works.

1.2.4 Analysing Recordings and Scores of Traditional and Classical Music

The academic analysis of classical music is intrinsically linked to the analysis of music scores. This approach is not sufficient for traditional music because few notations of traditional music give a detailed picture of traditional music as it is actually performed. Therefore an essential aspect of my research methodology was to locate recordings of interest and to listen to them in detail. The recordings I consulted were located through my discovery of musicians of interest at festivals and performances and through recommendations from others. Many of these recordings were archival rather than commercially released recordings. It was necessary to consult archival recordings because some musicians of interest, most notably Paddy Fahey (b.1926), have not released recordings commercially. After locating recordings of interest these were analysed aurally to discover sounds and techniques which I then adapted for my own compositions. I chose aural analysis over computer based analysis. A computer programme such as *Melodyne* can accurately transcribe all the notes a musician plays and even define aspects of pitching and rhythm to an accuracy that the human ear might not be able to. However there are aspects relating to articulation, rhythm and ornamentation in traditional music that no computer programme I know of can properly detect or analyse. I understand these aspects because I experience the music in a different way to a computer. I play it, I listen to it, I experience it in a human way. For these reasons my transcriptions of traditional musicians have been done by ear with the occasional assistance of software which slows down recordings.

I have analysed classical music works through a combination of listening to different recordings of works (where available) and consultation of scores. In some cases the works do not have scores, so I have had to rely on the recordings. In most such cases, particularly electro-acoustic works, there are no scores and so it has not been necessary to transcribe any of these works. Where notated examples were needed I was

able to copy examples from scores either by photocopying or by re-notating the music into *Sibelius* notation software. I have detailed the sources of these scores in the section where I have outlined the works cited (page 457).

There are many notated examples of traditional tunes in the text. I have transcribed most of these examples from memory.[3] Any tune which goes unreferenced comes from my memory. I acknowledge sources for tunes which do not come from my memory.

[3] I have, like most traditional musicians, memorised a large store of traditional tunes.

2 THE NOTATION DILEMMA

2.1 Introduction

> If the collectors tried to capture every thing we do on a page, there would be so much ink the page would be black.
>
> Mickey Doherty [1]

> When you write down the piece or the tune, all you're writing down is the skeleton. It's impossible to get all the different interpretations.
>
> Paddy Glackin [2]

> Notation is at all times an unavoidable oversimplification that only a pedestrian performer takes on face value. Truly artistic performance is replete with delicate nuances, subtle inflexions, (sic) and tantalizing rhythmical irregularities which the score cannot begin to indicate.
>
> Frederick Neumann [3]

During my research I have interviewed many musicians. In transcribing these interviews I became very aware of the fact that the written word could not possibly indicate the character of the interviewee to the reader. To take one of my interviewees as an example, a short description saying 'Harry Bradley spoke in a Belfast accent' gives the reader little insight. 'Harry Bradley spoke in deep toned, pointed, staccato phrases, punctuated by occasional moments of dry, dour humour' gives a much better sense of how he speaks. Still, the only way of really knowing the way Harry Bradley speaks, is to hear him speaking. Much the same applies to traditional Irish music. No matter what lengths I could go to transcribing Bradley's flute playing, the only way of really knowing what it is like, is to listen to it.

In this dissertation and in some of my compositions I have notated, as accurately as I could, certain techniques and sounds deriving from traditional Irish music. The reason for this is to provide those who do not have a good knowledge of traditional music with a better system for understanding my own music and traditional music in general.

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[1] Harrigan, Roisín: *An Ceol -The Donegal Fiddlers' Summer School Music Tutor Volume Three.* Donegal: Cairdeas na bhFidiléirí, 1996, 4.
[2] Interview with Paddy Glackin, July 5 2009.
[3] Neumann, Frederick: *Ornamentation in Baroque and Post-Baroque Music.* Princeton: Princeton University Press, 1978, 9.

There are countless tune collections which notate Irish traditional melodies, including O'Neill (1907); Goodman (1861); and Breathnach (1963). Many such collections indicate some form of notation for ornamentation and other special techniques. Few have attempted to notate the music to the point where a musician who has little knowledge of traditional music could come close to replicating the sound of the music just by reading it. As the quote from Paddy Glackin at the start of this section observes, these notations of traditional music are really only the skeleton of what a traditional musician might play. Traditional musicians do not need any more information than this as they can spontaneously create their own interpretation of these tune skeletons. Most of the time they are not even working from notation, the tune is something they have in their head from aural learning. They add the flesh to the skeleton with their own imagination.

There are similarities here with Baroque and early classical music, as Frederick Neumann's remark at the start of this chapter illustrates. Early music specialists must conduct considerable research into the music they are playing in order to fill in the gaps left by the lack of information in the score. A comparison of the notation for the 'Double' from the *Violin Partita in B minor* (BMV 1002) by J.S. Bach (1685-1750) with the notation for the Irish *slip jig* 'The Kid on the Mountain' reveals they are both skeletal. There are no indications other than the basic notes, key signature, title, repeat signs and some slight detail regarding phrasing by way of slur marks.

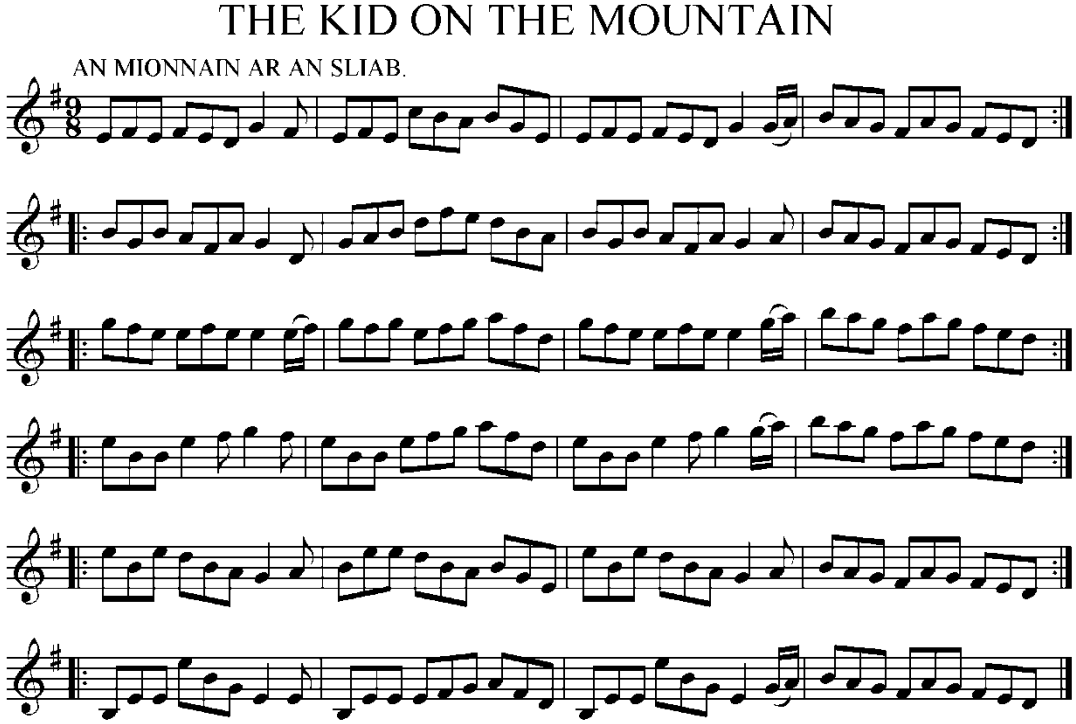


Figure 2.1 'The Kid on the Mountain.' (O'Neill, 1907:85).

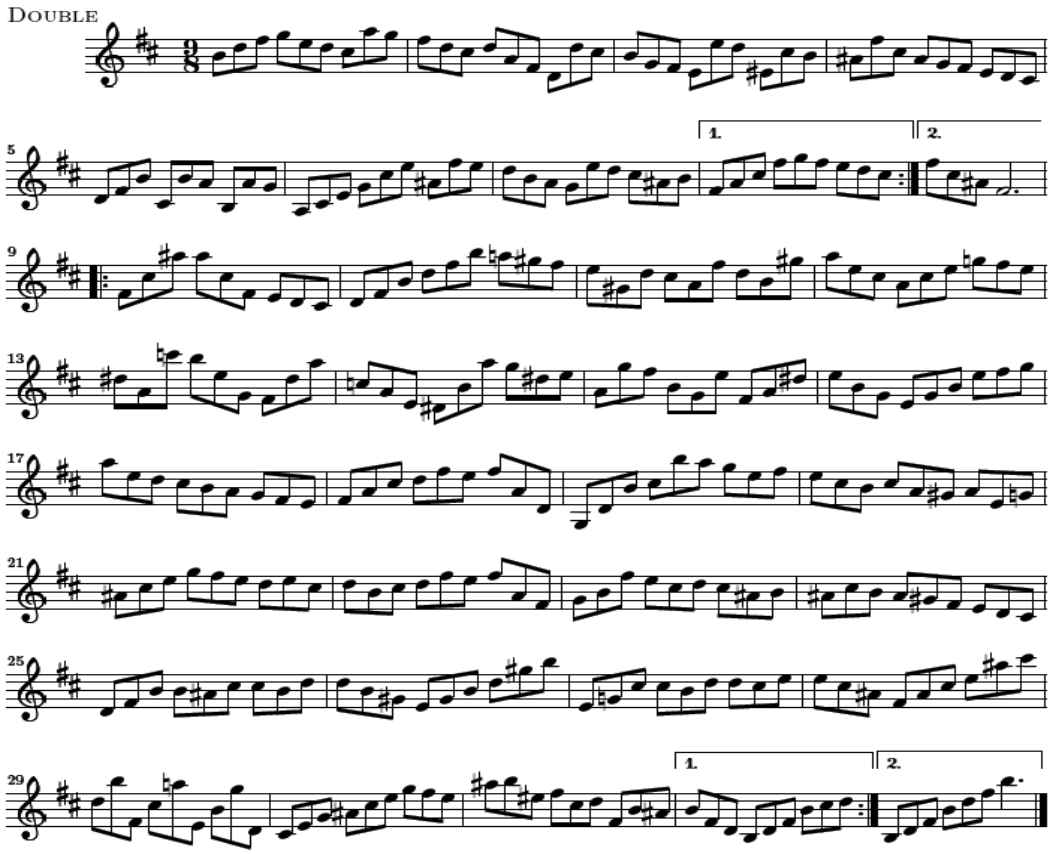


Figure 2.2. J.S. Bach, *Partita in B minor for Solo Violin*, BWV 1002, 'Double'.

It would be easy to presume from these scores that the Bach 'Double' and 'The Kid on the Mountain' were stylistically similar and that they were both relatively simple

pieces. Performances by an expert in Baroque music like Rachel Podger (1999) playing the Bach (Audio CD Track 1) and an expert in traditional music like Kevin Burke (1972) playing 'The Kid on the Mountain' (Audio CD Track 2) demonstrate that the similarities between the pieces are only superficial and the notation hides the complexities really involved in a successful performance of either piece.

This approach to notation differs considerably to that taken by many contemporary classical composers. Brian Ferneyhough's (b.1943) notational approach in *La Chûte d'Icare* (1988) is highly detailed.

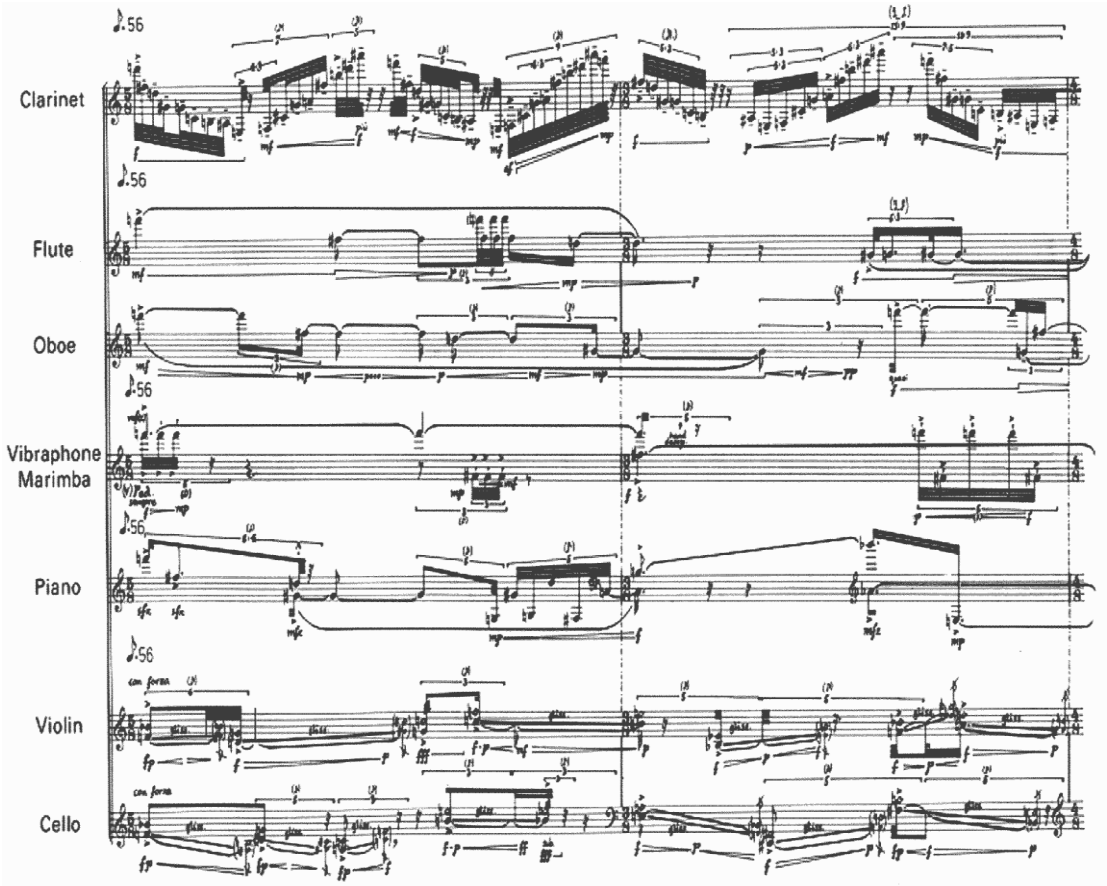


Figure 2.3 Ferneyhough, *La Chûte d'Icare*, 1-2.

Almost every note is given specific dynamic and articulation markings in the above example. The contrast with the skeleton notation of the Bach 'Double' and 'The Kid on the Mountain' is extreme.

In my works the detail of the notation is dependent on the musicians the music is written for. If the parts are written for traditional musicians then all or most of the score

is in a skeletal form because to add any more detail would hinder their creativity. Part of the joy of working with good traditional musicians is the individuality and spontaneity they bring to each performance.

Great classical musicians do of course bring individuality and spontaneity to each performance also, but in general they need very detailed scores or intensive research into a work to be able to do this. In my works for classical musicians which draw on elements of traditional music it is necessary to be very detailed in the notation because these traditional music elements are alien to most classical musicians.

There are two logical reasons why a more detailed notation system for traditional Irish music is generally not used.

- The music is mostly learnt by aural and visual demonstration, with minimal reference to notated music.[4]
- Most publications relating to traditional music are aimed at people who already have some knowledge of traditional music or who are learning it aurally.

So there has never been a general need for traditional music to be notated as accurately as possible from a sight-reader's point of view.[5] Tune books and tutorials are created with the assumption that those who use them will have the ability to flesh out the tunes once they have learnt the basic skeleton. This approach, whilst perfectly valid for traditional music, is not sufficient for my composition work. In much of my work I am trying to bring some of the characteristics of traditional Irish music into a contemporary classical context. The current standards for notating traditional music do not translate to classical musicians. Harry Bradley aptly summed up the way many traditional musicians react when they hear classical musicians performing traditional music.

[4] Many teachers and students of traditional music do find notated music useful. Pádraig O'Keeffe was particularly notable for developing his own notation system to help his students remember details such as bowing and ornamentation. (See Cranitch, 2006).

[5] I use the term 'sight-reader' as a general term to describe musicians, particularly classical musicians, whose practice depends on the use of sheet-music in learning and performance situations.

> You hear it all the time, the 'James Galway effect'. Somebody picking up a whistle or flute who already plays some sort of music and starts playing Irish music and it sounds like something from *The Tellytubbies*.
>
> (Interview with Harry Bradley, April 8, 2009).

By referring to the children's TV show *The Tellytubbies*, Bradley is suggesting that even a classical musician of James Galway's international repute makes traditional music sound childish when they attempt to play it. This may seem outlandish to some, but it is a point of view I can relate to. It illustrates the fact that classical musicians with no knowledge of traditional music often presume that in playing the notated tune skeleton they are playing authentic 'traditional music', whereas in fact they are really leaving out all the interesting details that distinguish traditional Irish music. This detail is something which people not attuned to the music often cannot hear on first listen. It is part of what I like to describe as the 'Hidden Complexity' of traditional music.

2.1.1 The Hidden Complexity

Some or all of the following fourteen elements are usually missing from notated versions of traditional Irish music.

i. Ornamentation
ii. Articulation
iii. Phrasing/bowing
iv. Rhythmic swing
v. Rhythmic variation
vi. Melodic variation
vii. Metrical variation
viii. Dynamics
ix. Tempi
x. Timbre
xi. Microtonal pitching
xii. Instrumentation
xiii. Harmony
xiv. Number of tune repetitions

These are all elements a contemporary classical musician might expect to find in any basic score. Since classical musicians are trained to gain understanding of music through analysis of the written score, it is understandable why traditional music is often

misunderstood when all these elements are missing. No one will ever get close to the essence of traditional music by analysing it as it is normally notated.

It is only by listening to master musicians in great detail that one can get a sense of this 'hidden complexity'. It is not seen on the page, it is heard; not only that, the music needs to be listened to many times before this complexity is fully revealed. Each listen brings another level of hidden complexity as the listener becomes more familiar with the music. As Mickey Doherty said, the page would be black if one were to attempt to capture in music notation everything a great traditional musician does. This is what the fiddler Martin Hayes was referring to when he told me, 'It's not just the melody, it's how Irish musicians and Irish people look at the melody.' (Interview with Martin Hayes, 6 July 2008).

On the page the music looks simple but this simplicity is just down to the perception of the person viewing it.

> Sometimes with this music you realise 'God, it's simple' and it is simple, but the beauty of something really simple, if it's well constructed, and it is well constructed, is the freedom it affords you.
>
> (Here Hayes sings the *reel* 'The Bunch of Green Rushes' as if it was played exactly from a book. With a straight rhythm, without any phrasing or expression etc),
>
> That's what the classical composer sees when he looks at the sheet. But I hear….
>
> (Hayes then sings it with lots of phrasing and expression),
>
> That's what I hear and that's as good to me as Beethoven's *Ninth Symphony*. So he (a classical composer) just saw 'Three Blind Mice' and I saw Beethoven's *Ninth Symphony* in the same piece.
>
> (Hayes interview).

So it is clear that traditional music poses a dilemma to those who try to understand it through music notation.

2.2 The Notation of Traditional Irish Music by Traditional Musicians and Collectors

The most referenced notation table for traditional Irish ornamentation is perhaps the one presented by Breathnach (1963).[6]

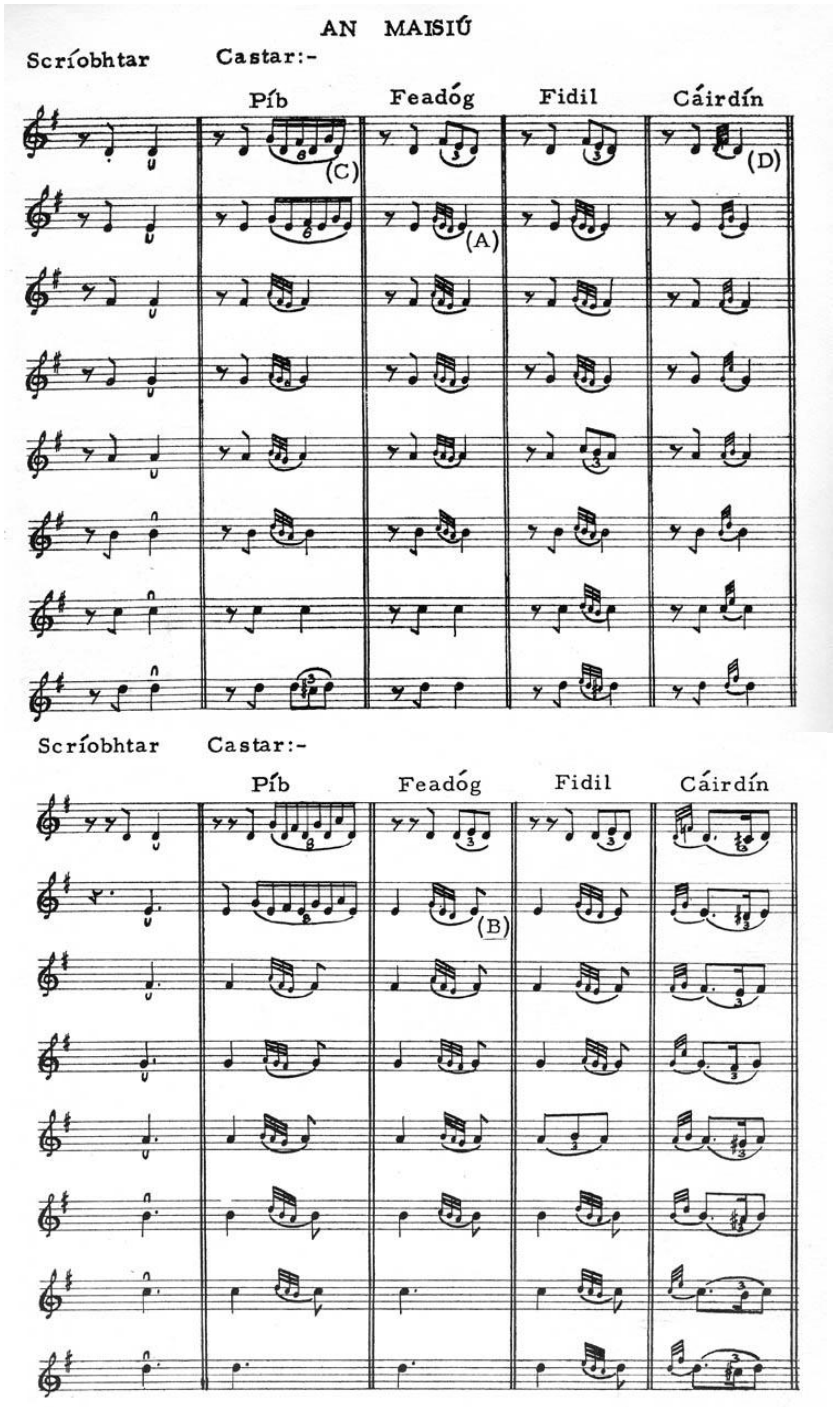


Figure 2.4 Breathnach's ornamentation table. (Breathnach, 1963).

[6] It must be noted that few traditional musicians would refer to notation to learn about ornamentation. Breathnach's table is possibly the most referenced table from an academic perspective.

Breathnach's system is quite detailed and perfectly acceptable to traditional musicians who primarily learn aurally. It is, however, missing quite a few details and contains some inaccuracies from the point of view of a musician who learns through sheet music. Breathnach's system is inaccurate from this perspective primarily because most ornamental notes in Irish traditional music are articulations of principal notes. They have more of a rhythmic than a melodic function in this sense. Therefore the ornamenting notes are not clearly audible pitches; they are articulated as quickly as possible. This primarily distinguishes them from ornaments in classical music, which tend to be clearly pitched and evenly articulated.

Larsen (2003) has attempted to address this issue:

> When I speak of ornamentation in traditional Irish instrumental music I am referring to ways of altering or embellishing small pieces or cells of a melody that are between one and three eighth note beats long. These alterations and embellishments are created mainly through the use of special fingered articulations (cuts and strikes) and inflections (slides), not through the addition of extra, ornamental notes.
>
> The modern classical musician's view of ornamentation is quite different. *Ornamentation, A Question & Answer Manual*, a book written to help classical musicians understand ornamentation from the Baroque era through the present, offers this definition: "Ornamentation is the practice of adding notes to a melody to allow music to be more expressive."
>
> Classical musicians naturally tend to carry this kind of thinking with them as newcomers to traditional Irish music. However, as long as they overlay the "added note" concept onto Irish ornamentation, they will be unable to gain fluency in the language of Irish music.
>
> GRACE NOTES VS. ARTICULATIONS
>
> Most written instructional material for Irish music ornamentation uses the grace note, as a term, a concept, and a notation practice. I feel that this has severely limited our thinking, that the grace note concept is the major factor constraining many people's understanding of Irish ornamentation. Using the concept of the articulation, instead of the grace note, allows us to understand ornamentation much more clearly. For our purposes, I define an articulation as that extremely brief sound component of a note that defines its beginning or attack. To articulate a note is to create or define its beginning or attack.
>
> (Larsen, Grey: "A Guide to Grey Larsen's Notation System for Irish Ornamentation." *GreyLarsen.com.* Grey Larsen. 2003:1. http://www.greylarsen.com/services/tunebank/notationsystem.pdf (accessed September 22, 2009).

Larsen's explanation is thorough and it can generally be applied to traditional music. However, there are occasions when ornamenting notes have a discernable pitch and the rhythm at which the ornaments occur can also differ.

These are the main reasons why I disagree with Larsen's use of slashes above the main notes to indicate ornamentation. His system seems to be designed specifically for flute and whistle players. His 'new cut notation' and its explanation follow.

A New Cut Notation

Since a cut is an articulation, I notate it as a slash placed over its parent note.

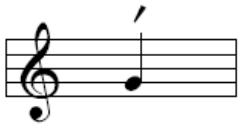


Figure 2. A new symbol for a cut.

This is a simple, clean notation that reflects the reality of the cut's sound and function. There is only one note here, not two. There is no indication or implication of pitch or duration for the cut. The notation is similar visually to other markings, such as staccato markings or accents, which are placed above the note they affect.

Figure 2.5 Larsen's 'new cut' ornamentation system. (*Ibid.*:4).

Like Breathnach's system, this system is perfectly valid for traditional musicians to understand, but from a sight-reader's perspective it is confusing. The similarity of the 'slash' to other markings already in use, which Larsen acknowledges, is one potential cause of confusion. It also does not provide room for all the possible variations of how this note can be articulated regarding the rough pitch the articulating note occurs at and the rhythm. For all Larsen's arguments to the contrary, there are certainly times where some form of pitch is discernable on these articulating notes, particularly on the fiddle, concertina and accordion. Peter Browne also pointed out to me that the fingering a musician uses for ornaments can help define their individual sound[7], so it is erroneous to leave out reference to where on the instrument the ornamenting finger articulates the note, as Larsen does; therefore I feel this is a very instrument-specific system.

Larsen's reasons for wishing to abandon the grace note as a notation practice in traditional music are logical but I prefer a different approach, which leaves room for more detail.

[7] Peter Browne mentioned this to me in an unrecorded telephone conversation.

In my system most such articulating notes are marked as demisemiquaver grace notes, to emphasise the rapid speed of the articulation. More importantly, many of these grace notes have a crossed note head as shown below.

Figure 2.6 Crossed note head notation.

This is the standard contemporary notation symbol for a note of indefinite pitch; it is used regularly in percussion scores. On all common instruments used in traditional music, articulating grace notes are produced by a rapid flick of the finger on or near the area a specific note would be articulated. The clarity of the pitch will vary depending on the instrument and musician. It will rarely be a completely clear note but occasionally it will be. Occasionally a squeaking pitch higher than the principal note is sounded. This is particularly noticeable on instruments such as the accordion and concertina, but it also occurs at times on the fiddle, as is explained further. In my notations I place these notes of indefinite pitch on the staff at the note which corresponds to the point the musician will flick the finger.

I also use the crossed note head symbol to indicate notes of indefinite pitch which are produced by heavy bow pressure on the fiddle or heavy bellows pressure on the accordion. This most commonly occurs in the ornament known as a *treble* which, along with other ornamentations, I explain in Chapter 2.4. The only previous example of a use of this crossed note head in notation of traditional music I have found occurs in transcriptions of the playing of the fiddler Tommy Potts (1912-1988) prepared by Ó Súilleabháin (1987). Ó Súilleabháin uses the crossed notation to indicate notes which are articulated in such a way as to make more of a percussive sound than a discernable pitch.

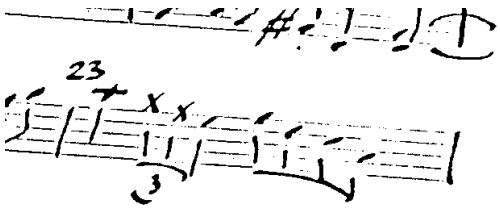


Figure 2.7 Ó Súilleabháin's use of crossed note head notation. (Ó Súilleabháin, 1987:409).

Mitchell (1976, 1986, 2007) has gone into thorough notational detail in his transcriptions of the music of the pipers Willie Clancy (1918-1973), Patsy Tuohey (1865-1923) and Séamus Ennis (1919-1982). The amount of ornamentations documented in the Ennis collection is particularly notable, but the grace note style notation for these ornaments appears to be based on Breathnach's system and thus, for reasons already explained, it is inaccurate from a sight-reader's perspective.

Since traditional musicians do not rely on notation, Harry Bradley's paraphrasing of Mitchell's own views on his detailed notation of traditional music would resonate with many within the traditional music community.

> I think he (Mitchell) came to the conclusion you can express it to an extent on paper but from the point of view of actually playing it, do we need to know? From the point of view of analysis you can do a lot, but I dunno how much use that's gonna be to people really.
>
> (Bradley interview).

So this notational detail is not necessary for most traditional musicians. The notational detail I utilise is therefore going to seem unnecessary to many people; however there are some very strong reasons why I believe it is necessary. Some are personal compositional reasons; others could have a more wide ranging impact on the understanding of traditional Irish music to those who generally learn music through notation.

- I view the various ornamentations and techniques I have notated as excellent compositional tools: each one creates a different sound, so they are useful compositional devices.

- In many cases, classical musicians I have worked with neither had the aural ability or the rehearsal time to easily pick up traditional Irish techniques by ear and so the accuracy with which I can notate them is vitally important to the rehearsal and performance process.
- Much of the academic writing which references traditional Irish music in the context of classical music displays a fundamental lack of appreciation for the nuances of traditional music. This is perhaps partly due to the fact that neither the authors, nor the composers they reference, have a thorough understanding of traditional music beyond the skeleton notation they encounter in tune collections. I would most specifically refer here to the writings of Harry White (1998), which have been challenged most vociferously by Fintan Vallely on these grounds:

> This music White refers to somewhat disingenuously as 'the ethnic repertory' – the better, presumably, to distinguish it from Classical or 'Art' music, which, deductively, by way of standardising the argumentative ground, will be addressed here as 'the imperial repertory'. In a nutshell, *The Keeper* sees Irish nationalism as having dominated the popular ear here – implicitly that is, as Luther might have said (after), that it had 'all the good tunes'. Consequently it absorbed talent which might – or 'should' – otherwise have gone into composition and performance in the imperial repertory…. *The Keeper* argument accords no artistic significance to the performers of the ethnic repertory. At Maynooth, as an editor of the *Encyclopaedia of Music in Ireland*, Harry White took this further, speaking on the one hand of 'the complex organisms of Art music', but dismissing what he here called 'Traditional music' as but 'cultural fetishism'. He went on to implant the suggestion that the collection of music and song is over-rated – 'tribalism' and 'taxonomy'. By startling implication he portrayed the ethnic repertory and its aesthetics as part of 'history's faeces' (in the quotation printed on page 9), performance of it as non-intellectual; he rubbished the idea of aurally-transmitted style (the *'nya'*) by disingenuous rhythmic and tonal mis-pronunciation as '*the knee-a*'…..And such a dismissive attitude to the nuts and bolts of the marshalling of cultural capital is also applicable to the imperial repertory itself – it simply depends on one's class perspective and sense of 'aesthetic'. So while analysis such as this demands being done for the ethnic repertoire, it is essential that it be done by those inside the field, who actually understand relevant nuance (in particular, concepts and their pronunciation), and, most importantly, passionately love the material they work with.
>
> (Vallely, Fintan: "Tiger Ireland, Turd Sniffers & Meta-Trad: People, Power and the Pursuit of Privileged Status in Music in Ireland." Edited by Toner Quinn. *The Journal of Music in Ireland*, March/April 2007:10).

I do not wish to enter the divisive debate between White, Vallely and other writers; I have primarily developed a more detailed notational approach for the benefit of my compositional work. However, I also humbly hope that my experience as a performer

and scholar of both traditional and classical music ensures my analysis is of suitable value to scholars in both fields and that it may therefore contribute to an improvement in the academic understanding of traditional Irish music in a classical music and general academic context. I have therefore subjected some previous scholarly work on the use of traditional material in the works of classical Irish composers to stern critical analysis, to highlight how the lack of understanding of the nuances of traditional music has caused confusion and flawed analyses.

2.3 The Notation of Traditional Irish Music by Contemporary Composers

A number of Ireland's most prominent living composers have, to varying degrees, used elements from traditional Irish music in their compositions. Their approaches to notating these elements are quite varied. I have divided these approaches into three categories:

2.3.1 The Skeletal Approach

Composers such as Gerald Barry (b. 1952) and Eric Sweeney have used skeletal notations of traditional melodic fragments in a number of their works, even though their music is written for classical rather than traditional musicians. In doing so they are, perhaps deliberately, stripping the music of most of the elements that would make it sound like traditional music.

In Barry's own analysis of his *Piano Quartet No.1* (1992), he states 'Bars 1-52 are based on an inversion of the tune *Sí Bheag Sí Mhór.'* (Barry, n.d.:7) He then presents the following notation of this tune.

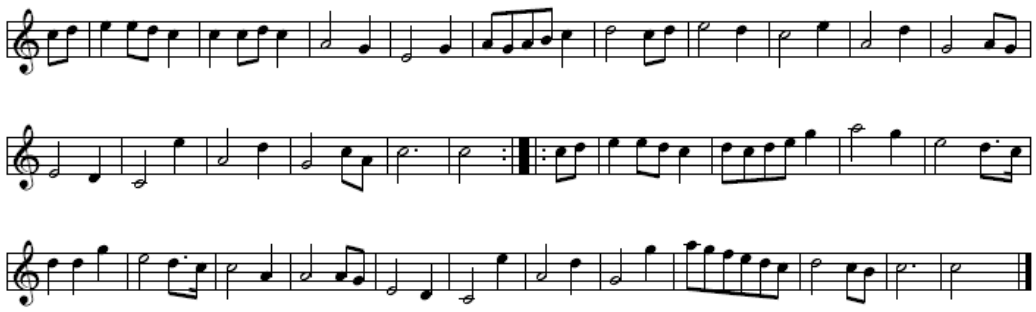


Figure 2.8 Barry's notation for 'Sí Bheag Sí Mhór'. (Barry, n.d.:7).

This notation is as basic a skeleton notation there could be for a tune. When Barry transfers it to his score by means of inversion, there are no obvious attempts to add any of the characteristic ornamental, rhythmic or melodic variations a traditional musician might add. In the following example, the skeleton notation of 'Sí Beag Sí Mhór' is

inverted in the bass clef in the piano and this inverted melody appears in canon in the other instrumental parts.

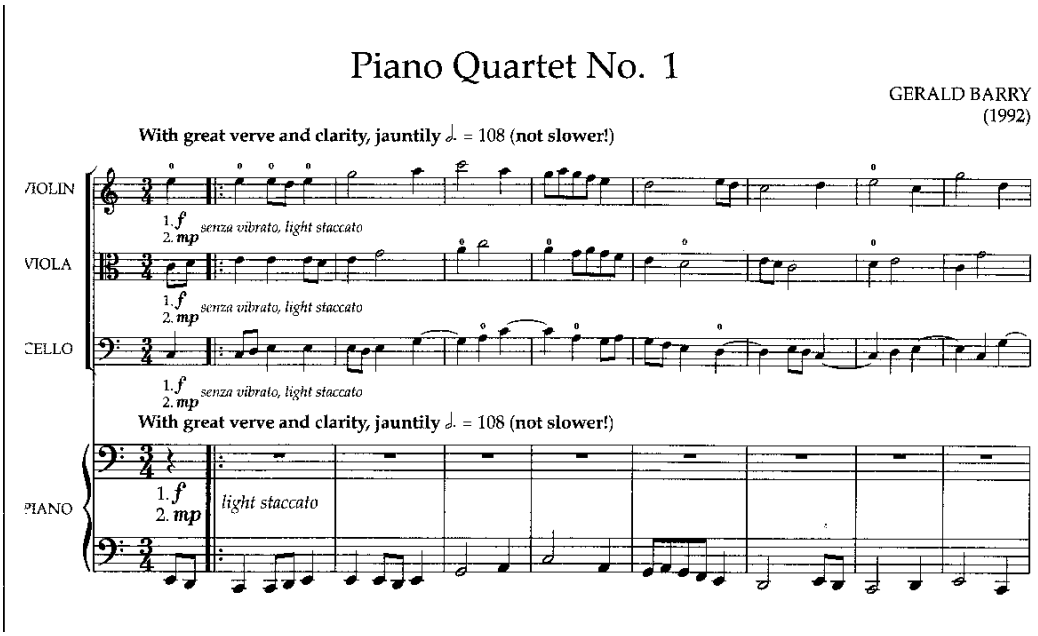


Figure 2.9 Barry, *Piano Quartet No.1*, 1-8.

It is difficult to aurally detect any traditional tunes in Barry's music due to the fact that he deliberately disguises them through inversion, thick contrapuntal textures or the insertion of additional notes in between each of the original melody notes.[8]

The source material is more clearly discernable in some of Eric Sweeney's works. He described his use of such source material thus:

> Since my second symphony I have developed a more tonal and at times minimalist language which often uses Irish traditional music as source material. However, such Irish elements are used in a non-traditional way. Fragments of melodies appear in multiple canons and overlapping sequences thus hinting at, but never stating, their traditional source.
>
> (Sweeney, Eric: "Eric Sweeney Composer's Profile." *Contemporary Music Centre Website.* Contemporary Music Centre. n.d. http://www.cmc.ie/composers/composer.cfm?composerID=108 (accessed June 14, 2010).

Sweeney identified to me his orchestral work *Dance Music* (1989), his *String Quartet* (1996) and his *Concerto for Guitar and Strings* (2004) as his most prominent works which feature elements from traditional music as source material.[9] In all such scores the

[8] See Chapter 3.3.5 for further details in this regard.
[9] Interview with Eric Sweeney, May 13, 2010.

source material is presented in skeleton notation, thus ensuring the traditional Irish elements are indeed used in a non-traditional way.

Elements of the well known *jig* 'The Three Little Drummers' are clearly audible in Sweeney's *String Quartet.*

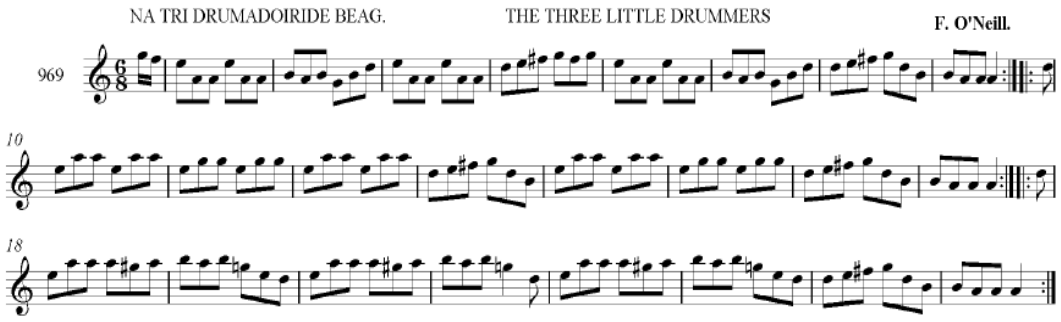


Figure 2.10 'The Three Little Drummers.' (O'Neill, 1907:45).

Elements of this tune appear in a rhythmically altered form beginning in the second violin on the last beat of bar 16.

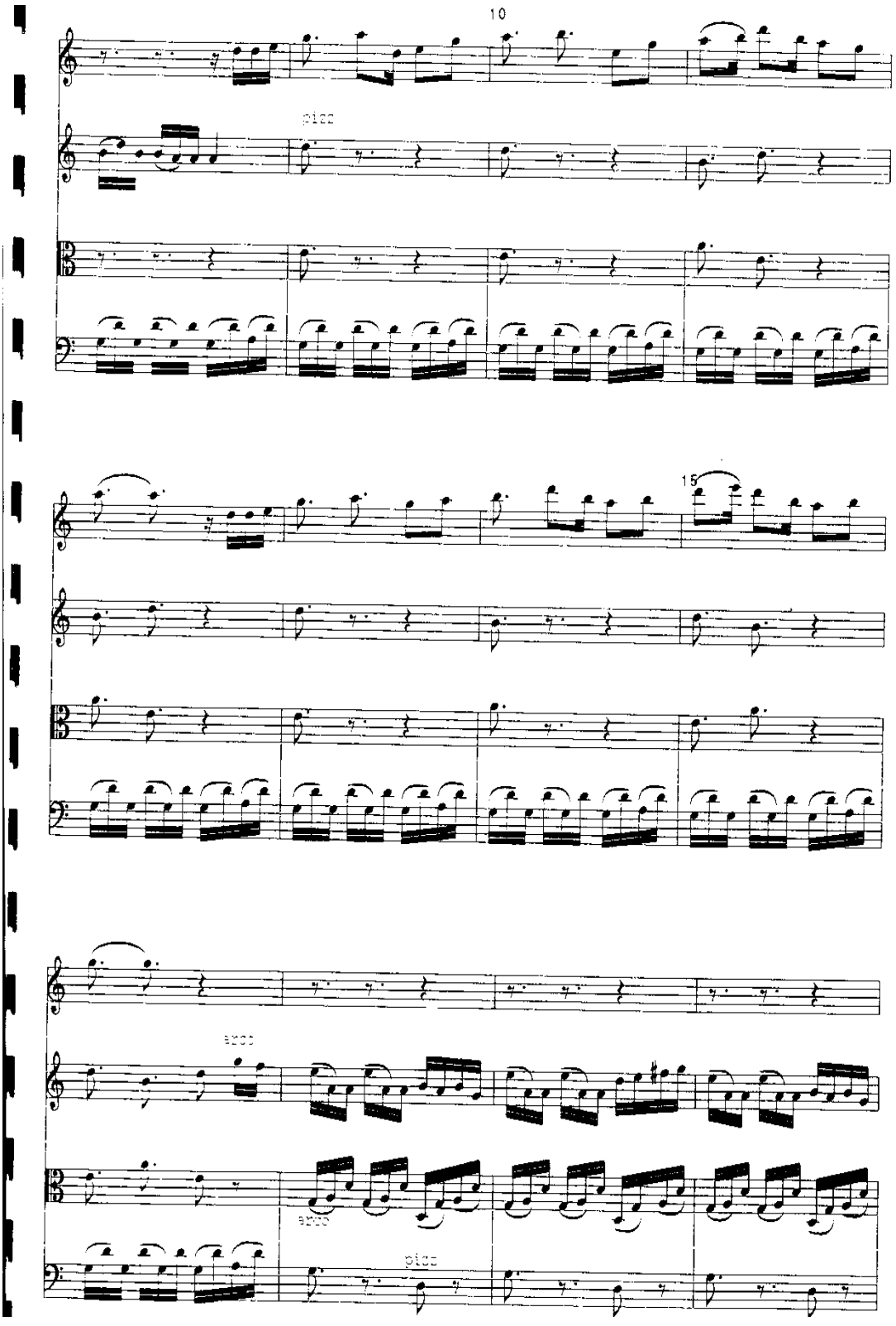


Figure 2.11 Sweeney, *String Quartet*, II, 8-19.

Similar skeletal notations can be found in many of Sweeney's works. The lack of ornamentation and indeed almost any form of additional notation clearly illustrates Sweeney's intention that the 'Irish elements' are used in a non-traditional way.

2.3.2 The Ornamental Approach

A number of composers have sought to bring elements of traditional Irish ornamentation into a notated context. Seán Ó Riada (1931-1971) was one of the early pioneers in this respect. A change in Ó Riada's approach from a skeletal to a more ornamental approach is evident in examining two of his lesser known works, *The Banks of Sullane* (1956) and *Seóladh na nGamhan* (1959).[10]

In *The Banks of Sullane,* Ó Riada orchestrated the air of the same name within an impressionistic context, redolent of the music of Maurice Ravel (1875-1937). At the opening of the piece, the celli play the melody, which is notated in a skeletal way.

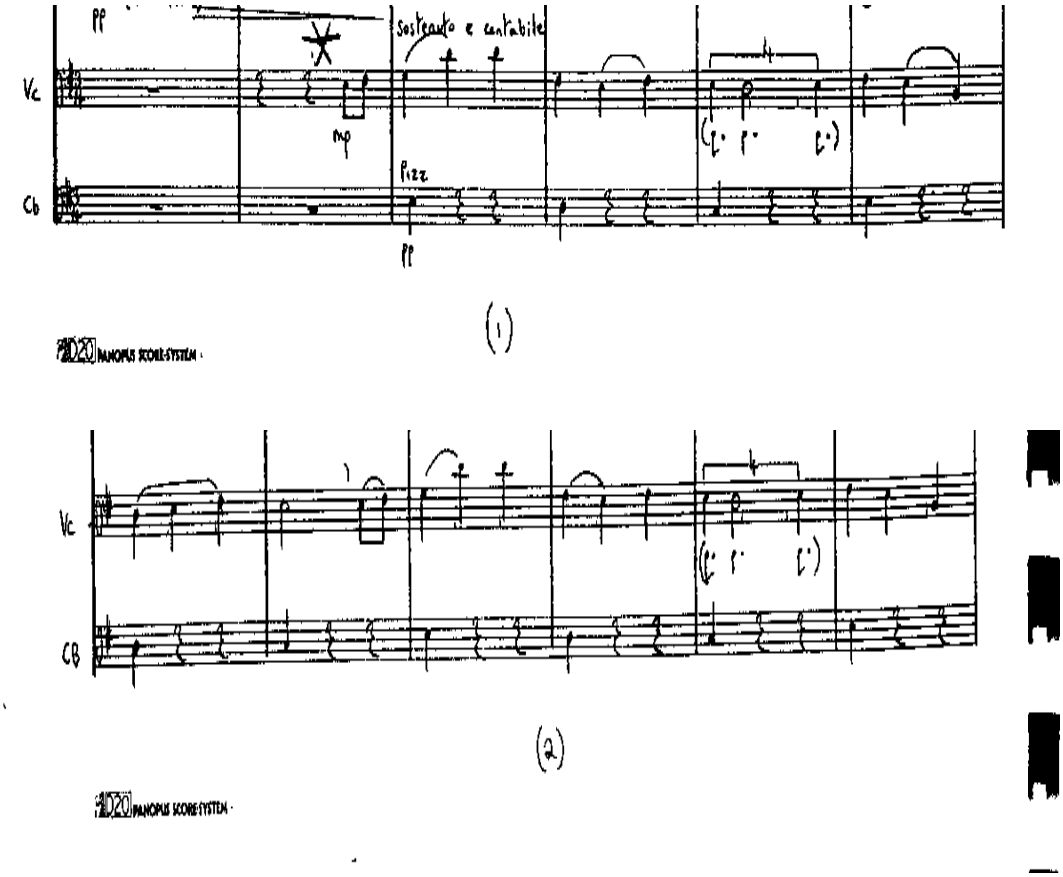


Figure 2.12 Seán Ó Riada, *The Banks of Sullane,* 1 – 12, cello and bass parts.

[10] The song Ó Riada bases *Seóladh na nGamhan* on is 'Seóladh na nGamhna'. One must presume Ó Riada misspelled the title and this misspelling has resulted in his work being labelled as such in the Contemporary Music Centre library.

When Ó Riada orchestrated *Seóladh na nGamhan* three years later, his appreciation for the ornamental nature of traditional music appears to have expanded greatly. He notates the air in a highly ornamented fashion.

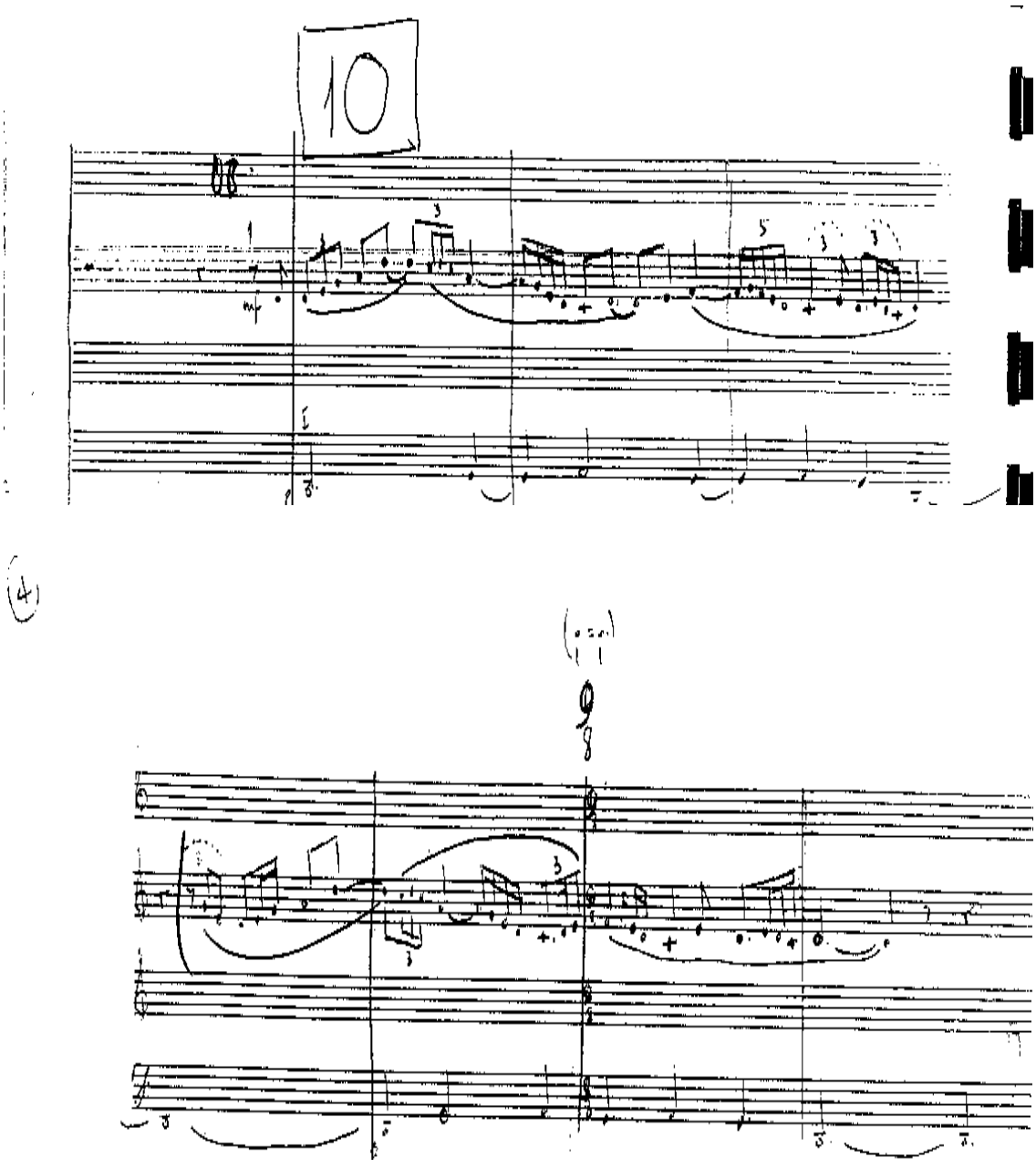


Figure 2.13 Seán Ó Riada, *Seóladh na nGamhan,* 9-16, woodwind section.

The ornamentation is written in a purely melodic fashion with use of semiquaver tuplets. This approach, though certainly more detailed than the skeletal approach, does not convey the rhythmic, articulating nature of ornamentation in traditional music.

In the 1970's Seóirse Bodley (b. 1933) juxtaposed traditional style melodies with composition techniques derived from contemporary classical music such as

serialism and pointillism. Works from this period include the piano pieces *The Narrow Road to the Deep North* (1972), *Aislingí* (1977) and the orchestral piece *A Small White Cloud Drifts Over Ireland* (1975).

Bodley's use of traditional music elements in his piano works has been extensively discussed by Ó Cuinneagáin (1992). Ó Cuinneagáin concludes that Bodley has gone to great lengths to introduce the melodic and ornamental character of traditional music into his original piano works.

> The many original dance tunes and slow airs in Bodley's piano works of the 1970's possess a genuine sense of antiquity, attributable to their authentic use of aspects of traditional Irish ornamentation.
>
> (Ó Cuinneagáin, Pádhraic: *The Piano Music of Seóirse Bodley. Masters Thesis.* Maynooth: St. Patrick's College, 1992:116).

Ó Cuinneagáin's claim that Bodley's use of ornamentation is 'authentic' is contentious. The technicalities of the instrument mean it is extremely difficult, if not impossible, to authentically recreate the sound of many Irish ornamentation techniques on the piano. This difficulty is not helped by the fact that Bodley presents his ornamentations in a purely melodic manner; so, like Ó Riada, Bodley has not addressed the rhythmic articulating nature of traditional ornamentation. Bodley does provide more detailed explanations in the performance notes that precede *Aislingí*.

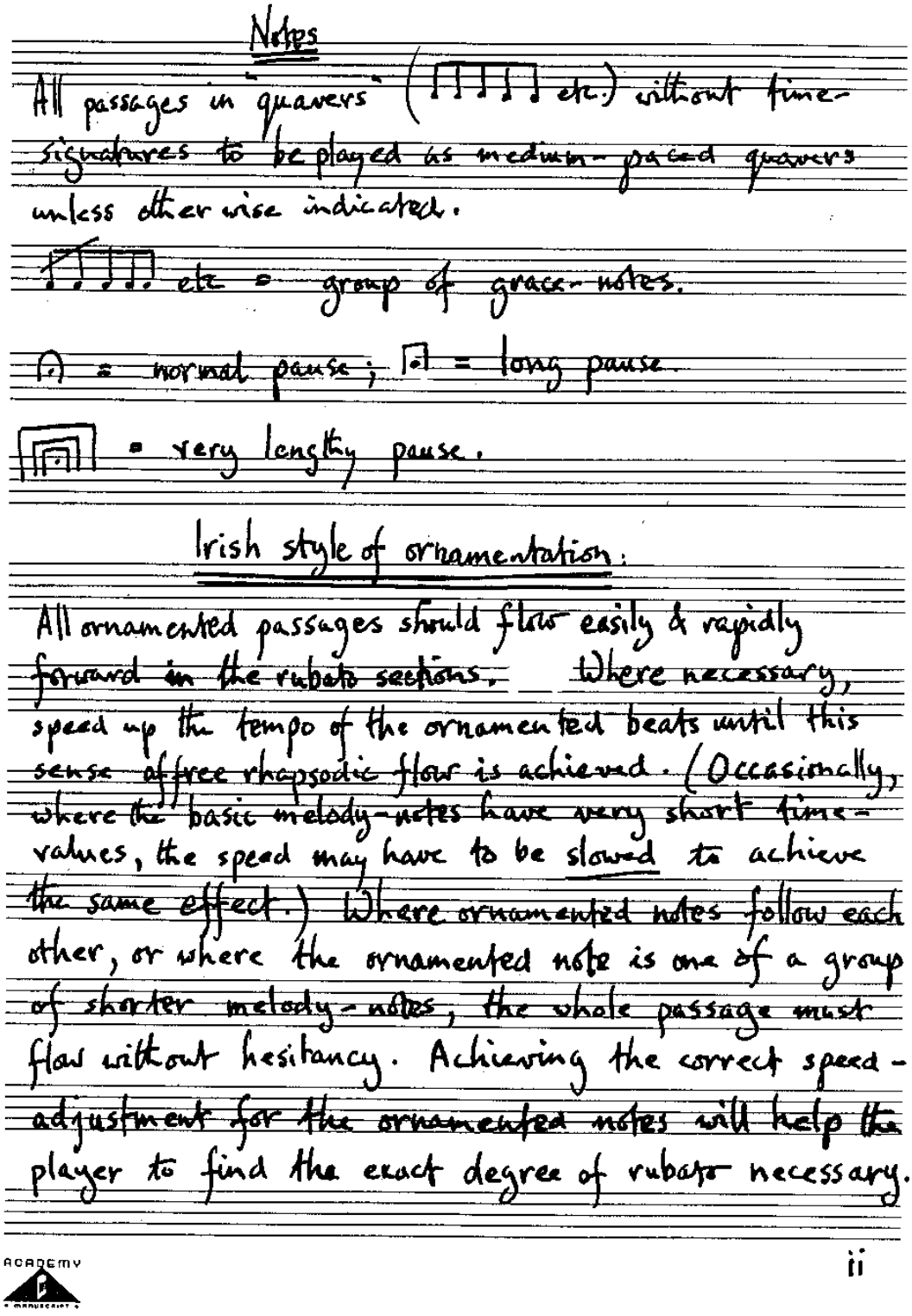


Figure 2.14 Bodley, *Aislingí,* performance notes.

It is clear from these performance notes that Bodley is seeking to emulate the sound of 'The Irish style of ornamentation', however a performer with no knowledge of traditional music is unlikely to perform the music in a traditional style, mainly due to

the fact that they have no experience of traditional music, but also due to the lack of reference to the articulating nature of Irish ornamentation techniques. Nevertheless, Bodley's notation of these elements is more comprehensive than most composers and thus an important reference point.

Ó Cuinneagáin, (1992:116) says of Bodley's music, 'The most characteristic form of ornamentation in the piano works is that of single and double grace notes, their function being to decorate an accented note.' He then presents the following example from *Aislingí V*.

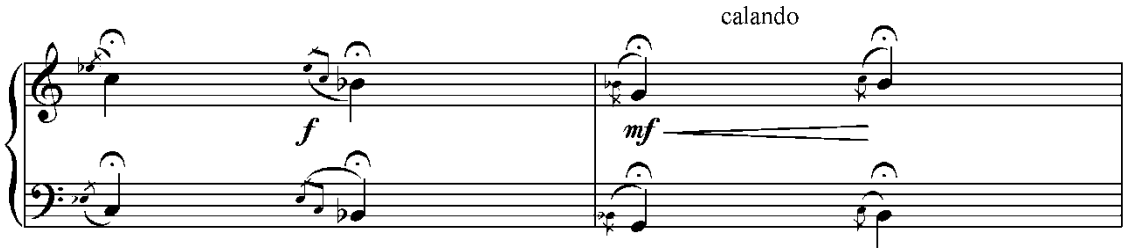


Figure 2.15 Bodley, *Aislingí V*, 90-91.

Given the preface to *Aislingí* regarding 'Irish style ornamentation', one must presume that Bodley's intention is for these notes to sound like the ornament known as a *cut*, unfortunately the notation does not give the performer a clear impression of the technique required to create a *cut.* It is therefore inevitable that most classical pianists will perform these ornaments like classical grace notes rather than *cuts*.[11]

The same principle applies to Bodley's notation of *rolls*. Ó Cuinneagáin (1992:118) notes how '*Aislingí II* (bar 113) contains rolls on the second and fourth beats of the bar, the grace note and two semiquavers being intended as a decoration of the ensuing note 'A'.'

[11] Information on the differences between these ornamentation techniques is found in chapter 2.4.2.1.

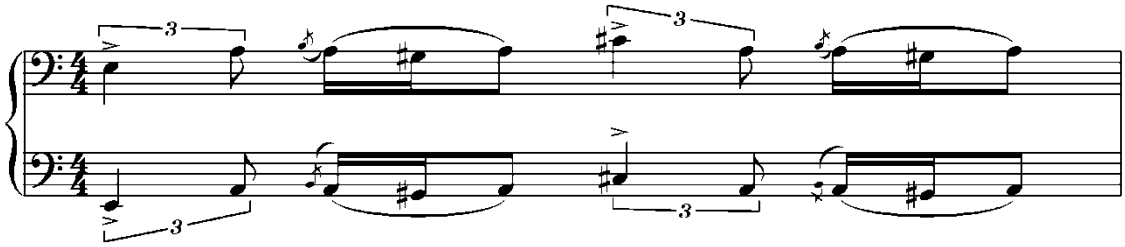


Figure 2.16 Bodley, *Aislingí II*, 113.

The sound a classical pianist will create from this notation is unlikely to be like a *roll*. The most particular reason for this is the strong melodic emphasis given to the note *G-sharp*. A traditional musician would usually only emphasise the note *A* when playing such a *roll*, the notes *B* and *G-sharp* would be barely audible as separate pitches. This is confirmed by John O'Conor's recording of the work.[12] O'Conor's talents as a classical pianist are not in question; however in all places where Bodley notates *roll*s O'Conor plays *turns* instead. I believe this is because the notation makes the *rolls* look like *turns*.[13]

Bodley also makes a notable attempt to incorporate the ornament known as *cranning* into his music.[14]

> A technique used by pipers known as 'cranning', where groups of grace notes are employed to decorate the bottom and second notes of the chanter, is exploited in a particularly authentic manner in *Aislingí I* and *V*.
>
> (Ó Cuinneagáin, 1992:119).

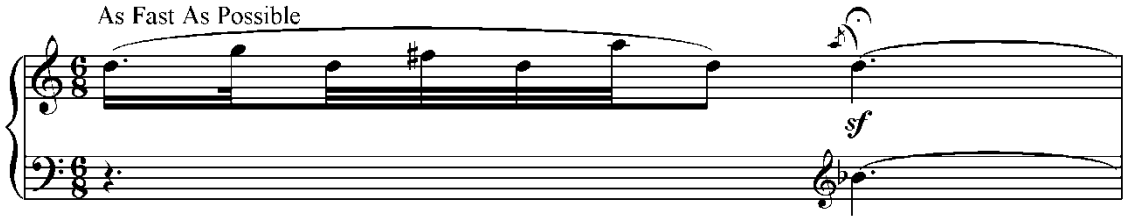


Figure 2.17 Bodley, *Aislingí I*, 3.

One could argue that Bodley's instruction that this figure be played 'as fast as possible' is sufficient to allow a sound akin to *cranning* to occur. However, the melodic emphasis

[12] O'Conor, John: *Aislingí.* Comp. Seóirse Bodley. Archival recording housed in the CMC. 1975. Cassette.
[13] An explanation of the difference between *rolls* and *turns* is found in Chapter 2.4.2.3.
[14] An explanation of the *cranning* technique is found in Chapter 2.4.2.2.

Bodley gives to the notes *G*, *F-sharp* and *A* takes away from the intended effect. If Bodley wished to authentically imitate *cranning* then these notes should not be given equal emphasis to the *D* notes. There is nothing in Bodley's notation to clarify this point. It is even feasible that a pianist might actually give more melodic emphasis to the notes *G*, *F-sharp* and *A* than the *D* notes. This would not create an authentic *cranning* sound.

In *A Small White Cloud Drifts Over Ireland*, Bodley has written a solo violin part that is intended to imitate an Irish fiddle sound. In the performance notes he gives these instructions.

> The violin solo passages in jig & reel style may be played using the traditional fiddle method of holding the instrument rather than the "classical" method. All these passages should be played in 1st position using open strings quite freely.
>
> (Bodley, Seóirse: *A Small White Cloud Drifts Over Ireland.* Unpublished score housed at the CMC, 1975).

In the following excerpt, Bodley's notation is only slightly more detailed than a skeleton notation. This makes it difficult for a classical musician to perform the music in the traditional style Bodley is asking for.

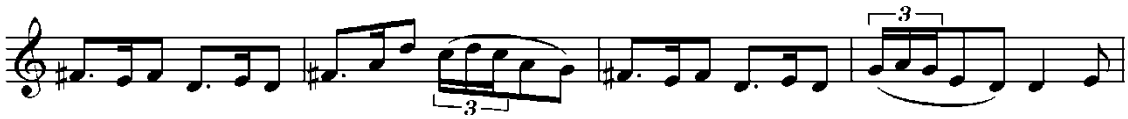


Figure 2.18 Bodley, *A Small White Cloud Drifts Over Ireland,* violin part excerpt.

In rehearsals for the first performance of the work with the *RTÉ National Symphony Orchestra*, Bodley referred the musicians to recordings of the fiddler Seán Keane (b.1946). Peter Browne mentioned to me that he remembers hearing Bodley describe in a radio broadcast that he felt that this resulted in a more authentic fiddle sound.[15]

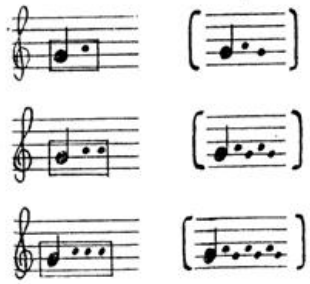
Bodley (1973) prepared some notable scholarly work regarding the transcription of *Sean-nós* singing. His notation method for *Sean-nós* ornamentation is a prominent feature of this article.

[15] This information was obtained from one of a number of unrecorded conversations I had with Peter Browne.

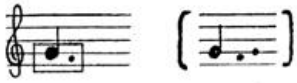
for the fact that in spite of all the variables, the basic melody is readily recognisable.

The ornaments, on the other hand, are not as complicated as might be imagined. They mostly take the form of steps adjacent to the main melodic line. The reason for this is probably that large intervals are not easily *sung* with rapidity. Instrumental music does not suffer from this restriction, and therefore the ornaments used by the traditional instrumental performer differ quite considerably from those of the *sean-nós* singer. The most common ornaments are as follows :

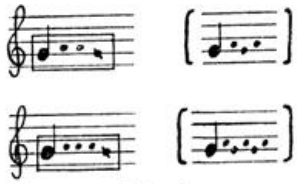
1. (a) ornamentation with the note above, once, twice or three times :



(b) ornamentation with the note below :

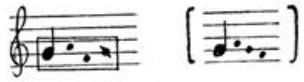


(c) without returning to the basic note at the end of a double or triple ornament :



2. The turn : (a) ornamentation with the note above and the note below the melody note :

(b) without returning to the basic note at the end of the turn :



3. Grace-notes upward or downward :

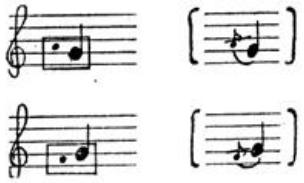


Figure 2.19 Bodley's notation for *Sean-nós* ornamentation. (Bodley, 1973:47)

This system is notable because it gives most importance to the main note by indicating the ornamental notes as being peripheral through their small size and lack of stems.

Donnacha Dennehy has created a number of works in collaboration with the *Sean-nós* singer Iarla Ó Lionáird (b.1964). The most notable work is *Grá agus Bás* (2007). Dennehy built this work around fragments of two traditional songs, 'Aisling Gheal' and 'Táim Sínte ar do Thuama'.

Dennehy's approach to notating the piece has changed since the first rehearsals. Originally the notation was not so detailed and Dennehy called on the players to listen to Ó Lionáird's singing to influence their approach to playing their parts.

> One great thing was having Iarla there, so often the way he sang would influence the way they were playing it……I remember the first time doing it, I was very insistent about particular ways of doing it and I wonder whether I've put all that into the notation. I keep on updating the notation so that it can be possibly done by others at different stages, because there was so much that I was saying verbally as well that I have updated into the notation so that each time you come back to it you haven't forgotten it then, because when you've written it first you're so fresh about exactly what you want.
>
> (Interview with Donnacha Dennehy, March 6, 2009).

There are a number of places in the piece where the members of the ensemble are required to imitate Ó Lionaird's *Sean-nós* singing style, indeed the instrumental parts are littered with grace notes which echo Ó Lionaird's ornamentation. The addition of dynamic markings and the instruction to swell on each note at bar 440 is a clear imitation of Ó Lionaird's general singing approach. [16]

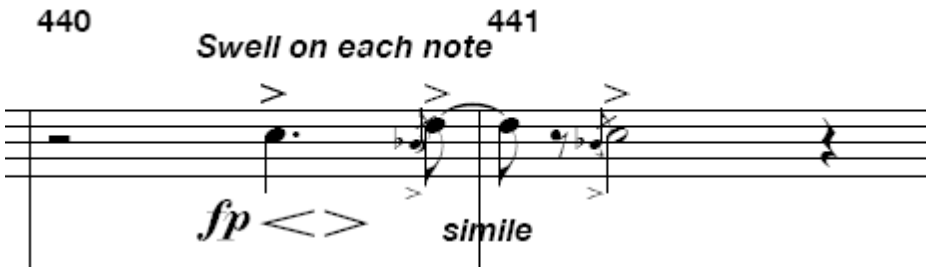


Figure 2.20 Dennehy, *Grá agus Bás*, 440-441, flute part.

The trombone part at bar 280 is also influenced by the traditional melodies. There are similar melodic fragments, derived from the source songs, throughout the piece.

[16] These excerpts are taken from a PDF copy of the score which Dennehy sent to me. The poor spacing between some of the notes could not be helped.

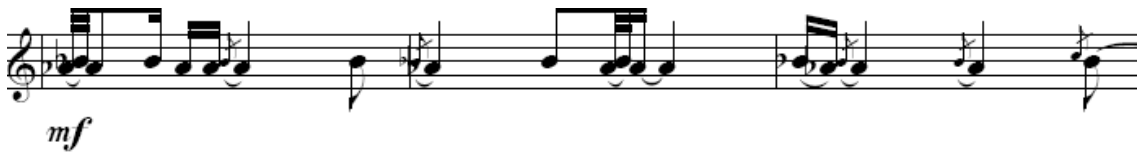


Figure 2.21 Dennehy, *Grá agus Bás*, 280-282, trombone part.

Dennehy's use of grace note notation is less problematic in this work than in Bodley's because in this case the classical musicians have a traditional musician to refer to. The supposition is that since they are accompanying authentic traditional singing it is easier for them to recreate a similar sound.

2.3.3 The Maximalist Approach

In Figure 2.3 I provided an example from the work of the composer Brian Ferneyhough to indicate the depths of complexity found in some contemporary classical music notations. Ferneyhough's style of music is often described as 'maximalist' as opposed to the 'minimalist' music of Steve Reich. It is perhaps ironic that I would define my own approach to the notation of elements of traditional music as maximalist, given the fact that I identify much more with the minimalist school of composition. Nevertheless my approach to notational detail is certainly maximalist when compared to the skeletal approach of Barry and Sweeney.

I am confining the discussion of this maximalist approach to two works which I composed prior to commencing research for this dissertation; *Between the Jigs and the Reels* (2004) and *String Quartet No. 2 –The Cranning* (2005/rev. 2009). I call the approach maximalist because in these works I attempted to notate elements from traditional music at a level of detail that is more complex than any of the other composers' works I have studied. When I composed these works my knowledge of traditional music was not as detailed as it is now and so I have since revised the notation.

Initially I notated all the ornamentations using regular grace notes, much like my fellow composers had done, however I added written descriptions with these notations to indicate that the grace notes should be more like articulations than additional melodic notes. Upon learning more about ornamentation techniques, particularly by way of learning how to play the fiddle, I developed the idea of using crossed note heads and demisemiquavers, along with more detailed explanations of how to perform these ornaments in the score. I felt compelled to take this direction following the first performance of *String Quartet No.2* by *The Smith Quartet* at the 2005 *Huddersfield Contemporary Music Festival*. Despite the Quartet's best efforts, they were not creating the sounds I desired. I found it difficult to explain these sounds to them. It became clear to me that the notation was not sufficiently detailed for this purpose.

Whilst I was aware of the articulating nature of traditional music ornaments, I did not realise how confusing the use of grace note notation was to classical musicians in this context until working with *The Smith Quartet*. Once I realised this, I revised the score, replacing all grace notes with crossed note heads. I also revised the notation I had given for the *cranning* technique, allowing the musicians the option to use a number of different approaches. My initial description of *cranning* in the first draft of *Between the Jigs and the Reels* and my revised description, which I prepared for my revised version of *String Quartet No.2-The Cranning*, follow. This revised notation was largely made possible due to the research I have undertaken for this dissertation.

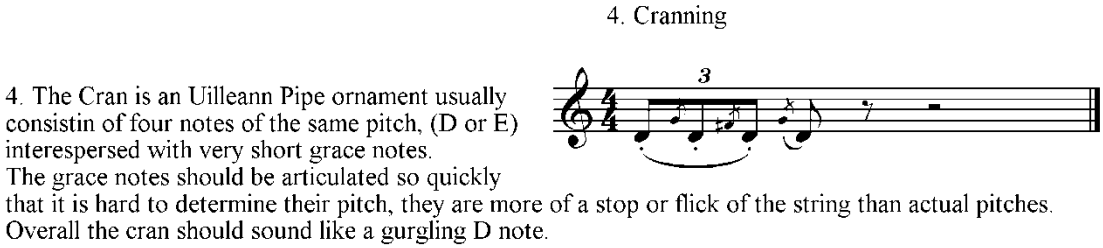


Figure 2.22 Cranning notation from Flynn, *Between the Jigs and the Reels*.[17]

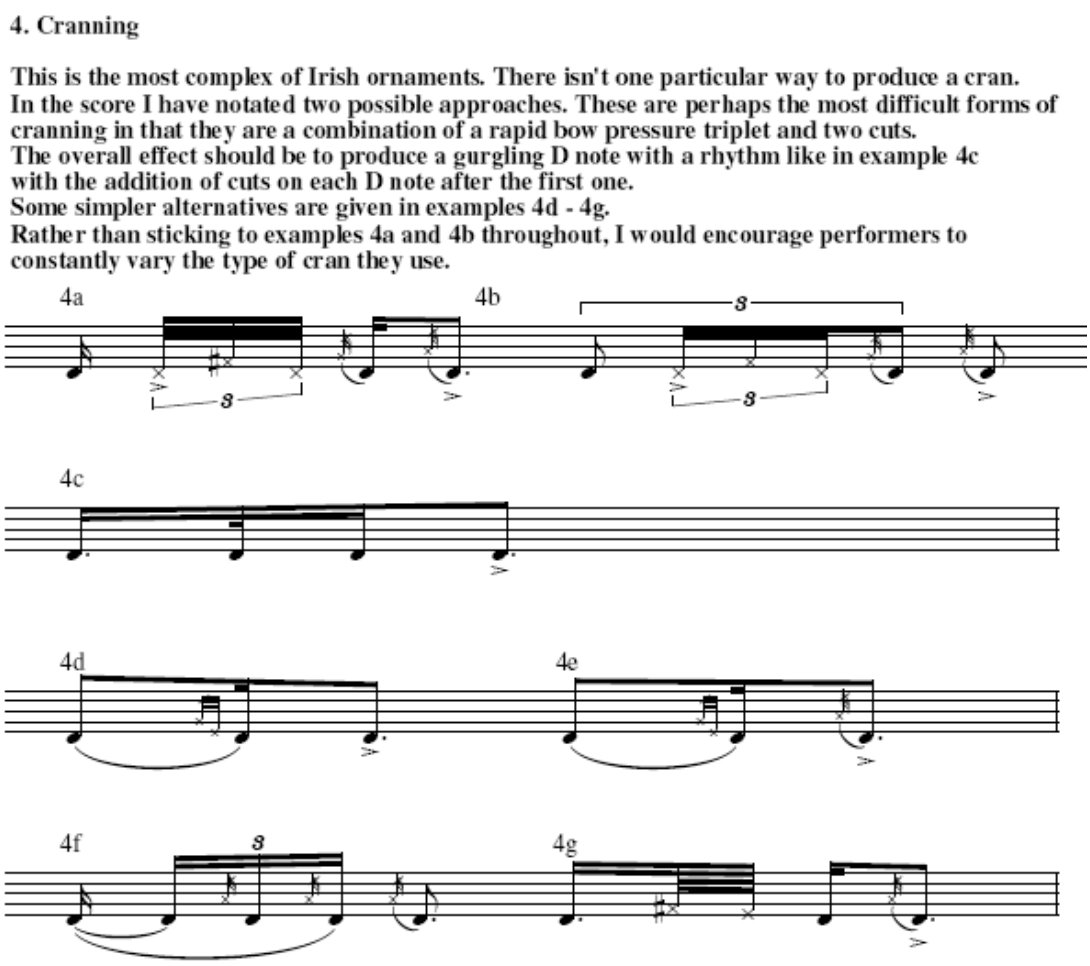


Figure 2.23 Cranning notation from Flynn, *String Quartet No. 2*.

The level of detail in my notation for *cranning* has evolved considerably from giving one simply notated option, to providing seven options of varying notational complexity. I have not encountered any other scores where the various possibilities of *cranning* techniques are detailed in notation like this. I have found this more detailed system is much more useful in rehearsal situations. The

[17] This is a scan from the original score, therefore I have not changed the spelling mistakes!

different notated versions of *cranning* give the musicians the freedom to vary the sound each time and this results in a more dynamic performance.

2.3.4 Summary

Elements of traditional music have been notated in three primary levels of detail by contemporary composers. The skeletal approach results in music which sounds quite removed from authentic traditional music, unless traditional musicians are involved in the performance. The ornamental approach brings aspects of traditional ornamentation to notation; however most of these notations are flawed due to the fact that they do not take the rhythmic articulating nature of these ornaments into account. My maximalist approach takes this into account and therefore provides musicians who primarily learn music through the written note a detailed resource with which to better understand the hidden complexities of traditional music.

2.4 Ornamentation

> You have this toolbox of tricks and you've a choice of when and where to use them and this embellishes and decorates the tune. But it's very much a central part of the tune because without it, it wouldn't be traditional either.
>
> Charlie Lennon[18]

> I suppose it's like in art, it's like in architecture where you make a decorative element that has a functional quality. It might be holding up the house and look good at the same time.
>
> Martin Hayes[19]

> Music in the early days was often written as a skeleton of the melody, where the performer was expected to provide the improvisation to make the tune more interesting. Many times the better or more renowned musician had his reputation based on his ability to embellish. In the 15th century, composers began to write in the ornaments as a guide to the player. Toward the end of the 17th century, most music was written exactly as it was to be played. By the Romantic period, a performer was not allowed to put in any of his own ornaments and to do so was considered a practice bordering on musical sacrilege.
>
> Gene Casti[20]

There are numerous techniques used by traditional musicians, many of which are most commonly referred to as ornaments. This is perhaps because they are viewed as additions to the notated melody. In my discussions with traditional musicians I have found that some of them view these techniques not as ornaments but variable components of the overall structure of the music that are as important as the main melody notes. Without them it simply would not be Irish traditional music. For convenience sake I refer to them as ornaments in this dissertation.

Some of these ornaments are almost universally used; others occur due to a particular individual's approach. One would need to study almost every traditional musician in depth to discover every ornament used in traditional music. Here I document the most common ornaments and some variants as I have found them practiced by musicians of note. Many of these ornaments are used in my compositions. Sometimes they are notated, other times they are added spontaneously by the musicians.

In my conversations with traditional musicians they have all alluded to the importance of ornamentation. The 'toolbox of tricks' Charlie Lennon refered to contains

[18] Interview with Charlie Lennon, June 20, 2008.
[19] Hayes interview.
[20] Casti, n.d.

a number of distinct ornamental techniques, many of which are unique to traditional Irish music in the way they are performed and the context in which they are used. Whilst some similar ornaments may be found in other folk traditions and in Baroque music, the overall approach to ornamentation in Irish traditional music is distinct even from Scottish traditional music, which is the most closely related tradition.[21]

Whilst the ornaments known as *cuts* and *trebles* can also be found in Scottish traditional music, two of the most common forms of Irish ornamentation techniques, *rolls* and *crans*, only occur rarely in Scottish traditional music and when they do it is probably as a direct influence from Irish traditional music.[22] I asked Peter Browne, who has an excellent working knowledge of different piping traditions, whether he felt *rolls* and *crans* were unique to Ireland. He answered, **'**Yes, the particular way they're done.' (Interview with Peter Browne, March 23, 2009).

Within the Irish instrumental tradition there are many approaches to ornamentation.[23] The amount of ornamentation used varies from region to region and player to player, as do the types of ornamentation. Some ornaments are particular to certain instruments, regions or even individual players. Charlie Lennon and Martin Hayes would have very different approaches to ornamentation. Lennon uses quite a lot of ornamentation, this being linked to the prevalent traditions in North Connacht where he is from and his admiration of the legendary Sligo fiddler Michael Coleman (1891-1945). Hayes prefers a 'less is more' approach;

> I've always been of the 'less is more' school with that. So I try to make *triplets* be functional in terms of trying to make a tune flow and at the same time be an ornament. So we'll say in the cross bow that I would use a *triplet* to make that flow. So it becomes functional and it allows the tune to flow and rolls and cuts and stuff like that to allow bowing to flow more freely. By doing that I seem to have enough ornaments on the tune that operate on some level both functionally and as decoration. Then I make up other weirdisms like maybe just

[21] Peter Browne explained to me how he felt the Irish and Scottish traditions are basically from the same source yet through time they have separated into distinct traditions.
[22] Scottish ornaments including the *birl* and *crunluath* bear similarities to *crans*, yet remain distinct.
[23] The approach to ornamentation in *Sean-nós* singing is also a complex issue which I have not thoroughly investigated since my major focus has been on the instrumental tradition, therefore there are only a few references to *Sean-nós* ornamentation in this dissertation.

> rolling a finger occasionally on a note as I'm altering the pitch of it and little weird hammer-ons or strange formations of the note just to imitate or suggest a vocal quality.
>
> (Hayes interview).

Hayes is known for stripping tunes down to their bare bones and applying very little ornamentation, yet where and when he chooses to ornament the tunes is hugely important. So even though he would use ornamentation a lot less than many traditional musicians, their function is still extremely important. This is one of the main reasons why accomplished musicians with little or no knowledge of Irish ornamentation techniques do not sound remotely like traditional musicians when they attempt to play the music from skeleton notation.

2.4.1 Ornamentation in Baroque Music

The similarities between traditional Irish music and the period of classical music known as the Baroque (ca. 1600-1750) are often commented upon. One of the key similarities between the genres lies in the importance of ornamentation. Few Baroque ornaments are exactly like Irish ornaments but there are a number of similar approaches to the application of ornamentation in both genres. The quotation from the recorder player Gene Castri at the beginning of Chapter 2.4 was given to illustrate how the fundamental approach to ornamentation in early classical music was similar to how it is in traditional Irish music; the performer was expected to add improvised ornamentation. As the western classical tradition developed this practice became less and less, to the point where it was frowned upon in the nineteenth century and all ornamentations were usually meticulously notated by the composer.

The quotation from Neumann (1978) at the beginning of Chapter 2 is a prime example of a number of statements he makes regarding Baroque music that could easily apply to traditional music. Neumann pinpoints a number of literary sources which

demonstrate a remarkable similarity between how Baroque musicians felt about the teaching of ornamentation to how traditional musicians still learn them today.

> The idea that ornaments are too free to be tamed into regularity and to be taught by book goes like a red thread through the literature of two centuries. The following few select quotations should suffice to make the point.
>
> Peri, in 1600, speaks of embellishments "which cannot be written, and if we do write them, cannot be learned from writings."
>
> The 17th Century lutenist Jean Baptiste Bésard explains why he does not deal with ornaments. "If it were possible to prescribe how to play sweet ornaments and *Trills* on the lute, I would make some remarks about this here; since they cannot be explained, however, either orally or in writing, it will have to suffice for you to imitate someone who can play them well or to learn them by yourself."
>
> L'Affilard, who presents in 1694 an ornamentation table, cautions that in dealing with ornaments he tries only to "give a general idea…..not believing in the need of giving a more detailed explanation, and convinced that one can learn them much better by the example given by singing than by any dissertation that one could write on the subject".
>
> (Neumann, 1978:10).

Neumann cites many more examples such as these, one of which relates particularly to the concept of variation in traditional music.

> Saint Lambert in 1702 carries the freedom of ornaments to a point where the composer's prescriptions may be ignored and other ornaments substituted for those specified.
>
> (*Ibid.*:11).

Neumann's conclusions on the matter could extend to my own ideas regarding the notation of traditional music ornaments. 'Descriptions of an ornament, whether by words or notes, are only rough outlines.' (*Ibid.*:12).

This quotation comes at the beginning of an extensive book, detailing as closely as possible in notation, many of the ornamentation practices in Baroque music. Yet the author is at pains to explain that even this detail is but a rough outline. So in Baroque music, just as in traditional music, aural learning is essential when it comes to teaching ornamentation. Since aural learning is no longer commonplace in classical music teaching, a book as detailed as Neumann's was necessary to help enlighten those students of Baroque music as to how to fill in the details missing from the regular notation of Baroque music. This is just like the dilemma I was faced with when dealing with the common notation practices of traditional music.

In order to hear how close some Baroque ornamentation techniques are to traditional music ornamentations I interviewed Claire Duff, the leader of the *Irish Baroque Orchestra*. I demonstrated a number of traditional fiddle ornamentation techniques, highlighting the rhythmic rather than melodic nature of the ornamenting notes. She responded by saying that Baroque ornamentation is 'definitely nothing like that, if it was fast we would still play the note, just sped up. Even if it's fast we'd still want it (the ornamenting note) to sound.' (Interview with Claire Duff, May 27 2010)

So the general function of ornamentation is quite different in the two styles. Nevertheless, through my research into Baroque music, I have pinpointed some ornaments that are at least very similar in written description to Irish ornaments.

2.4.2 Ornamentation in Traditional Irish Music

Ornaments in traditional music are normally placed into four main categories.

- *Cuts*
- *Crans*
- *Rolls*
- *Trebles* and *Triplets*

I have added to this a number of techniques, some of which are not usually classed as ornaments. I include them because they have an ornamental function in the context of traditional music.

- *Slides*
- *Trills*
- *Vibrato*
- Microtonal inflections
- Miscellaneous techniques

2.4.2.1 Cuts

Cuts are rapid articulations of a principal note and occur in three main forms. I distinguish them by calling them the *single cut*, the *dividing cut* and the *double cut*. They are sometimes called grace notes but since the actual technique and sound of a *cut* is different to what a classical musician would understand from the term 'grace note', I prefer not to use the term.[24] Instead I use the term 'articulating notes' to reflect the fact that these ornaments are usually more like rhythmic articulations than melodic additions.

The terms *tip, pat, slap, clip* and *strike* have been used to describe an articulating note at a pitch lower than the principal note, with the term *cut* given to an articulating note at a pitch above than the principal note. Due to its common use I only use the term *cut* here. I use the terms *upper cut* and *lower cut* to distinguish between the two directions a *cut* can occur in. The other terms are sometimes used in literature and I acknowledge that they are in more general use amongst pipers.

In previous notation systems, including Breathnach's (1963), *cuts* tended to be notated as in example A.

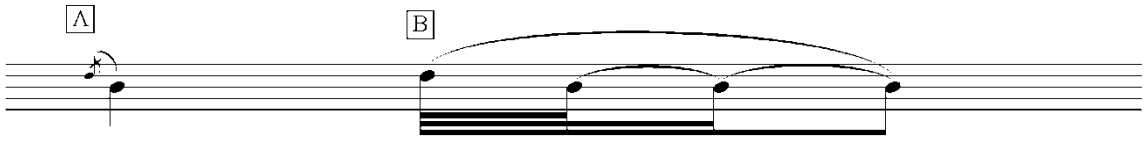


Figure 2.24 An acciaccatura.

To a classical musician the notation given in example A indicates an *acciaccatura*, which would in performance end up sounding roughly as in example B.[25] This *acciaccatura* is rhythmically and melodically different to a *cut*. *Cuts* usually occur

[24] Grace notes in classical music are 'conventional melodic ornaments applied to single notes.' Seletsky, Robert E: "Grace notes." In *Grove Music Online*. *Oxford Music Online*, http://0-www.oxfordmusiconline.com.ditlib.dit.ie/subscriber/article/grove/music/11566 (accessed November 3, 2010).

[25] The exact rhythm of an *acciaccatura* would vary slightly between musicians; this is an example of the most common approach.

rapidly just before the beat where the principle note lands. The cutting note is not of such a clear pitch as the *D* note in example B would be when a classical musician performs an *acciaccatura*. A classical violinist would fully depress the finger on the *D* note; a traditional fiddler would not, with some rare exceptions.[26] There are a number of different forms of *cut.* My notational approach to *cuts* can be seen in the following examples.[27]

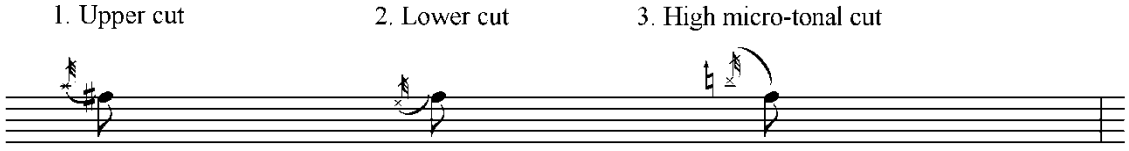


Figure 2.25 Cuts.

Example 1 is the most common form of *cut*; it is a single articulation of the principal note where the articulating note is positioned higher. Example 2 is similar but the articulating note is lower. *Lower cuts* could be perceived to have more discernable pitch content, particularly on the fiddle when an open string is used, however good musicians usually articulate the note so quickly that the pitch is not discernable. Example 3 is a highly effective type of *cut* that I have noticed in the playing of two particular fiddlers, Paul O'Shaughnessy (b.1961) and Oisín Mac Díarmiada (b.1978). It does not exclusively occur on the note *F-sharp*, but it seems to be the most common note *cut* in this fashion. In this case the musicians stretch their little finger to a point slightly higher than an even-tempered *B* would be fingered. The flick of the finger at this point on the string produces a yelping sound similar to a piping ornament. Mac Díarmiada described it to me as a 'dissonant colouring' intended to spice up the melody.[28] This *cut* is particularly notable because some element of pitch content is more discernable than in

[26] I have occasionally noticed some musician playing what are in effect *acciaccaturas* where the ornamenting note is more clearly heard. This occurs rarely but when it does it is usually in slow music.
[27] Appendix I contains numerous examples of *cuts* and other ornamentation techniques.
[28] This description came from an informal conversation I had with MacDíarmiada after a concert at the 2007 Masters of Tradition Festival in Bantry, Co. Cork.

the other *cuts*. Despite this, it is still more correct to use the crossed note head whilst notating it, because the finger does not fully press the string down.

Cuts also occur when two notes of the same pitch are divided by a *cut* at a higher or lower pitch. They occur in upper and lower forms just like *single cuts*. In conventional traditional music notation these dividing *cuts* are similar to the classical ornamentation known as a *mordent*.

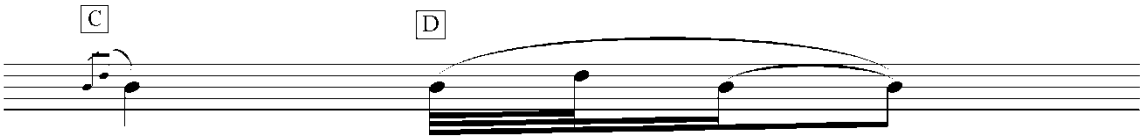


Figure 2.26 A mordent.

Example C shows the common notation for a *dividing cut* in previous Irish traditional music notation systems. A classical musician, presuming they are looking at a *mordent*, might interpret this like in example D. A traditional musician would play this so rapidly as to produce two articulations of a *B* note with a slight rhythmic interruption in between. The pitch of the articulating note would not be heard clearly, so again I use the crossed note head symbol in the following examples.

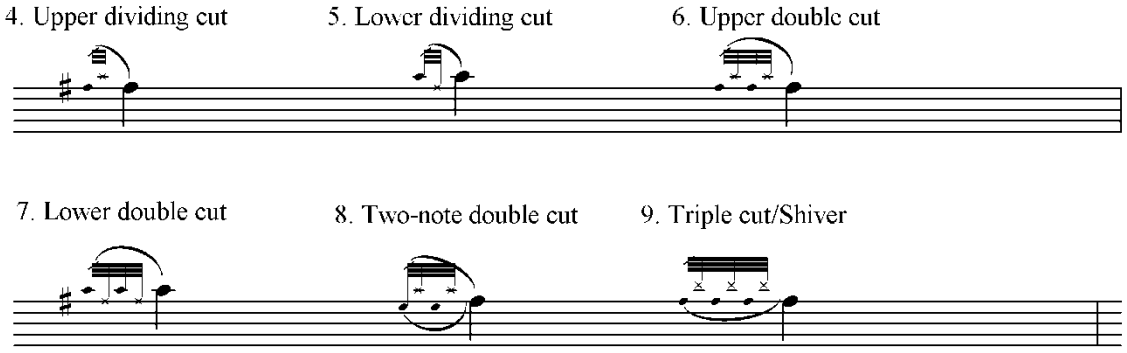


Figure 2.27 Longer cuts.

The main note is given with a regular note head in all instances because the articulations mean it is sounded more than once. Examples 4 and 5 are *dividing cuts* where the main note is sounded twice. Examples 6 and 7 are *double cuts* which involve two *single cuts* in succession, usually but not exclusively cutting one particular note, which will in effect sound three times. The articulation is so quick that this may not be immediately

noticeable. On paper it looks similar to a *trill* but it sounds different because only one note is clearly heard. Occasionally a *double cut* will occur with two different notes being *cut* as in example 8.

Ennis (1998:29) described a form of triple *cut* on the notes *E* and *F-sharp* as a *shiver* (example 9) and suggested it as an alternative to a *cran*. Peter Browne explained to me how Ennis produced this technique by vibrating the right forearm whilst leaving the fingers limp, in doing so the finger hits off the chanter to produce a shivering effect.[29]

2.4.2.2 Crans

Crann is the Irish Gaelic word for tree. In traditional music the *cran* is an *uilleann* piping ornament where one central note, usually a low *D*, is like the tree from which many ornamenting notes branch off. On the pipes it is produced by repeatedly cutting the lowest *D* of the chanter with the fingers rapidly flicking at various different holes to create a rhythmic effect, which Paddy Glackin described to me as a 'gurgling *D* note'.[30] Whilst it is most commonly used on the lowest *D* it is sometimes used on other notes, particularly the *E* above that and occasionally the *G* and *D* notes above that. Cranning has been adapted by other instrumentalists, for instance fiddlers sometimes use an adapted *cranning* technique on their open strings, *G*, *D*, *A* and *E*. In the examples in Appendix I, I concentrate on low *D crans* with occasional notations of *E crans*. Similar principles apply to *crans* on other notes.

There are many different approaches to *cranning* both rhythmically and regarding pitch content. The rhythm of the *cran* usually relates to the rhythm of the tune. It seems every musician with a well developed approach to *cranning* utilises

[29] Browne mentioned this to me in an unrecorded telephone conversation.
[30] This came from an unrecorded phone conversation I had with Glackin.

different techniques. They usually fall under two different types; Ennis (1998:27) called them *single crans* and *double crans*, elsewhere they are referred to as *short crans/half crans* and *long crans*. Four examples of my notational approach for *crans* follow.

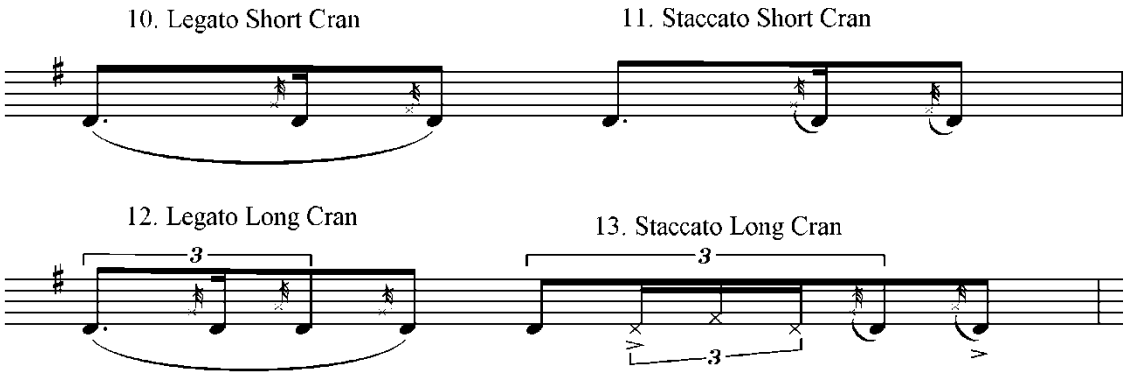


Figure 2.28 Crans.

Short crans usually occur in the space of three quavers in duple time tunes like *reels*. *Short crans* have two or three articulating notes. The rhythm of a *short cran* varies, so this results in a number of different possibilities, depending on the instrument and the ability of the musician. Some fiddlers do it in one bow movement with different fingers used to *cut* the *D*. Others create a more aggressive *cran* by bowing a *D* with *cuts* in between each bow. Two sections for *short crans* are found in Appendix I; I divide them between *legato short crans* and *staccato short crans* as per examples 10 and 11. *Legato crans* occur in one bow, breath or pluck through the use of slurring. They are usually applied to pipes, whistle, flute and string instruments.

Staccato crans occur when there are a number of bowed, blown, plucked or bellowed articulations within the space of the *cran*, so on the fiddle they are not done in one bow as *legato crans* are. They mainly apply to the fiddle but some can also apply to flute, whistle, plucked strings, accordion and concertina. They are technically impossible on the pipes because the low *D* or *E* note cannot be emphasised in the way bowing, blowing, plucking or bellows movement will on other instruments.

Long crans are performed mainly in *jigs* and other triple-time tunes and they utilise at least three *cuts* of the lower note. More skilled players will use four or more

cuts. There are multiple rhythmic possibilities for a *long cran*, many of which are detailed in Appendix I. Examples 12 and 13 give two possibilities.

Legato long crans are most characteristic of the pipes, whistle and flute. They are technically possible on the fiddle, but only the most adventurous fiddlers will attempt any of these *cranning* techniques. Their use on other instruments is limited. *Staccato long crans* are most characteristic of the fiddle.

The examples given in Appendix I are a representative selection of some of the possible approaches to *cranning*. There really is no one 'proper' way to *cran*, so long as the effect of a gurgling note is achieved.

2.4.2.3 Rolls

There are numerous approaches to the ornament known as a *roll*. This ornament causes perhaps the most confusion as it is often mistaken for the classical ornament known as a *turn*. This is because on paper the same note sequence seems to be used for a *roll* and a *turn*; the main note is ornamented by a note above and then below it. Also, in some tune collections the symbol for a *turn* is used to indicate a *roll*.

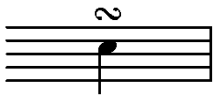


Figure 2.29 Turn symbol.

A *turn* on a *C* can be played in a number of ways, some of which are illustrated below.

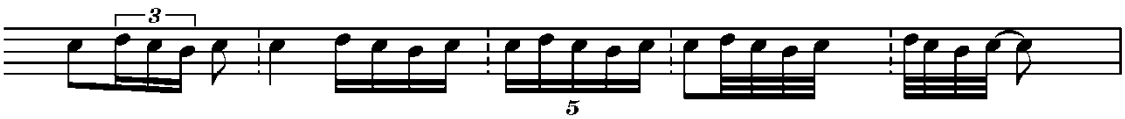


Figure 2.30 Turns.

A *roll* on a *C* could come in a number of different forms, but it would never sound like the *turns* above. The fundamental difference between a *turn* and a *roll* is that the ornamenting notes in a *turn* are melodic and generally given equal emphasis. In a *C roll*

the *C* would be articulated three times; the ornamenting notes would not be clearly heard. Claire Keville described this technique to me and the confusion it causes. '(if) you're doing a roll on *G*, it's your *G* that's the most important note, the other notes are just incidental notes, but people don't get that.' (Interview with Claire Keville, December 1, 2009).

The most common *roll* on this *C* note would take the form of an *upper cut* followed by a *lower cut*.

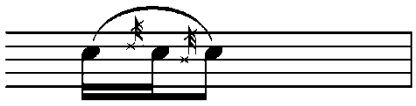


Figure 2.31 Common Roll.

There are two main types of *roll*, the *short roll* and the *long roll* and they occur in the same duration as *crans*. Within this relatively short space there are a remarkable number of variations as to how a *roll* can be played. The rough pitches of the ornamenting notes are usually determined by instrumental characteristics, such as where it is convenient to place the finger to produce a satisfactory articulation. One of the main distinguishing features of a *roll*, rarely mentioned in literature, is the fact that there is often a *crescendo* through the *roll* with an emphasis on the middle main note. This can be notated as follows.

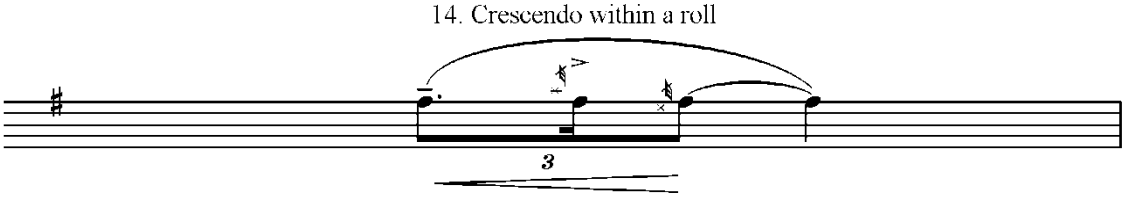


Figure 2.32 Crescendo within a roll.

This example demonstrates another common rhythm for a *roll*. There are numerous other forms of *rolls*, some of which are notated in Appendix I.

2.4.2.4 Trebles and triplets

Trebles and *triplets* are two distinct forms of ornamentation in traditional music. *Trebling* is the term traditional musicians use to describe the many different approaches to placing three notes of the same pitch in the space of two quavers. They are often mistakenly called *triplets*, thus leading non-traditional musicians to assume a *treble* should have the same rhythm as a *triplet*.

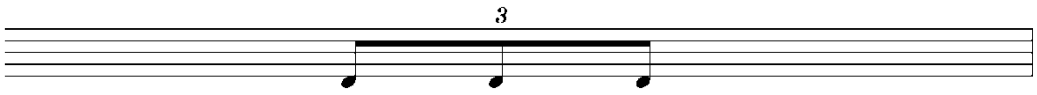


Figure 2.33 Triplet rhythm.

Sometimes *trebles* have this same rhythm, but more often the *treble* has a different rhythm where two of the notes are shorter in duration than the other, most commonly the first two being shorter. They are like *short rolls* without *cuts*. The most common approaches to the *treble* are notated in Appendix I. I have mainly given examples on a *D* but *trebles* can occur on any note.[31] Three of the main forms follow.

Figure 2.34 Trebles.

Scratched trebles are particular to the fiddle and are usually produced by heavy bow pressure so that a percussive rather than a pitched note is heard. An effect similar to the *scratched treble* is used on other instruments, most notably the accordion. This is produced by a combination of rapid articulation of the note and heavy bellows pressure.

Triplets in traditional music are more melodic than rhythmic ornamentations, although some *triplets* are a hybrid whereby one or two of the notes are more rhythmic than melodic. They are often found in a straight *triplet* rhythm but can be found in other rhythms. The melodic version of a *triplet* is most commonly found in *hornpipes* at the

[31] That is, any note that is technically possible and usually played on a given instrument.

end of a tune, as in example 18. Example 19 is a variation common to Donegal music where the rhythm is given a 'Scotch snap'.[32]

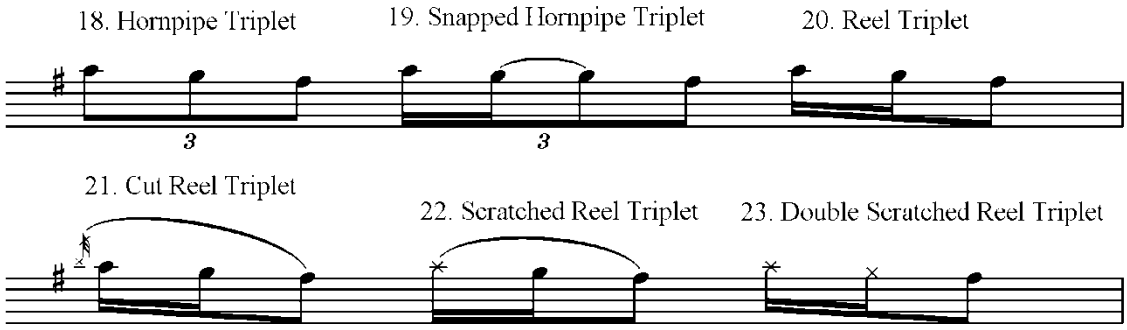


Figure 2.35 Triplets.

In *reels,* melodic formations similar to these *hornpipe triplets* commonly occur, but they often occur in the rhythm of examples 20-23. Example 21 occurs when a *cut* is applied to the first note of the triplet. Examples 22 and 23 show the fiddle playing approach of using bow pressure on one or two of the notes to create a percussive sound.

Quadruplets occur in triple time tunes like *jigs* and *slides*. They can be defined in similar terms as *triplets* due to their melodic effect on the music. Four versions of these *jig quadruplets* follow, other variations do occur.

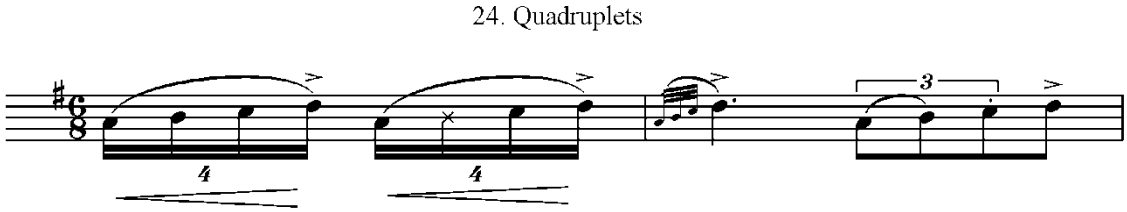


Figure 2.36 Quadruplets.

The first two examples are almost identical. They lead up to the last *D* note which is emphasised. There is often a slight *crescendo* through the *quadruplet*; sometimes the second note will not be clearly pitched. The third and fourth examples are not technically *quadruplets* but they are categorised in the same manner because four notes are played in the space of three quavers.

[32] A 'Scotch snap' is a term given to a rhythm where the second note of a two note sequence comes sooner than might usually be expected, thus creating rhythmic syncopation.

More elaborate melodic ornamentations than these can occur, from *quintuplets* to much longer phrases. These are particularly prevalent in *slow air*s. They follow similar principals to the *triplets* and *quadruplets* above.

2.4.2.5 Slides

Traditional musicians use the term *slide* to describe a form of dance tune; they also use it to describe the various types of *glissandi* used in traditional music. Some musicians use *slides* extensively, others rarely use them. They are most effective on fiddle, pipes, flute and tin whistle as well as in singing. *Slides* are almost always upwards in direction and possibly have their roots in *Sean-nós* singing where yearning *glissandi* often occur. *Downward sliding* is less common but it is practiced by some players. It does not always meet with approval, as the following quotation vividly illustrates!

> Downward sliding is used by a small number of younger fiddlers. It is a regrettable innovation as it is not a natural development from the tradition itself but has its roots in an alien system.
>
> (Ó Canainn, Tomás: *Traditional Music in Ireland.* Cork: Ossian Publications, 1978:101).

There is one form of *downward slide* that would seem to contradict Ó Canainn's assertion that *downward sliding* has its roots in an 'alien system'. A short *downward slide* has been used by players in Charlie Lennon's home area of Kittyclogher in North Leitrim for quite some time.

> D.F. You do an ornament that's like a little slide back with your finger sometimes. I don't come across that often. Is that particular to a certain style?
>
> C.L. Yeah I'd say we tend to do that at home. John Gordon would do that as well. I wouldn't be aware of it but if it's there it's there!
>
> D.F. But you know what I'm talking about.
>
> C.L. I do yeah, it's a slight intonation.
>
> D.F. James Byrne in Donegal does something similar but he'd move the first finger up slightly to pitch it.
>
> C.L. Yeah, but there's the opposite direction. Ben (Lennon's brother) would tell you more about that. There was another fiddler there, John Timoney, I think did that and I forget but that would have been a local trait.
>
> (Lennon interview).

Subtle *downward sliding* is also evident in *Sean-nós* singing where a single word is sung in a falling melodic phrase. The *downward sliding* Ó Canainn objects to is related to *glissandi* used in jazz and bluegrass which some musicians such as Cathal Hayden and Liz Carroll have adopted.

Upward slides remain much more common and they come in fast and slow versions. They usually vary in intervals from microtones to a major 2nd. *Slides* of a longer interval than this are rare. The rhythmic duration of *slide* can also vary from a very short *slide*, almost like a *cut*, up to a long yearning *slide* over an interval of a major 2nd, which is characteristic of *slow air*s and *Sean-nós* songs.

In most *upward slides* the first note is held for a while before a gradual *glissando* commences, in addition there is often a slight *crescendo* to go with the *slide*. In this respect the Irish *slide* is quite different to the usual *glissandi* used in classical music, which tend to be straighter in rhythm and without *crescendo*s unless specified by the composer. Yearning *slides* are a major part of the characteristic styles of the fiddlers Tommy Potts and Martin Hayes and the singer Iarla Ó Lionáird. They are commonly used in *slow airs.*

In order to notate these slides I use symbols used in classical and jazz notation.

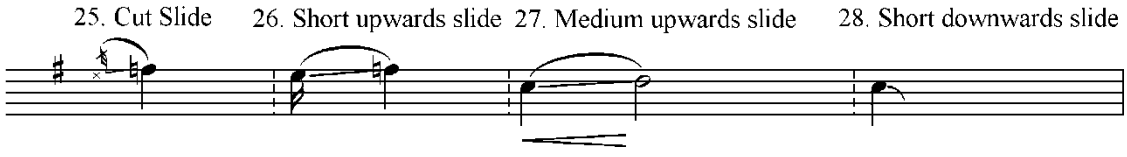


Figure 2.37 Slides.

Example 25 is like an *upper cut* which bends rapidly up to the main note. In example 26 the first note is more clearly heard. Example 27 is a *slide* of longer duration where both notes are clearly heard. Example 28 is the slight downward intonation that Charlie Lennon described to me. The effect is similar to a jazz articulation called a *fall*, so I have used the same notation symbol. Further examples of *slides* are found in Appendix I.

It is worth noting that *glissandi* are commonly used in contemporary classical music, however the yearning sound is very idiosyncratic of traditional music, so the introduction of Irish style *slides* into contemporary music is not particularly related to the common use of *glissandi* in the works of composers such as Iannis Xenakis (1922-2001) and John Adams (b. 1947).

2.4.2.6 Vibrato

There are some people who mistakenly believe that *vibrato* has no place in traditional Irish music. It would be more correct to say that the continuous *vibrato* often practiced by classical musicians is not a feature of traditional music. A more subtle form of *vibrato* has been used in traditional music for at least as long as recorded examples can testify. It would be naïve to presume that these *vibrato* effects just suddenly appeared when the first recording device was placed in front of a traditional musician!

Vibrato has an ornamental role in traditional music and in this respect its use is similar to practice in Baroque music. The most striking example of this similarity I have found lies in Frederick Neumann's description of *vibrato*.

> The vibrato is a means of enriching the musical tone. During the Baroque period the vibrato was looked upon as an ornament sometimes prescribed by symbol, but most often it was freely added.
>
> (Neumann, 1978:511).

Vibrato has now become a constant feature of the overall sound of many classical musicians. It is now generally part of the 'classical' tone in voices and instruments which can produce the effect. The common classical *vibrato* technique in use today is a wide *vibrato* with a wavering pitch; on a violin this is created with intense wrist movement. This form of *vibrato* is frowned upon in traditional music; it used to be frowned upon by classical musicians also. Neumann (*Ibid.*:518) describes how Leopold Mozart (1719-1787) criticised players who 'tremble constantly on every note, as if they had the permanent fever.' Mozart's humorous description is uncannily similar to Martin Hayes' feelings about classical *vibrato*. 'Oh, the impulsive vibrato, "I can't put my

finger down without it just shaking everywhere. Every time it hits the fingerboard it goes ‘whrrrrrr,’” (Hayes interview). There was quite a different approach to *vibrato* in the Baroque:

> Matheson (1739) stresses the one-pitch nature of the vibrato, which he calls *Tremolo* or *Beben*. It involves, he says, only the very gentlest wavering (*allergelindeste Schwebung)* on a single, definite tone, as produced on instruments “especially lutes, violins and clavichords” by simple pulsation of the fingertip without yielding its place.
>
> (Neumann, 1978:518).

The similarity between this description of the Baroque approach to *vibrato* and the general approach taken by traditional musicians is quite striking.

Neumann’s conclusions as to the prevalence of *vibrato* in classical music today are as damning as they are enlightening.

> It is interesting that throughout the 19th century the most eminent string players and teachers counselled restraint and considered indiscriminate use of the vibrato in bad taste. It was not until the 20th century that the vibrato spread to engulf every tone. Small wonder then that today the vibrato is no longer considered an ornament.
>
> (*Ibid*.:522).

In notation there are two main ways to indicate *vibrato*, the simplest is to state the word *vibrato* or *vib.* at the point where *vibrato* is desired. One can also use the following symbol.

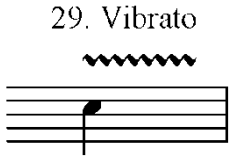


Figure 2.38 Vibrato Notation.

With this symbol, one can be quite specific as to what notes the *vibrato* should be used on and how long the *vibrato* should be held.

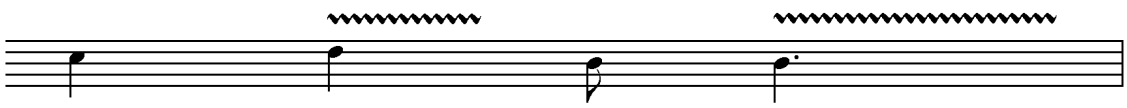


Figure 2.39 Possible Usage of Vibrato Notation.

The strength of *vibrato* in traditional music is determined by the common usage of the effect on each instrument. I describe this instrument-specific use in more detail in Chapter 3.1.

2.4.2.7 Trills

The *trill* is one of the few ornamental techniques which are executed in basically the same manner in traditional music as in classical music. It is also called a *shake*. It consists of the rapid alternation of two notes, usually a semi-tone or a tone apart. The *trill* is not universally used in traditional music but it is practiced by many players. Paddy Glackin and Seán Keane are two prominent fiddlers who make great use of *trills*. Bach (1851) used the following notation for a *trill*.

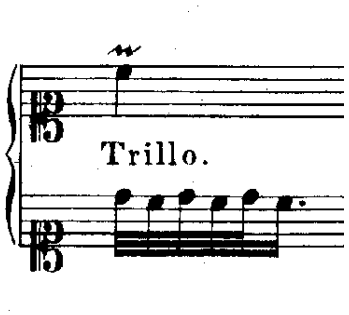


Figure 2.40 J.S. Bach's Trill Notation.

The symbol Bach uses for a *trill* is similar to the symbol used for *vibrato*. It is now more common to use the following symbol to denote a *trill*.

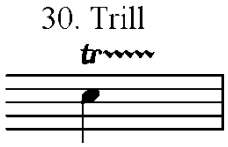


Figure 2.41 Common Trill Notation.

From my research I have concluded that the *trill* technique commonly used in traditional music is essentially the same as the one described by J.S. Bach; a note and the note below it rapidly played at least three times in succession with the last note held. The amount of repetitions of the two notes is sometimes more than three and the speed of the *trill* varies also.

2.4.2.8 Unison double-stops

There are a few techniques in use in traditional music created by subtle microtonal shadings. They are particularly prevalent in fiddle playing, where it is easy to produce such effects.

The *unison double-stop* is so named because the fiddler plays two notes of roughly the same pitch on adjacent strings, one is usually the open string, so they occur on the notes *D*, *A* and *E*. Some players create subtle microtonal shading when using this technique so that the note which is stopped on the lower string sounds slightly flat compared to the open string. This effect gives sharpness and bite to the music. My way of notating it follows.

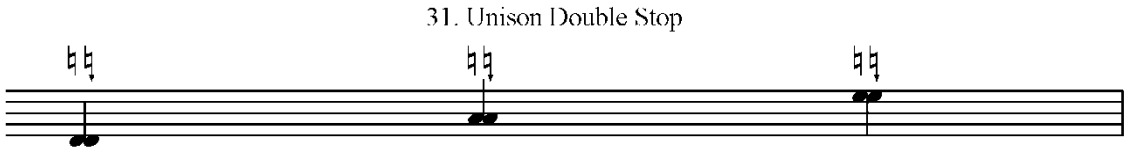


Figure 2.42 Unison Double-Stop.

The natural sign with a downward arrow indicates that the note is slightly flatter than usual.

2.4.2.9 Microtonal trebles

This effect is one I have mainly encountered in the playing of musicians from South West Donegal, most particularly James Byrne (1946-2008). It is a strong part of the local style there. It consists of three notes; an open string, followed by the same note played slightly flatter on the adjacent stopped string and then the open string again. It is used in place of a *roll*, *treble* or similar ornament. In the following notation, the circled number 2 along with the small number 4 indicates the string the note should be played on and the finger that is used to stop the string. The small circles over the other notes indicate an open string. It can occur in various rhythms.

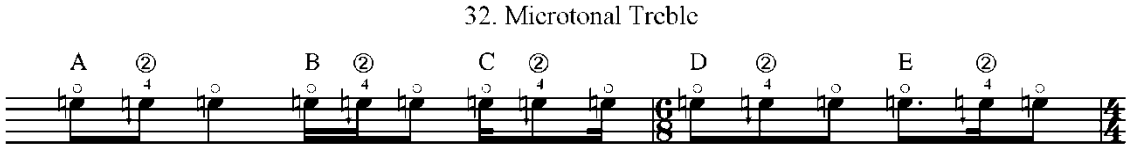


Figure 2.43 Microtonal Treble.

It should be noted that in both the *microtonal treble* and the *unison double-stop* a note slightly sharper than the open string is rarely if ever used.

2.4.2.10 Piping effects

There are some other special effects created on the pipes which are very idiomatic of the instrument.

> Hard D: By lifting the chanter off the knee, applying a tiny bit more pressure and cutting the note with the A, hard D is achieved. It gives the note a harsh edge that is loaded with harmonics and is desirable for piping. On most chanters the hard D is more in tune than the "soft" D.
>
> Hard E: The Hard E is played in the same way as the Hard D. The little finger is still on the bottom hole of the chanter with only the bottom hand ring finger raised.
>
> Back D: The note played with the top hand thumb when removed from the hole. Also, middle D as there is a D below and a D above on the uilleann pipe chanter. On some chanters it is necessary to open the C hole and or another hole, commonly the G, to bring the back D into tune. As a guide, these fingers can be used to vibrato the back D. Once you get used to the instrument you can use any finger combination that suits your particular chanter.
>
> Ghost D: or E-flat (E flat) is played by lifting only the little finger of the bottom hand. It is a nice effect as a grace note when moving between 2nd octave E and back D and vice versa.
>
> Pop/Bark: Popping is a wonderful characteristic unique to the uilleann pipes. It is achieved by very briefly playing a hard bottom D then bending the finger off the note you want to emphasize with this technique. I like to roll the finger off the note thus creating a bend in the note as it is played. The notes of the bottom hand are most commonly used for this effect but the upper hand is possible too with practice.
>
> (D'Arcy, Patrick: "Description of the Uilleann Pipes." *www.uilleannobsession.com.* http://www.uilleannobsession.com/faq.html#longroll [accessed March 21, 2010]).

To specify these effects in notation it should be sufficient to write the terms *Hard D, Ghost D* etc., over the corresponding note. Ennis (1998:19) used the following symbol for the *Ghost D*.

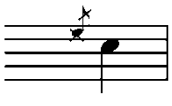


Figure 2.44 Ennis' Ghost D.

This is a regular grace note with a cross through it, similar to my notation for a *cut*. The effect of a *Ghost D* is like a pre-echo of the main *D*. Technically the finger is placed where an *E-flat* is sounded, so I have revised Ennis' notation slightly to create the following symbol.

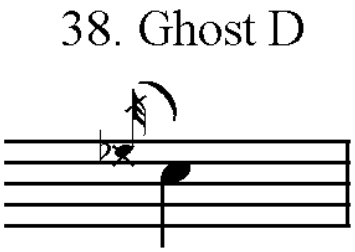


Figure 2.45 Ghost D.

For a *pop,* Ennis (*Ibid.*) prescribed the use of the sign ˅ over the note to be popped.

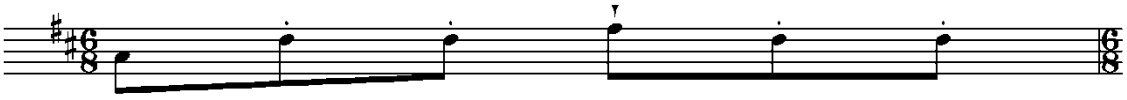


Figure 2.46 Ennis' Popping Symbol.

This was based on Ennis' idea that this sign indicates an accent. In classical music this sign actually indicates *staccatissimo*. A marked accent is usually denoted with the *marcato* sign.

Figure 2.47 Marcato sign.

I have coupled this sign with the open string sign 'o', which on the pipes can be understood as opening the sound of the pipes by taking the chanter off the knee.

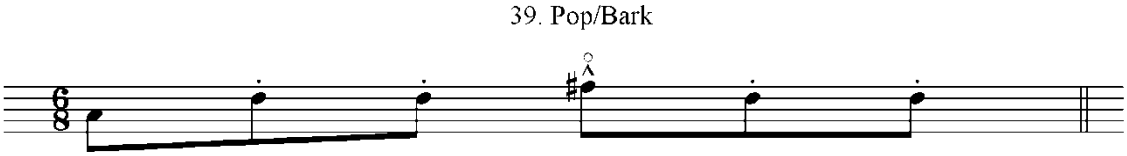


Figure 2.48 Pop/Bark.

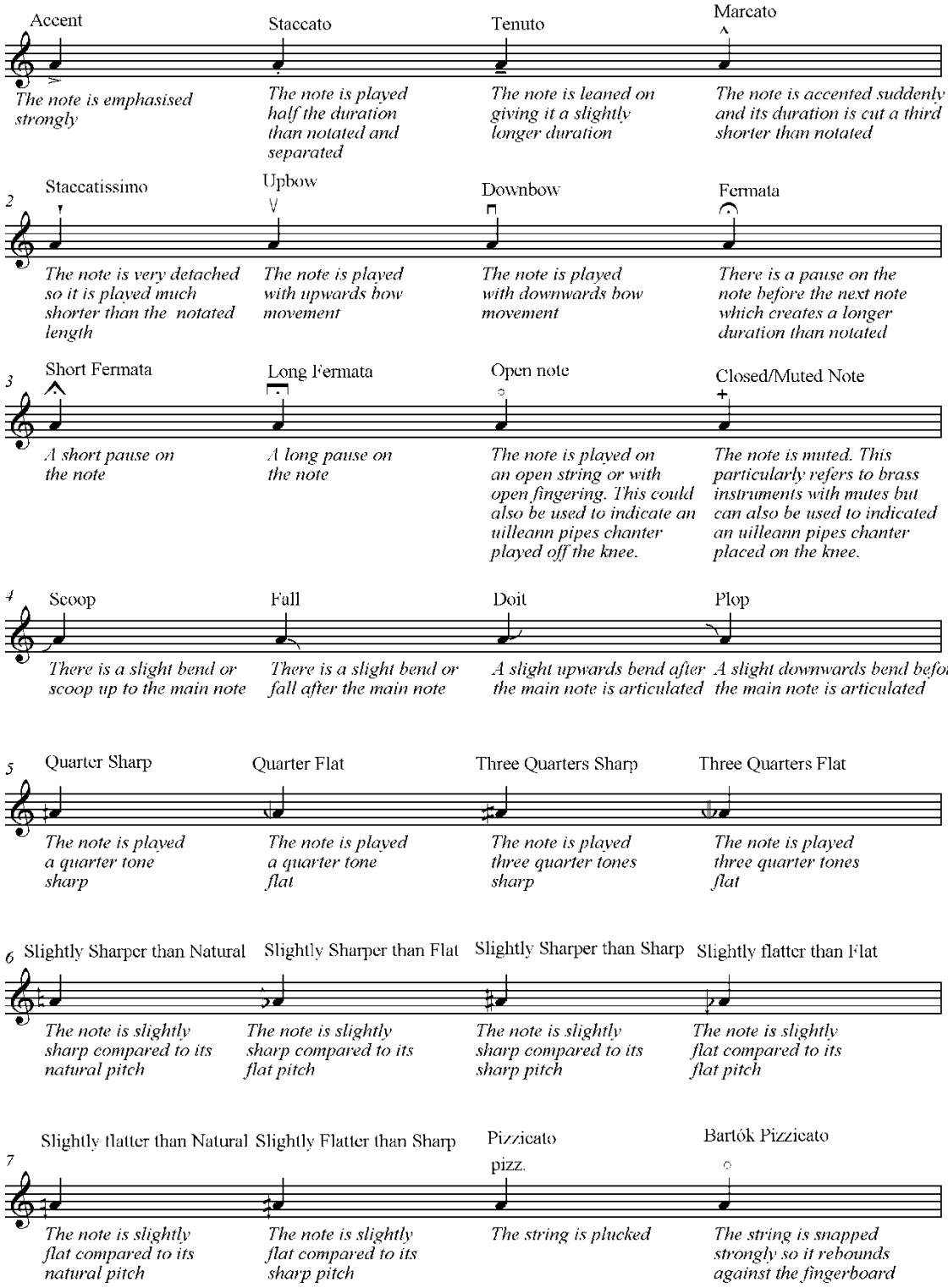
2.4.3 Summary

There is a wide variety of ornamentation techniques used in traditional music. These techniques are essential to creating the overall sound of the music, yet they are rarely fully notated in tune books and other publications relating to traditional music. When they have been notated they have often been notated incorrectly from a strict notational point of view. There has been particular confusion when notational symbols for different techniques deriving from classical music have been used in this context. I have developed a more refined system for notating these techniques for use in my compositions. These techniques are a vital component of all the works I have submitted with this dissertation. This system could also contribute to a better understanding of traditional music ornamentation for those who have been trained to understand music through sheet-music analysis.

2.5 Putting Flesh on the Skeleton – A Contemporary Approach to Notation

The notation style I used in the previous section on ornamentation is central to my overall approach to notating traditional Irish music techniques and performances. There are many other aspects to traditional Irish music which are missing in skeleton notation. Many of these aspects can be notated using notation symbols common to contemporary classical music. Some or all of these symbols will be unknown to musicians who have not studied contemporary classical music.

CONTEMPORARY NOTATION GUIDE



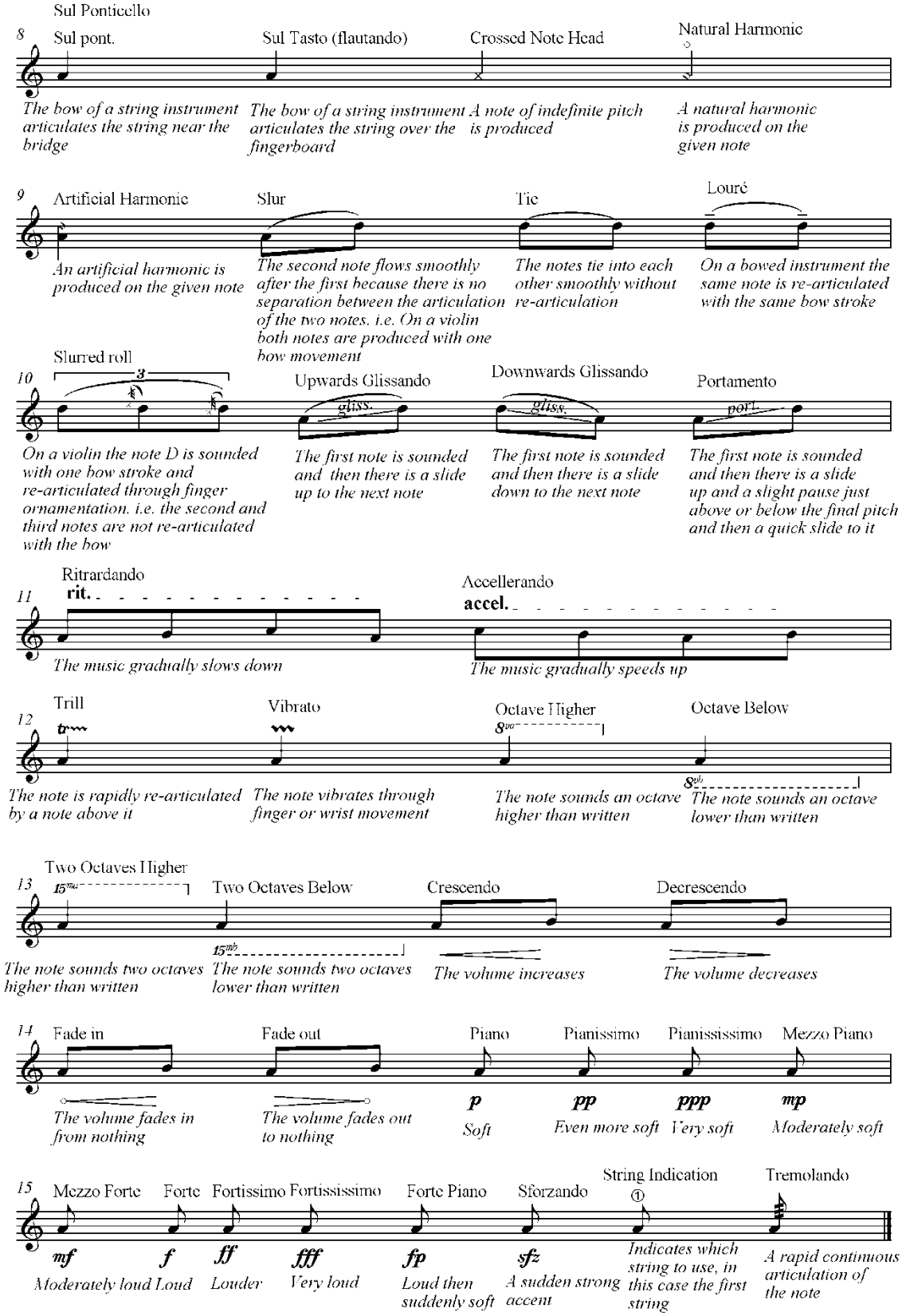


Figure 2.49 Classical Music Notation Symbols.

There are many more symbols used in contemporary classical music. Individual composers often develop their own notation symbols, some of which get more widely adopted.[33] I mainly use the symbols presented previously.

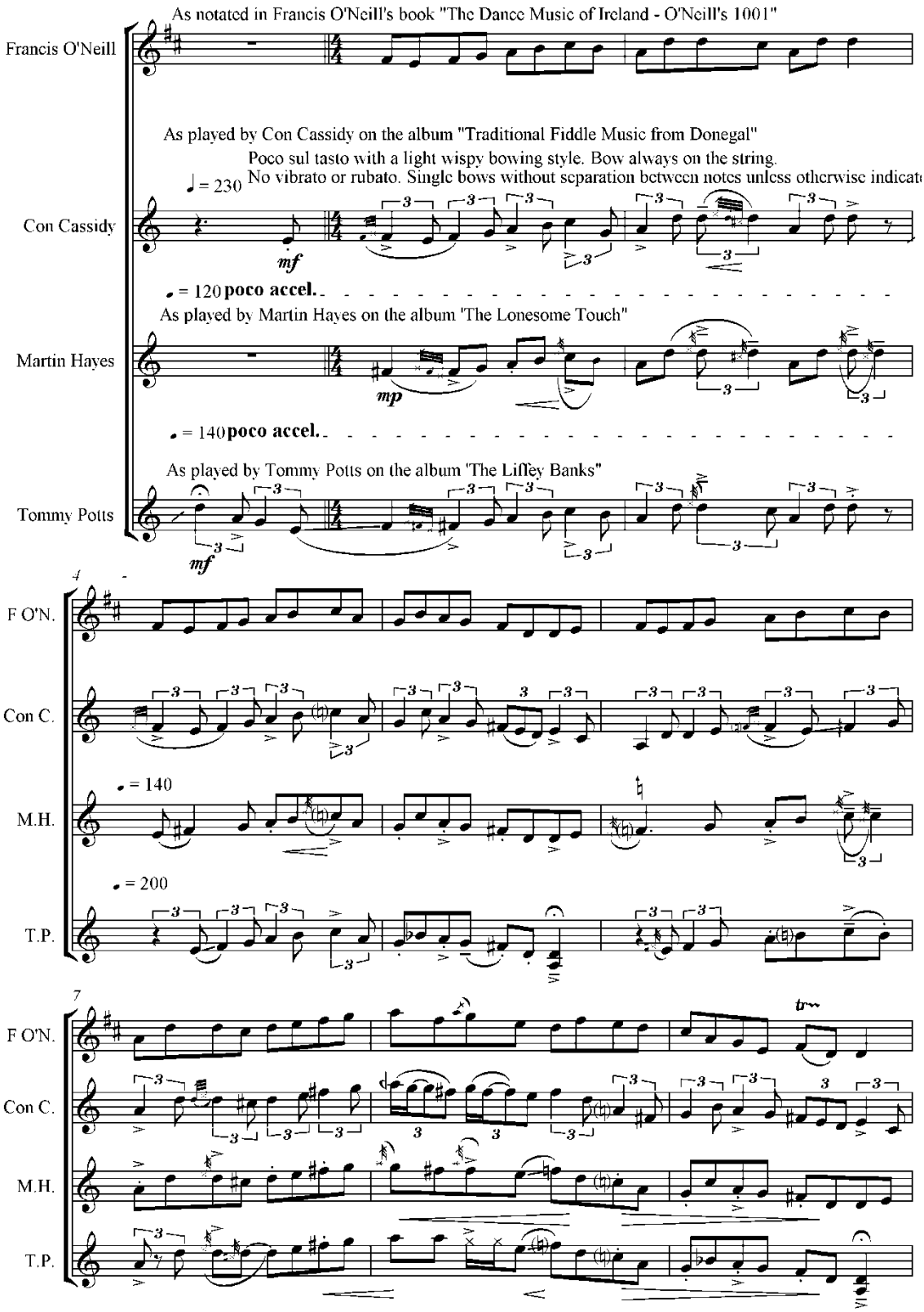
2.5.1 'My Love is in America' – Three Interpretations of a Reel in Detailed Notation

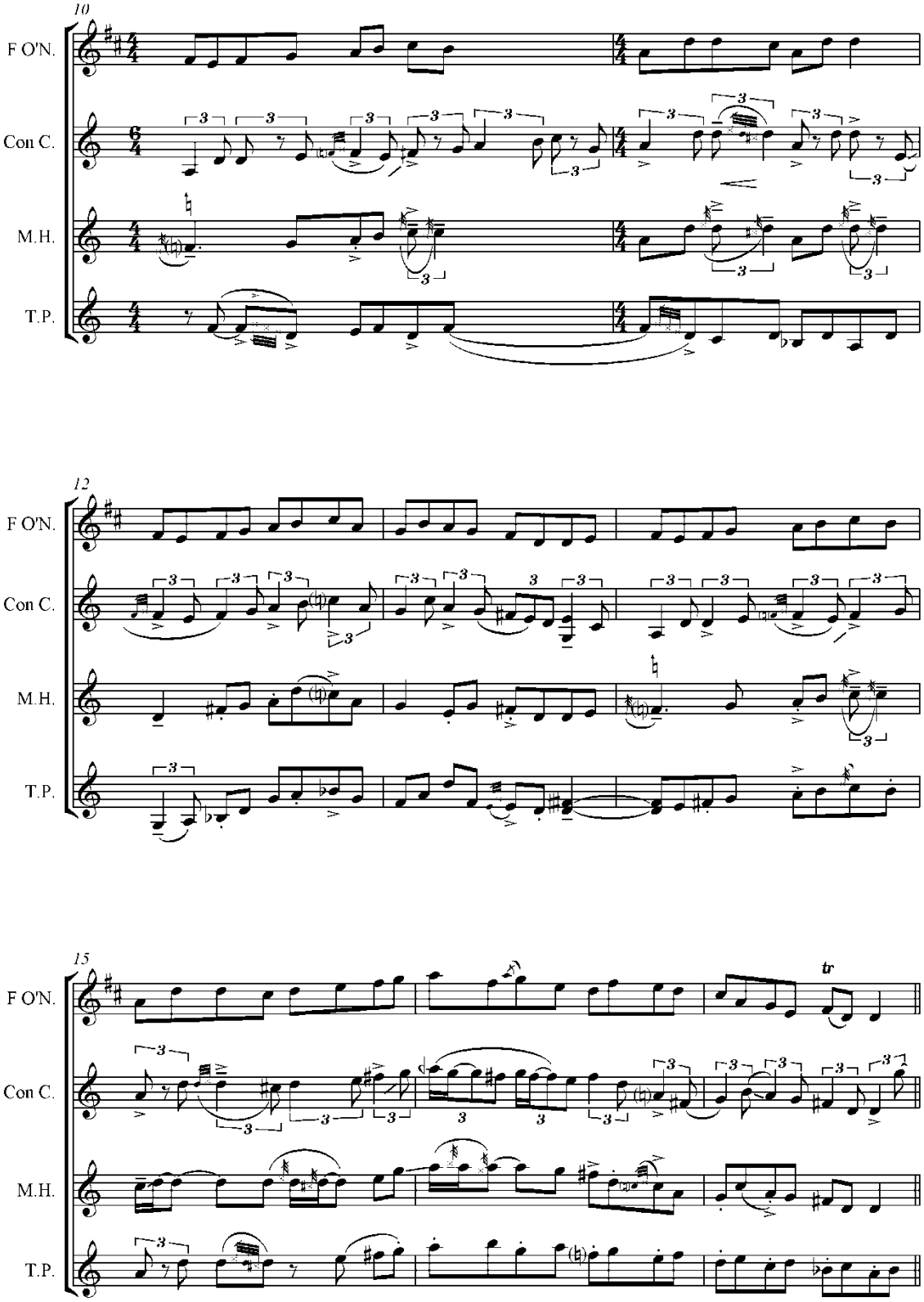
I have utilised my notational approach to create some detailed transcriptions of the playing of some esteemed traditional musicians. The first such examples are three versions of the *reel* 'My Love is in America' as respectively recorded by Con Cassidy (Audio CD Track 3), Martin Hayes (Audio CD Track 4) and Tommy Potts (Audio CD Track 5). Each transcription is of the first two repetitions of the tune found on these recordings. I have placed these transcriptions together in systematic notation to allow easy comparison between corresponding sections in the tune. In addition I provide the skeleton notation for the tune, as found in O'Neill (1907:107), in order to clearly demonstrate how traditional musicians add to and deviate from the skeleton. It must be stressed that any skeleton notation is simply not 'the tune'. The transcriptions demonstrate how the elements of hidden complexity (listed in Chapter 2.1.1.) are utilised by traditional musicians.

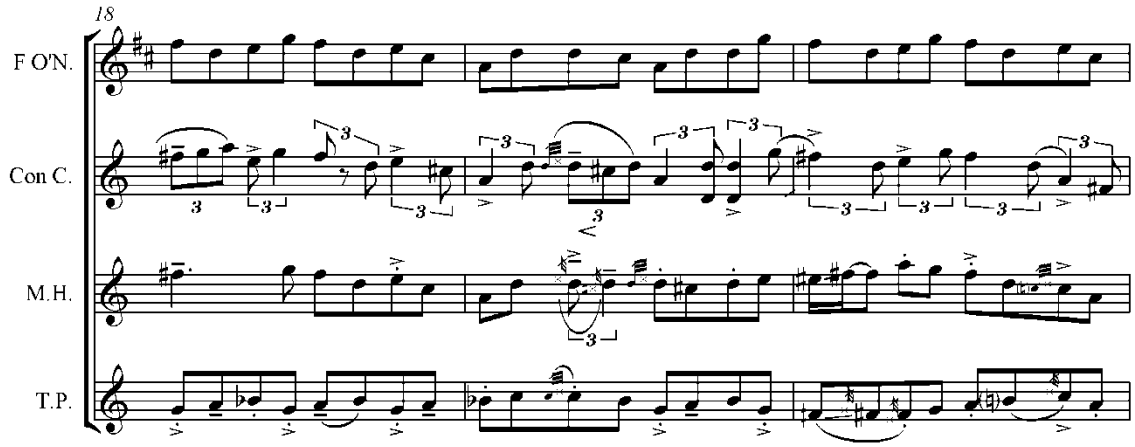
My method of analysing the elements separately in Chapter 3 is purely for theoretical reasons and so I present these notated examples first to give the reader a strong sense of how all these elements combine to create the whole entity which traditional musicians call 'the tune'. Even more detail could be added regarding slight *rubato* and dynamic changes; however the detail I have gone into should be sufficient for the purpose of demonstrating how much information is missing from skeleton notations. A brief discussion of the differences between the interpretations, with respect to these elements of the tune, follows these transcriptions.

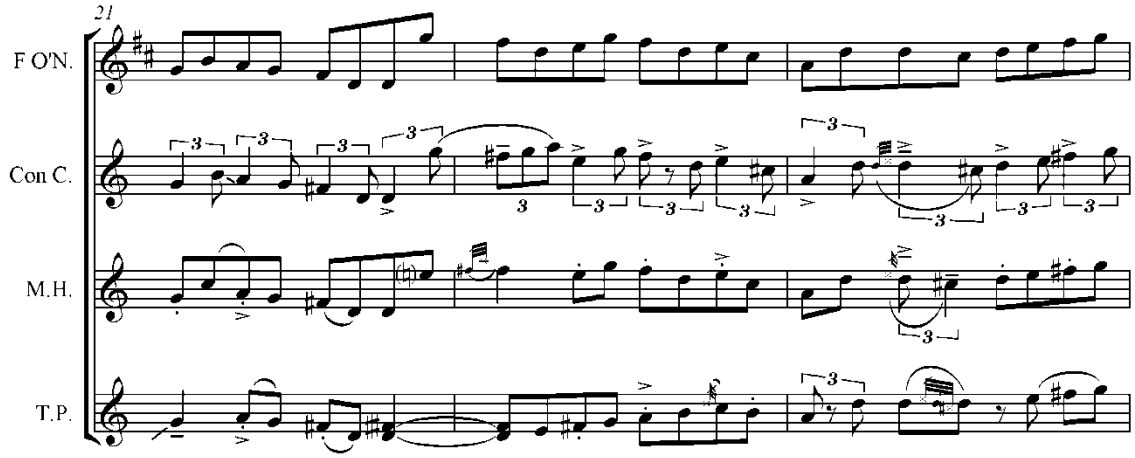
[33] Bartók's symbol for a snap *pizzicato* is a prominent example of this.

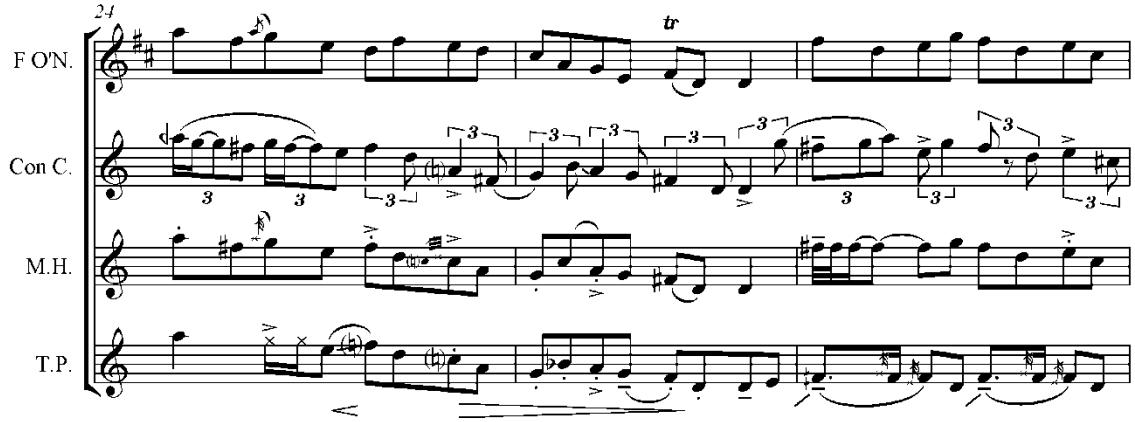
My Love is in America

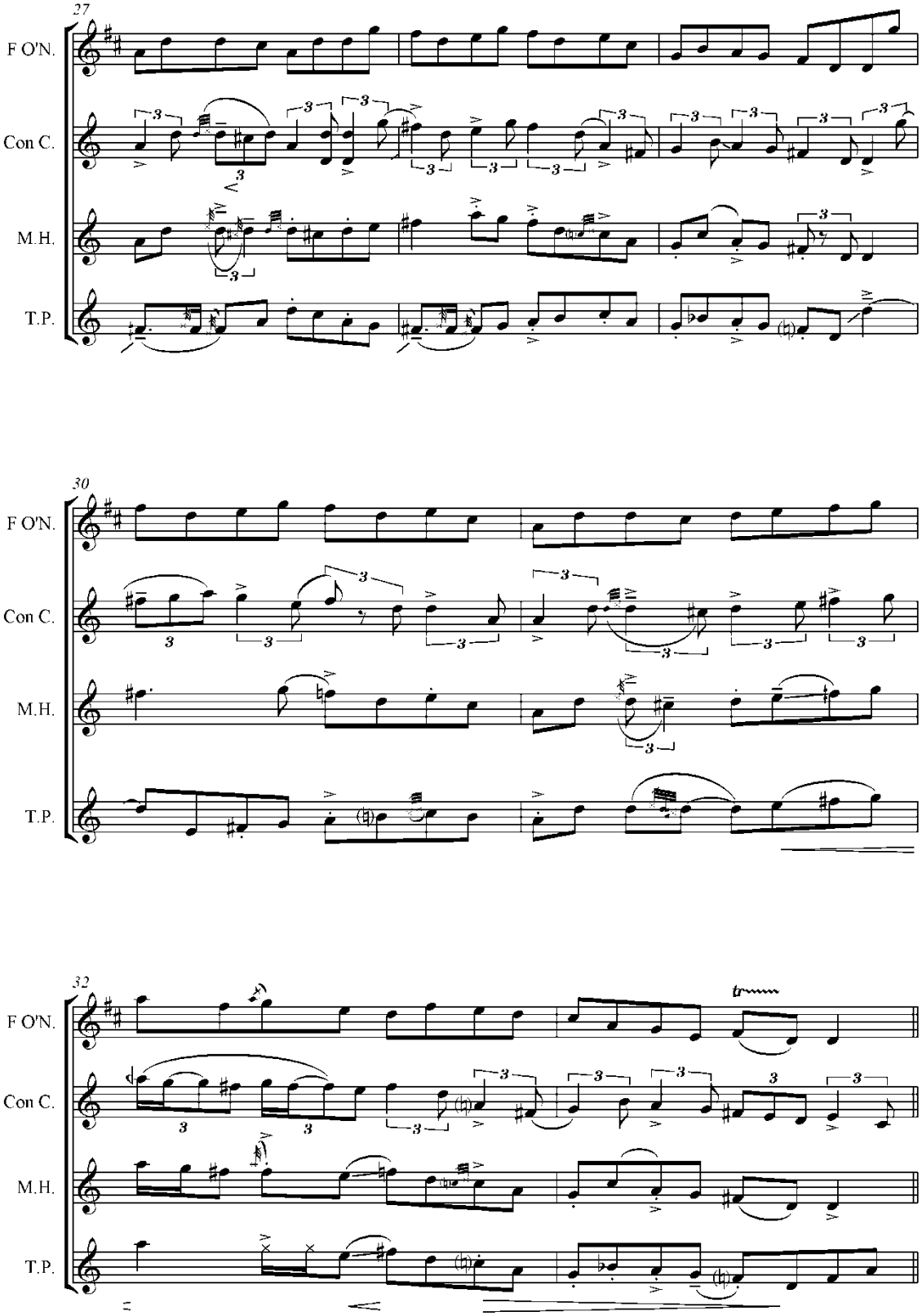


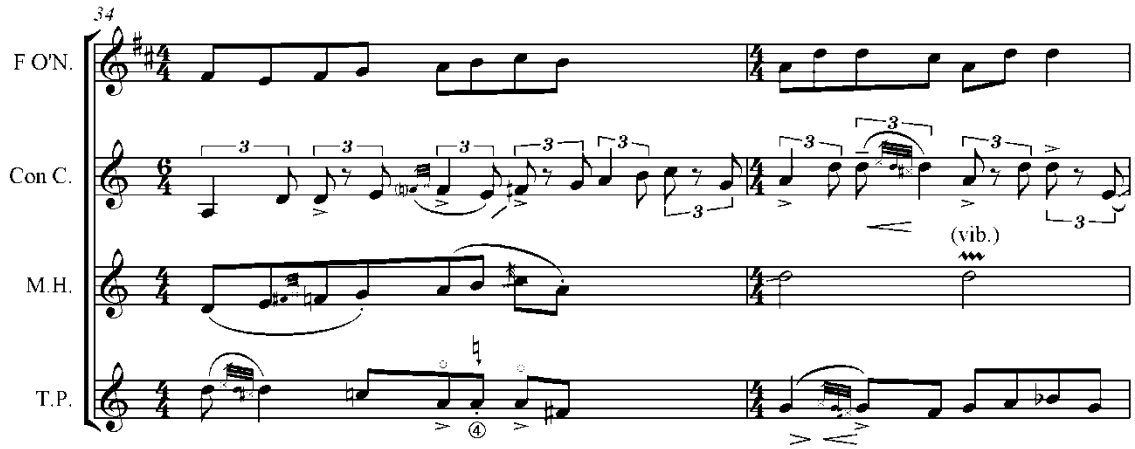

10
F O'N.
Con C.
M.H.
T.P.
12
F O'N.
Con C.
M.H.
T.P.
15
F O'N.
Con C.
M.H.
T.P.
tr

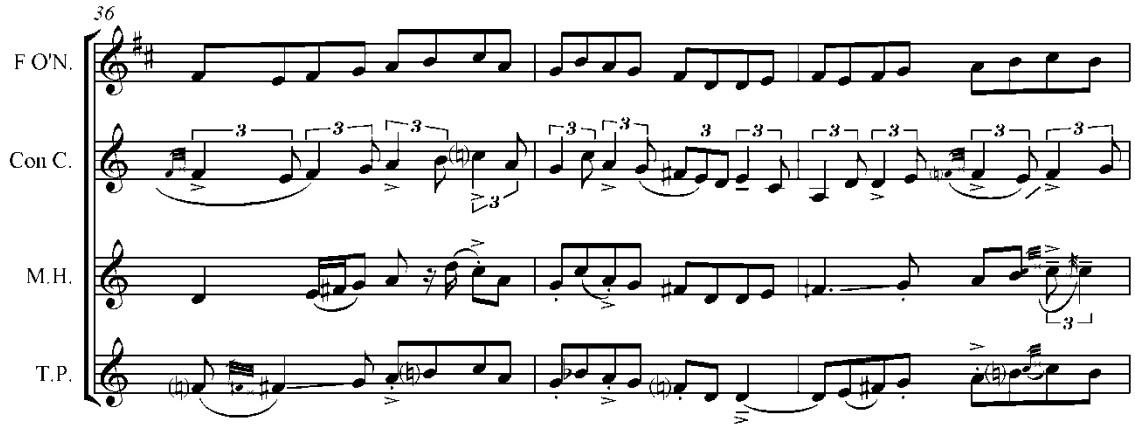

18
F O'N.
Con C.
M.H.
T.P.

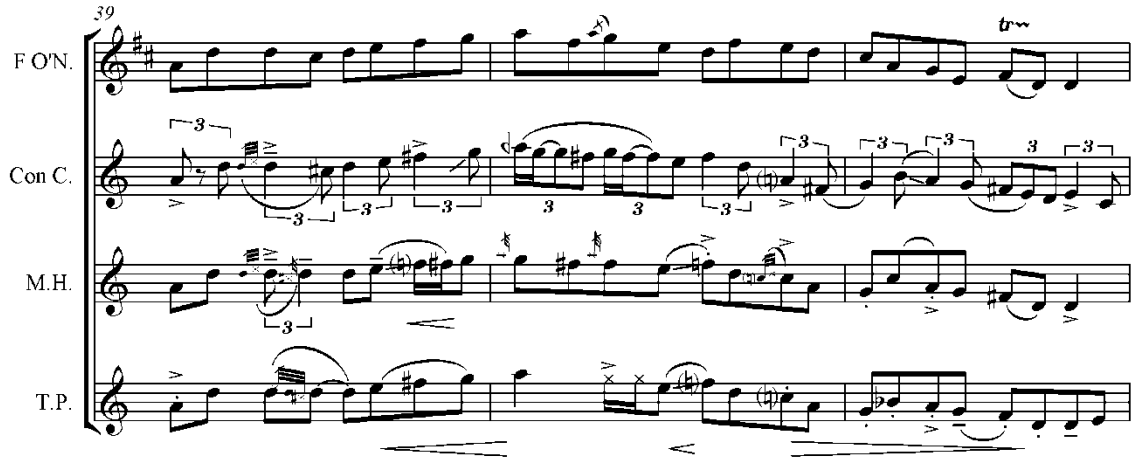

21
F O'N.
Con C.
M.H.
T.P.

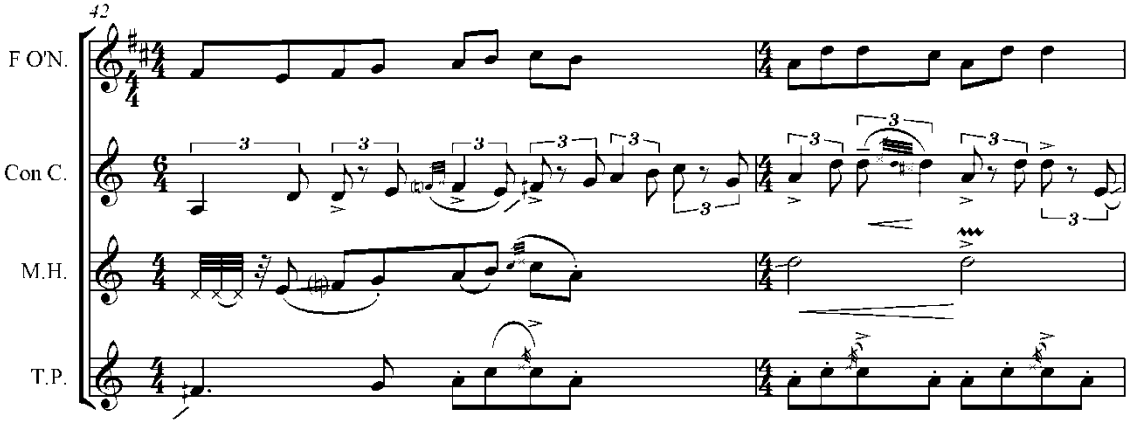

24
F O'N.
Con C.
M.H.
T.P.

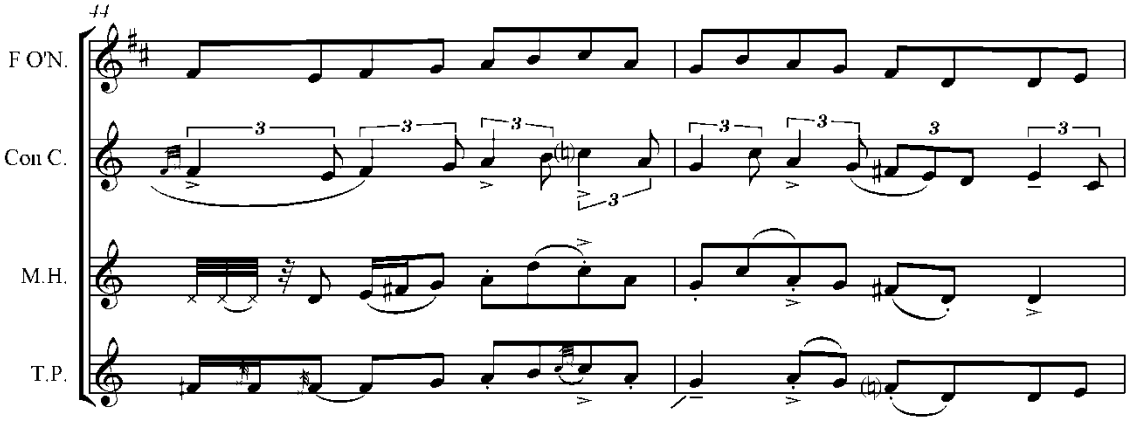

27
F O'N.
Con C.
M.H.
T.P.
30
F O'N.
Con C.
M.H.
T.P.
32
F O'N.
Con C.
M.H.
T.P.

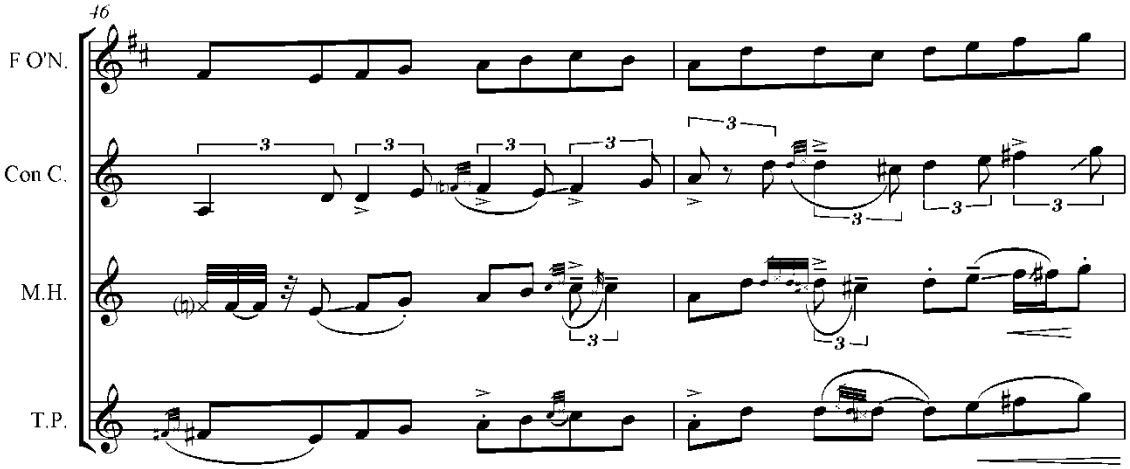

34
F O'N.
Con C.
M.H.
T.P.
(vib.)

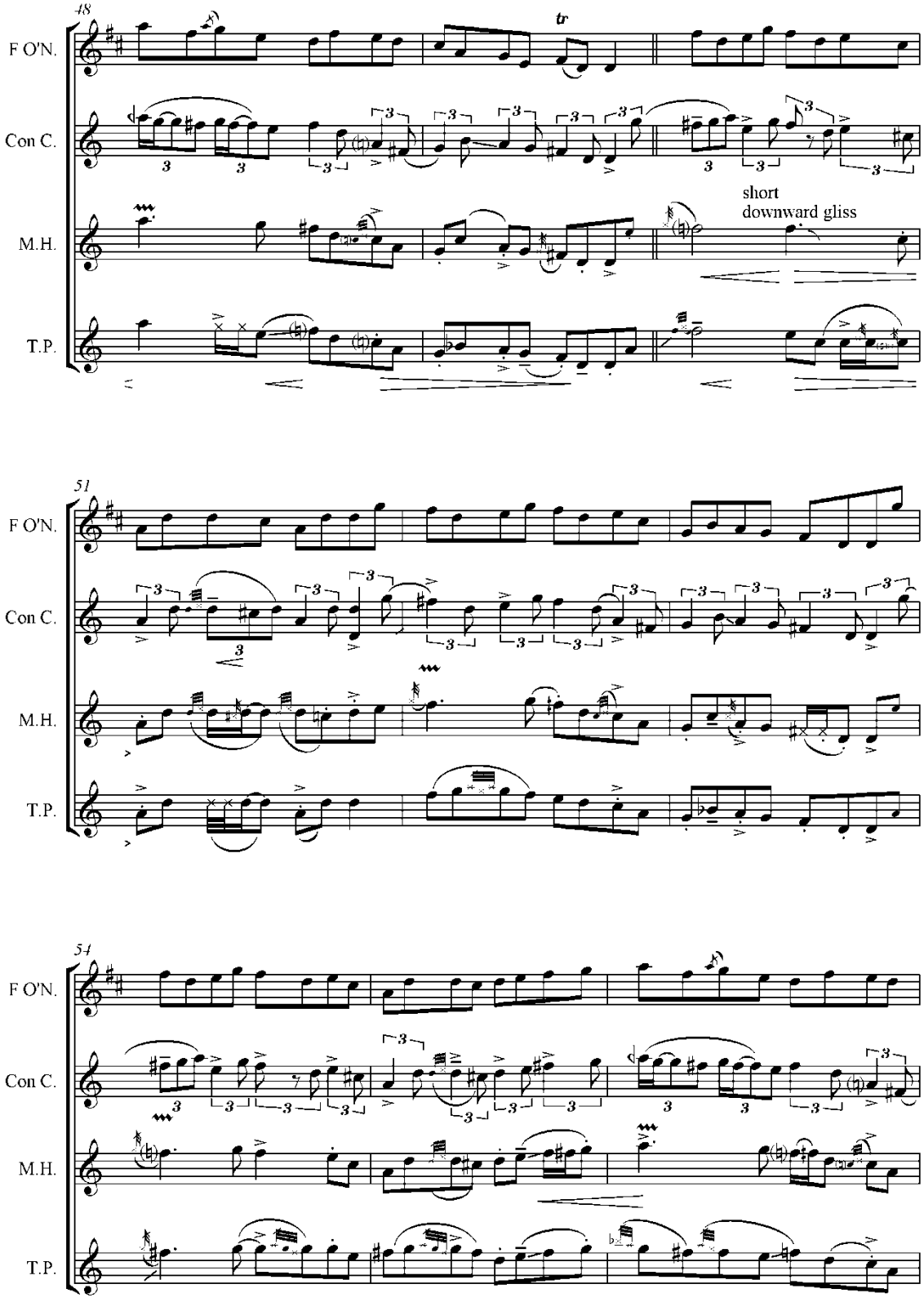

36
F O'N.
Con C.
M.H.
T.P.


39
F O'N.
Con C.
M.H.
T.P.
tr


42
F O'N.
Con C.
M.H.
T.P.


44
F O'N.
Con C.
M.H.
T.P.


46
F O'N.
Con C.
M.H.
T.P.


48
F O'N.
Con C.
M.H.
T.P.
tr
short
downward gliss
51
F O'N.
Con C.
M.H.
T.P.
54
F O'N.
Con C.
M.H.
T.P.

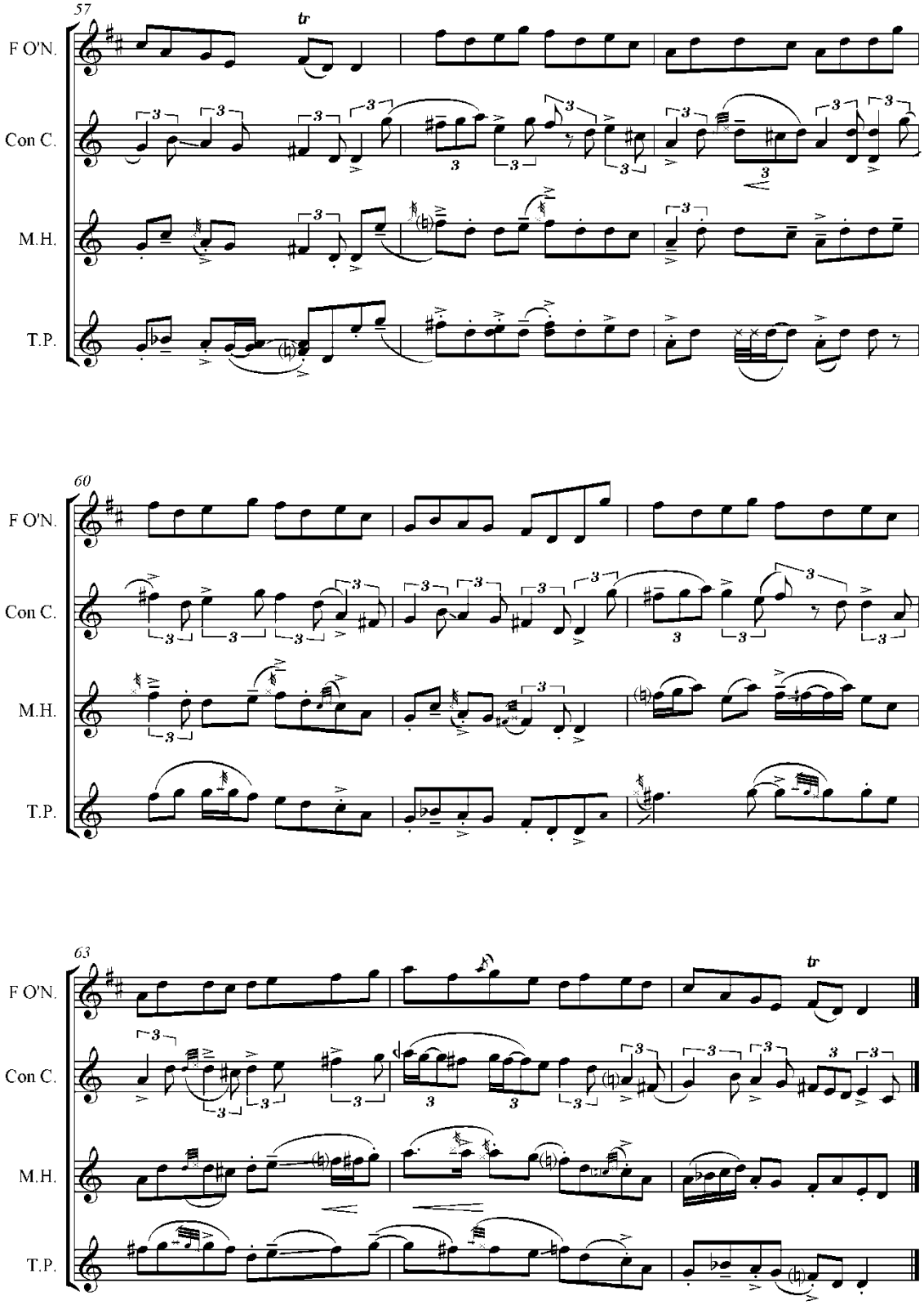


Figure 2.50 Four versions of 'My Love is in America'.

There are a number of important elements to note in these differing interpretations of the tune.

2.5.1.1 Tempo

The first obvious difference concerns the tempi the musicians choose. This is a characteristic of individual and regional styles. Con Cassidy (1909-1994) is from Donegal; Martin Hayes is from Clare. There is a general opinion that Donegal music is performed faster than Clare music, this is a gross oversimplification of the complexities of different music styles found in these counties, but these transcriptions give credence to this perception due to the fact that the general tempo Cassidy plays the tune at is 230 crotchets per minute, whereas Hayes settles on a tempo of 140 crotchets per minute, following an *accelerando* through the first two bars. Potts begins with a similar *accelerando* before settling on a tempo of 200 crotchets per minute. This demonstrates how traditional tune forms lend themselves to being performed at vastly different tempi.[34]

2.5.1.2 Metre

Reels are most commonly notated in 4/4 and I have retained this standard in these transcriptions. The main reason for this is to highlight Con Cassidy's unusual use of extra beats which create 6/4 bars at bars 10, 34 and 42. I call this approach 'extra beat insertion' and this is discussed further in Chapter 3.3.3. Cassidy's use of extra beat insertion in 'My Love is in America' illustrates the little documented feature of traditional Irish music, that it cannot always be defined in basic time signatures like 4/4 or 6/8. Even notating these transcriptions in 4/4 disguises the fact that different players phrase *reels* in completely different ways, so there might be phrasing in 8/8 (3+3+2) or less regular patterning. This is discussed further in Chapter 3.3.2.

[34] Tempo in traditional music is discussed further in Chapter 3.3.5.

2.5.1.3 Flexible notes

Some notes in these transcriptions are treated with flexibility. This is particularly true of the note *F*. In O'Neill's notation *F-sharps* are used all the time. All three transcriptions contain instances where the musicians play *F-naturals* or microtonal variations of the note *F*. O'Neill also notates *C-sharp* all the time whereas the other musicians use *C-natural* more commonly. This note flexibility is a very strong feature of traditional music. It is discussed further in Chapter 3.4.2.

2.5.1.4 Ornamentation

O'Neill's notation contains very little ornamentation. The three transcriptions contain lots of different ornaments. In the Potts transcription there are many different forms of *rolls* and other such ornamentations. Ornamentation was discussed in more detail in Chapter 2.4. These transcriptions give an insight into how such ornaments can be so varied and how they can be used by traditional musicians.

2.5.1.5 Rhythm and articulation

O'Neill's notation contains very little articulation markings other than a few slurs. There are many accent, *staccato, tenuto*, slur and other such markings in my transcriptions. These articulations are essential to give the music its rhythmic vitality. The swing of the music is further lost by the constant quaver movement in O'Neill's notation. This is just a convenient way of notating the skeleton. There is a lot of variation to this quaver movement in the transcriptions. Cassidy's version is dominated by tuplet movement and this reflects the hard swing of his style. The swing in Hayes' and Potts' versions is more subtle; it is created more through articulation than tuplet movement. Articulation and swing are discussed further in Chapter 3.3.1.

2.5.1.6 Melodic variation

Subtle melodic variation is an essential characteristic of traditional music that skeleton notation does not reflect. In the transcriptions, the same phrase is rarely played exactly the same way by any player. The extent of this variation varies considerably. Some players, like Con Cassidy, use very subtle variations so that only deep listening and familiarity with the tune reveals the variations. Potts goes to extremes in his melodic variations; bars 18-22 demonstrate a complete departure from the standard melody, yet he returns to the main melody through ingenious melodic variations. Hayes' approach is, by his own admission, influenced by Potts[35], yet it is rarely as melodically complex. It is notable for having a lot of held notes; the two minims at bar 35 and 43 are unusual within the context of the performing standards for *reels*. The use of such minims reflects the spare aspect of Hayes' style. Melodic variation is discussed in more detail in Chapter 3.4.2.

2.5.1.7 Dynamics

The use of dynamics in traditional music differs significantly to classical music. Sudden changes from soft to loud do not generally happen in traditional music. This is primarily because of the aesthetic differences between the traditions. Another reason for this is that it is technically impossible to play very quietly on the *uilleann* pipes or to suddenly vary a note from very loud to moderately quiet. Since the piping repertoire has such a strong influence on the tradition, I believe players of other instruments often follow the dynamic contours of pipers.[36]

The harpist Máire Ni Chathasaigh considers this dynamic limitation as being in keeping with an essential aspect of the Irish aesthetic:

> My central belief about Irish music is connected to my belief about Irish society…Irish music has always been a miniature art. If you think of the music of Beethoven as a landscape painting: his music is painted in broad strokes so that you have long crescendos

[35] Hayes often acknowledges Potts as an influence, as he did when I interviewed him.
[36] Some players, such as the Donegal fiddler Danny Meehan, do utilise a wider dynamic range to allow for *pianissimo* and *forte* contrasts, however this approach is not generally practiced in the tradition.

> and diminuendos. In comparison, Irish music is like a miniature painting. There are huge changes of dynamics within one bar of music. Some people think there are no dynamics in Irish music. If you take a reel for example, it seems the same from beginning to end. In fact, there are enormous changes but they all happen on a tiny scale. The overall sound seems the same from start to finish, but it isn't. It changes all the time. A really, really good traditional musician will never play the same thing twice in the same way. There will always be a slight change. But it will be done in a very, very subtle way. Subtlety is completely central to the whole Irish aesthetic. For the Irish, artistry equals subtlety, basically. One of the descriptions, from the earliest times, of the art of the Irish poets states that, to them, art that conceals art is the greatest of all. It was true of the Irish poets in the eighth century; it was true of the harpers described by Giraldus Cambrensis, in the twelfth century.
>
> (Sullivan, Mairéad: "An Interview with Máire Ni Chathasaigh ." In *Celtic Women in Music – A Celebration of Beauty and Sovereignty*, by Mairéad Sullivan. Bloomington: Quarry Music Press, 1999).
> http://www.alternatemusicpress.com/features/maire_ni_chathasaigh.html (Accessed August 23, 2010).

The micro-dynamics of traditional Irish music are evident through close listening and computer-aided analysis. I have added only slight detail regarding dynamics into my transcriptions, including a general dynamic at the start of the transcriptions and the use of hairpins to indicate occasional points where subtle *crescendos* and *diminuendos* occur. It is possible to analyse the recordings in great detail regarding dynamics and to notate every subtle dynamic change using indications such as ***p. pp. mp, mf,*** etc. I have avoided this approach for logistical reasons.

Many of my compositions follow the Irish aesthetic regarding dynamics. It is often left to the performer to use a basic dynamic marking as a reference point from which to spontaneously vary the dynamics in subtle ways. I am more specific about dynamics in my works written exclusively for classical musicians.

2.5.1.8 Miscellaneous elements

The transcriptions reveal some other aspects of the hidden complexity of traditional music including timbre, harmony (double-stops), articulation and phrasing. These aspects are discussed in more detail in Chapter 3.

2.5.2 'Gol Na mBan San Ár' – The Notation of a Slow Air

*Slow air*s tend to be the most complex types of Irish traditional tunes in terms of notation. They can sometimes be felt to have a form of natural pulse, but there are certainly no set rhythmic patterns for the general genre of *slow air*s. Their inherent rhythmic freedom has meant there have been few attempts to accurately transcribe them in music notation. De Noraidh (1964) transcribed the singing of a number of *Sean-nós* singers. These transcriptions clearly display the free rhythmic nature of *slow air*s. The most notable aspect of the transcription of Pádraig Ó Ceallaigh's singing of 'Mairne Thaidhg Mhá Chárthaigh' is the use of metrical changes from 3/4 to 2/4.

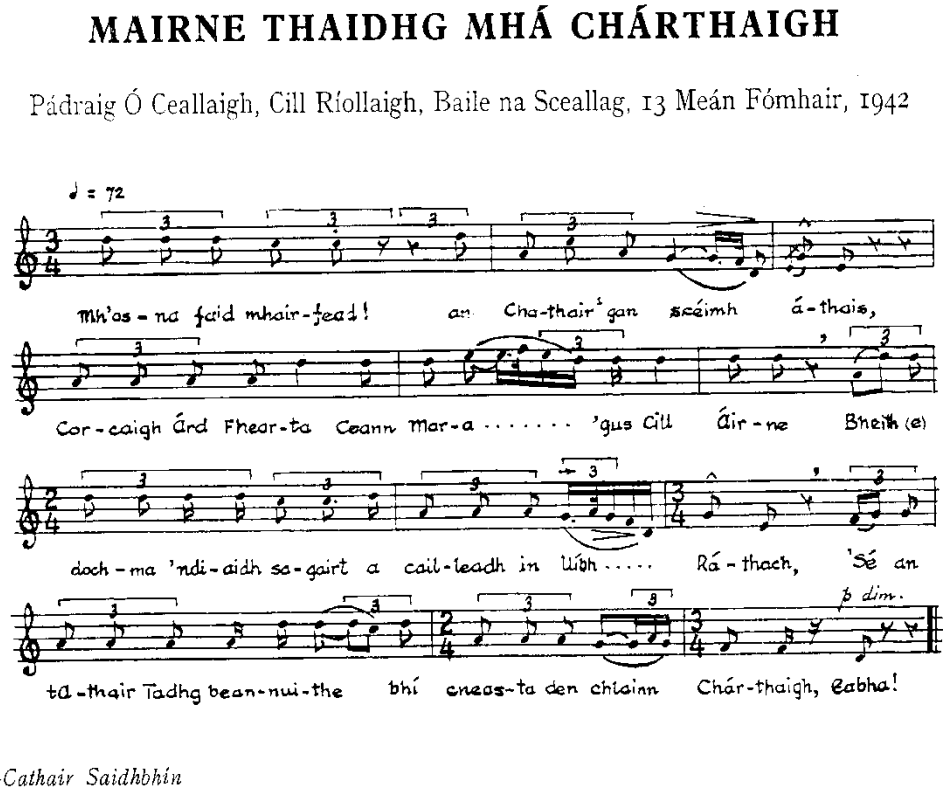
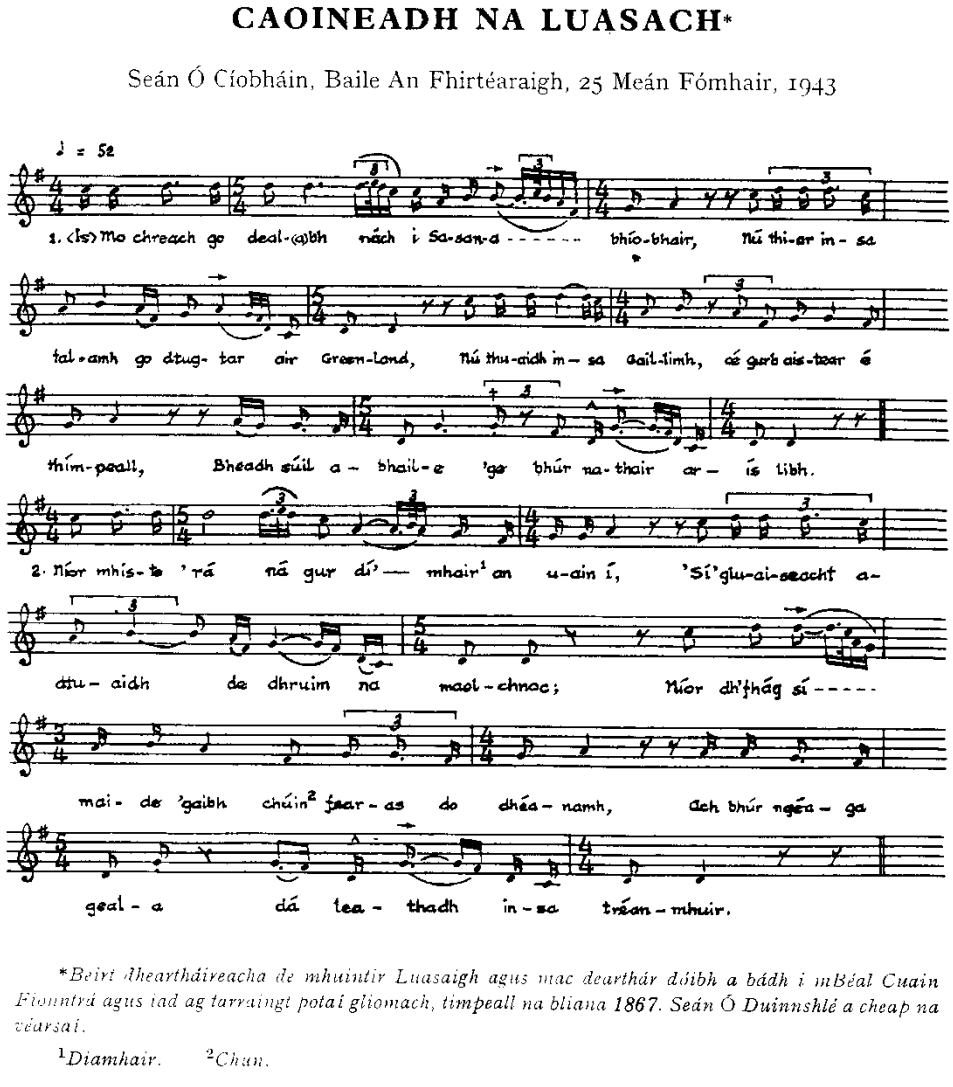


Figure 2.51 'Mairne Thaidhg Mhá Chárthaigh.' (De Noraidh, 1964:31).

In the transcription of Seán Ó Clobháin's singing of 'Caoineadh Na Luasach', De Noraidh used regular metre changes from 4/4 to 5/4 and detailed rhythmic notation to capture Ó Clobháin's phrasing.



CAOINEADH NA LUASACH*

Seán Ó Cíobháin, Baile An Fhirtéaraigh, 25 Meán Fómhair, 1943

♩ = 52

1. (Is) Mo chreach go deal-(a)bh nách i Sa-san-a - - - - - - bhío-bhair, Nú thi-ar in-sa

tal-amh go dtug-tar air Green-Land, Nú thu-aidh in-sa dail-limh, cé gurb ais-tear é

thím-peall, Bheadh súil a-bhail-e 'gar bhúr na-thair ar-ís libh.

2. Níor mhis-te 'rá nú gur dí'—mhair[1] an u-ain í, 'Sí'glu-ai-seacht a-

dtu-aidh de dhruim na mael-chnoc; Níor dh'fhág sí - - - - -

mai-de 'gaibh chúin[2] fear-as do dhéa-namh, Ach bhúr ngéa-ga

geal-a dá tea-thadh in-sa tréan-mhuir.

*Beirt dhearthaireacha de mhuintir Luasaigh agus mac dearthár dóibh a bádh i mBéal Cuain Fionntrá agus iad ag tarraingt potaí gliomach, timpeall na bliana 1867. Seán Ó Duinnshlé a cheap na véarsaí.

[1]Diamhair. [2]Chun.

Figure 2.52 'Caoineadh Na Luasach.' (*Ibid.*:37).

Such metrical changes are rarely acknowledged as a feature of traditional music. De Noraidh's innovative transcription method demonstrates that metrical changes occur regularly when *Sean-nós* singing is placed into metred notation.

Breathnach (1969) also used metrical changes when transcribing Micky (Cumbaw) O'Sullivan's recording of 'Gol na mban san ár' (1903).

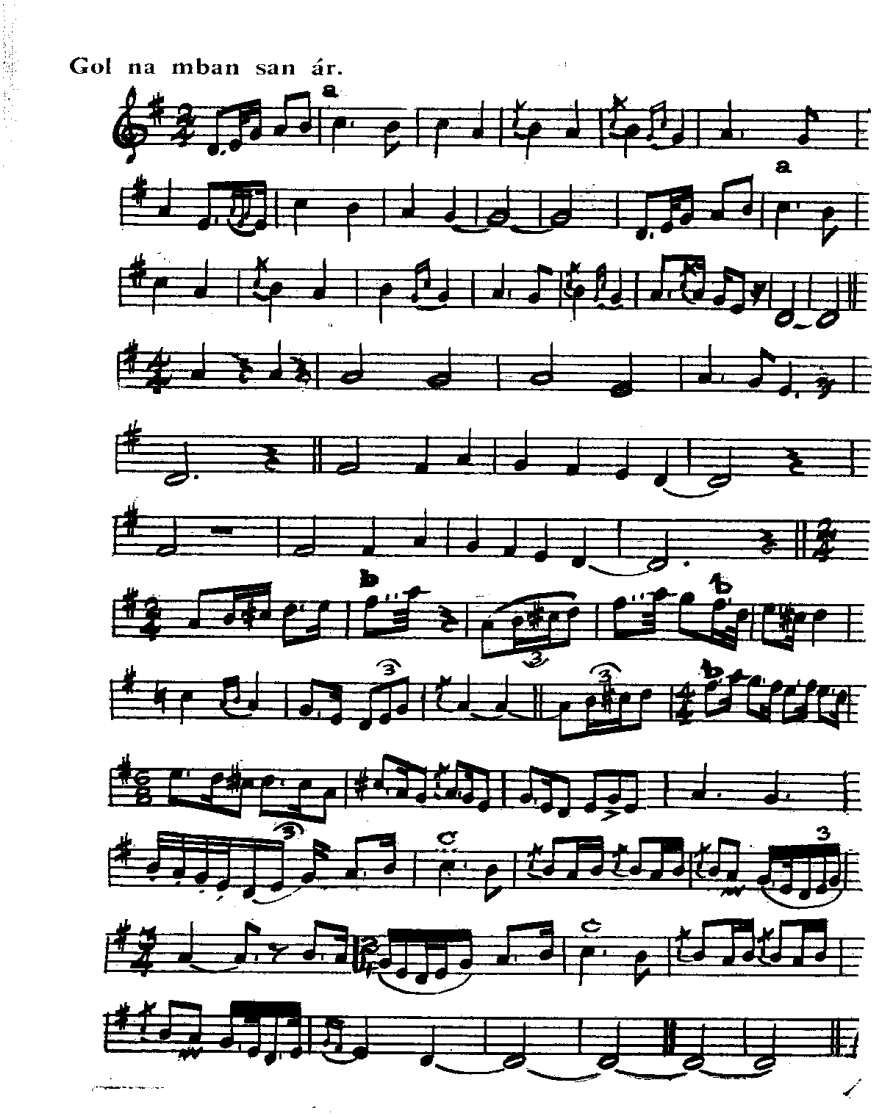
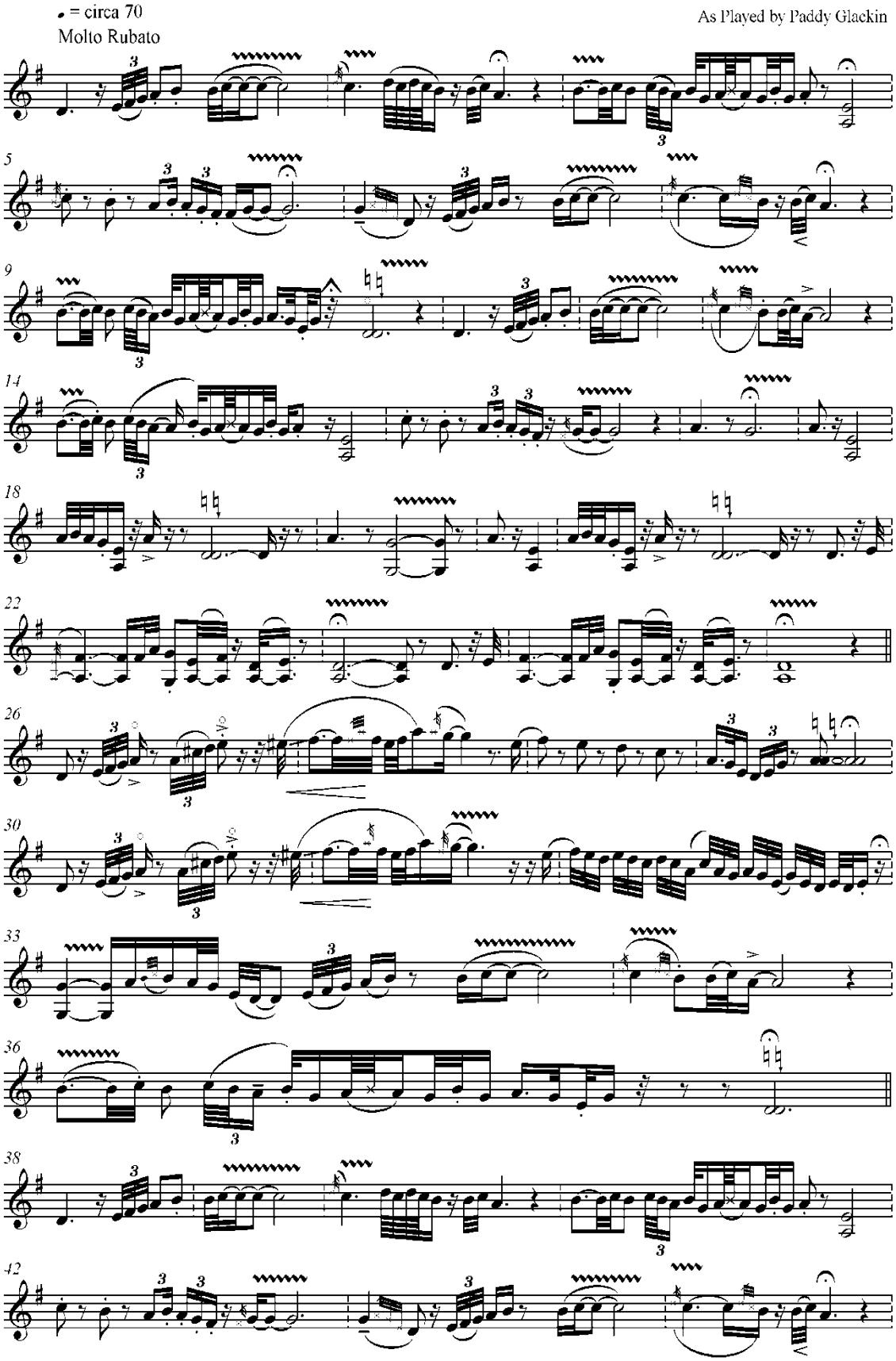


Figure 2.53 Breathnach's transcription of 'Gol na mban san ár.'(Breathnach, 1969:81).

This is one of the most detailed notations of a *slow air* I have encountered. Yet there is still much more detail that could be placed into such a transcription. It is almost impossible to accurately notate all the rhythmic nuances of the most complex airs but for the purposes of this study I have endeavoured to transcribe Paddy Glackin's recording of 'Gol na mban san ár' (2001) utilising my notational approach.[37] (Audio CD Track 6).

[37] Dynamics markings, other than hairpins, are not included for logistical reasons.

Gol na mBan San Ár
(The Crying of The Women in The Slaughter)



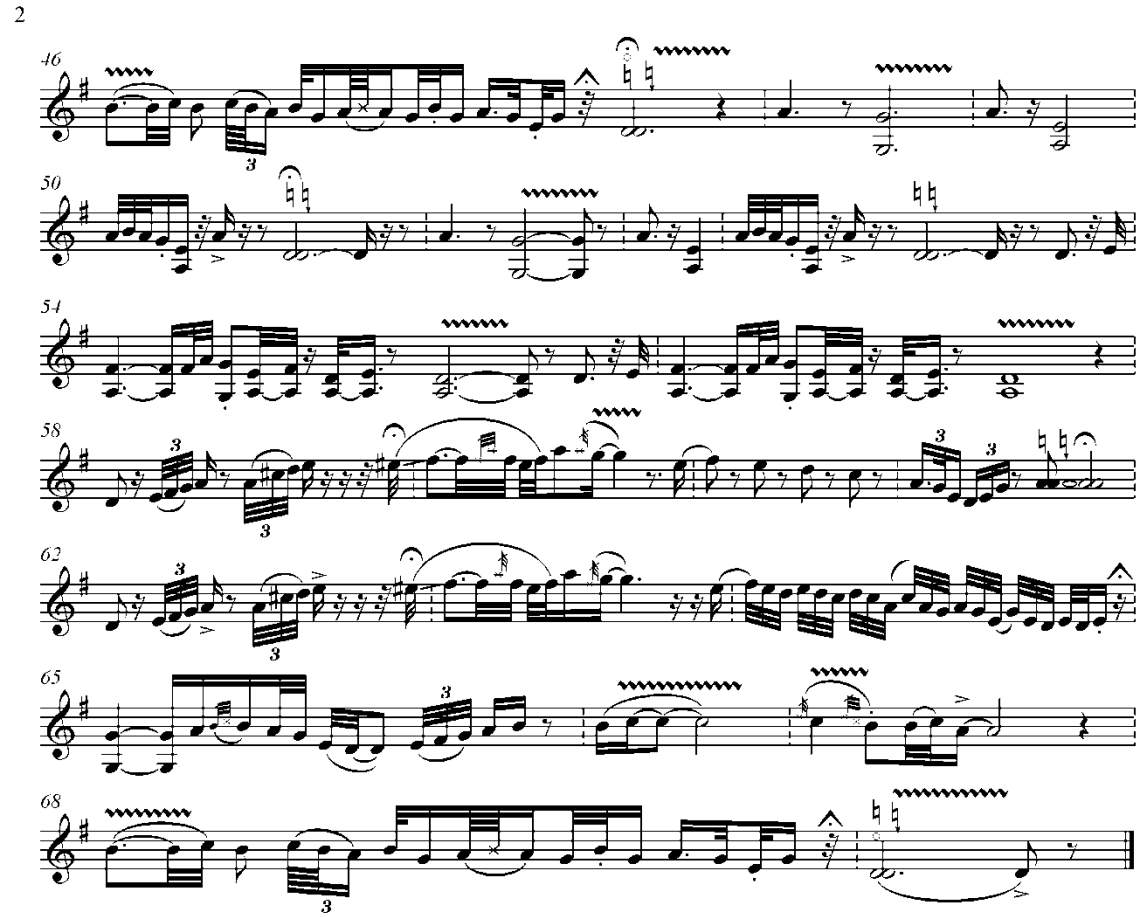


Figure 2.54 Paddy Glackin's version of 'Gol na mban san ár', transcribed by Dave Flynn.

This transcription is of the first two rounds of the air. I have dispensed with time signatures and normal barlines. Instead I use dotted barlines to indicate where phrases begin and end. This is something Glackin himself approves of, as evidenced by this excerpt from my discussions with him.

> D.F. As part of my PhD I have done a transcription of 'Gol na mban san ár', and I had to take out time signatures, I just made it kind of free.
>
> P.G. Well that's the best thing to do, did you take the bars out?
>
> D.F. Yeah, I have put little dotted things, more into phrases. There's only so much you can do.
>
> P.G. I think you're right because you'll only torture yourself, you can't get a time signature for them.
>
> (Glackin interview).

Some airs generally stay in one metre with occasional odd phrases in other metres when they are notated. An air such as 'Gol na mban san ár' tends to be played so freely that the concept of metre is irrelevant to it. Individual players will dwell on certain notes

more than others, thus giving the airs even more rhythmic freedom. Such is the case in Glackin's playing of 'Gol na mban san ár'.

I have also tried to detail all the ornamentation and rhythmic nuances of Glackin's playing. Whilst a full sense of the performance can only be obtained by listening to the recording, my transcription presents a clearer image of the complexity of traditional airs in notation. Undertaking this transcription was also a very useful exercise for me to understand how I might translate various aspects of traditional music into written notation for the purposes of my own compositions.

3 INFLUENTIAL ASPECTS OF TRADITIONAL IRISH MUSIC

The compositions I present with this dissertation are all influenced by various aspects of traditional Irish music. These aspects are related to instrumental characteristics, pitch and rhythm. A discussion of these elements and how they have influenced previous works of mine and the works of other composers follows. In Chapter 4 I detail how these elements have influenced the works presented with this dissertation.

3.1 Instrumental Characteristics

Traditional Irish music is played on many different types of instruments. I have witnessed traditional Irish music been performed very competently on such exotic instruments as the Laotian *khaen* and the Bulgarian *gaida*. There are a number of characteristic instruments to the tradition. These instruments have been well described in publications including Vallely (1999)[1]. In order not to duplicate such resources I describe these instruments from a compositional point of view, to aid understanding of how they influenced my compositions. These instruments, their technicalities and musicians who play them have profoundly influenced my research and compositional development. Some instruments common to the tradition, such as the accordion and concertina are omitted because they have not been influential on my compositions.

[1] Vallely, Fintan: *The companion to Irish traditional music, Volume 1999, Part 2*. Cork: Cork University Press, 1999.

3.1.1 The Holy Trinity

The standard repertory of traditional instrumental music and many of the characteristic sounds and techniques of the tradition have mostly evolved from the playing of the *uilleann* pipes, fiddle and Irish flute. So ubiquitous are these instruments to the tradition that I have heard them described as 'The Holy Trinity' of traditional Irish music.

3.1.1.1 Uilleann pipes

The *uilleann* pipes are unique to Ireland. They differ from most bagpipes found around the world by virtue of the fact that the air which flows through the instrument is produced not by blowing from the mouth, but by the exertion of pressure on the bellows by the elbow.[2]

The technicalities of the *uilleann* pipes have been covered extensively in publications including the first major tutor for the instrument by O'Farrell (1801) up to the CD-ROM *Uilleann Pipes Tutor* created by Seán Óg Potts (2005). Breathnach (1980) summarised these technicalities well:

> The distinctively Irish type of pipe emerged about the beginning of the 18th century. Its distinguishing features are:
> (i) the bag filled by a bellows, not from a blow pipe;
> (ii) a chanter or melody pipe with a range of two octaves as compared with a range of nine notes on the older pipes;
> (iii) the addition of regulators or closed chanters which permit an accompaniment to the melody.
>
> (Breathnach, Breandán: *Pipes and Piping.* Dublin: The National Museum of Ireland, 1980).

The elbow driven pressure of the bellows sends the air into the bag which permits the piper to create musical sound from three parts of the instrument. The placement and release of fingers on the chanter usually produces melodic material, the placement and release of the wrist[3] or fingers on the regulators produces simple harmonic accompaniment and switches produce up to three octaves of a sustained drone on the pitch the pipes are tuned to.

[2] Any uncited information pertaining to traditional music instruments comes through my experience of performing with and speaking with players of these instruments.
[3] It is actually the heel of the hand that is used on the regulators; however pipers usually say it is their wrist, so I have maintained this standard in this dissertation.

The most common pitch the pipes are tuned to is *D*. Pipes tuned in *D* are referred to as 'concert pitch' pipes. The 'concert pitch' pipes so prevalent today are a more recent invention than pipes pitched to lower notes. My notated versions of the range of the drones, chanter and regulator follow. These notations only apply to pipes pitched in *D*. Similar principles apply to *uilleann* pipes pitched to other notes. Since the pipes are usually tuned to just intonation many of these notes will in practice sound flatter or sharper than their equal tempered equivalents.[4]

Most sets of pipes have the ability to sound three octaves of drones. These can be sounded individually or together, as is the more usual practice.

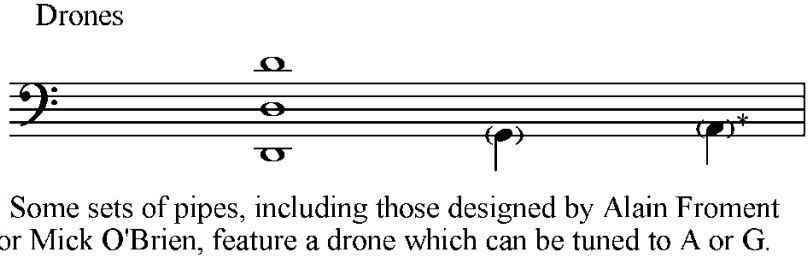


Figure 3.1 Uilleann Pipes Drone Pitches.

On the chanter most competent pipers can sound notes spanning a range of an octave and a sixth, from D^1 to B^2. This is the usual range of traditional piping tunes. More accomplished pipers can reach higher notes.

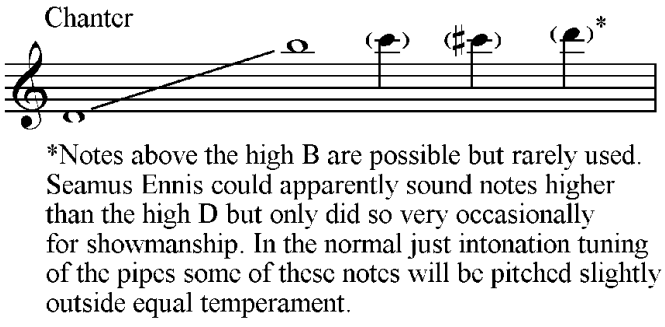


Figure 3.2 Uilleann Pipes Chanter Range.

The pipes are generally not a chromatic instrument; therefore some notes are more common and more easily obtainable through regular fingerings.

[4] Detailed notation systems for just intonation have been developed, including the system of Sabat and Von Schweinitz (2004), however I am not using such complex systems here for ease of reading.

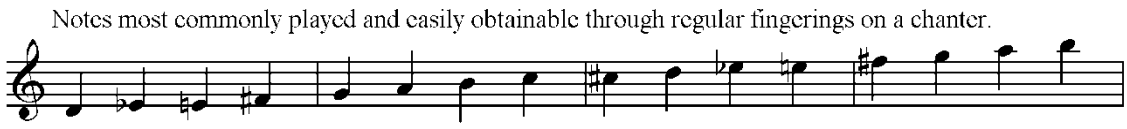


Figure 3.3 The most commonly used and easily obtainable chanter notes. [5]

To obtain the other notes pipers must either use the difficult technique of half-holing whereby fingers only half cover the holes to produce chromatic notes, or they must have special keys attached to the chanter, much like the keys added to the flute. Pipes come in four main designs in relation to keys; some have none at all. Most pipes have a *C* natural key which allows for easy sounding of the notes C^2 and C^3. The high C^3 cannot be obtained through half holing or alternative fingerings, so the *C-natural* key is necessary to produce this note. The next most common key is an *F-natural* key. There are fully keyed chromatic chanters, indeed Mick O'Brien mentioned to me that all his sets of pipes are fully keyed. Even with all the keys half holing is more usually used for the notes *F* and *C-natural*.

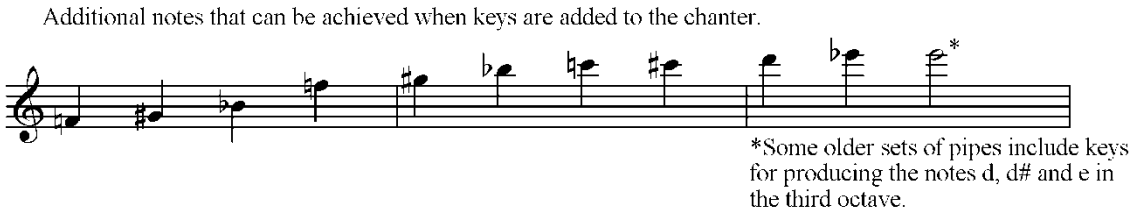


Figure 3.4 Other chanter notes obtainable with keys added.

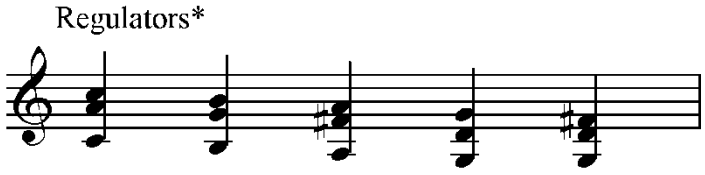
The just intonation nature of the instrument means that notes such as *G-sharp* and *B-flat* are considerably 'out of tune' with their equal tempered equivalents. This is a fact I and indeed any composer needs to take into account when composing for the instrument.

The pipes are essentially a reed instrument; the closest sounding standard orchestral instrument to the pipes' chanter is perhaps the oboe. Both instruments share similar registral qualities. The lower notes have a strong, rich tone which gradually brightens and becomes shriller at the highest end of the range.

[5] The note *E-flat* is easily obtainable on the pipes but rarely used, because it is rarely used in traditional music in general.

The pipes have one basic dynamic which may be roughly described as *mezzo forte* (moderately loud). Some sets of pipes are considerably louder than others and flat pitched pipes can be quite mellow. The volume of the instrument tends to increase up through the two octaves. One exception is that the high *D* has quite a thin sound whereas the low *Hard D* is possibly the loudest note on the instrument. There is only so much a piper can do to control dynamics. Further dynamic effects can be achieved by lifting the chanter from the knee, thereby opening the sound. Some special effects, including *pops*, are achieved by lifting the chanter off the knee. This produces a very distinct dynamic change.

The regulators produce sustainable notes, free from *vibrato*, which are usually sounded in isolation through the placement of fingers, or as chords through the placement of the wrist.



* These five chords constitute all the possible notes on the regulators on a set of D pipes. They can be played as full chords with the wrist or in simpler or more complex combinations by use of the fingers. The just intonation characteristics of the chanter applies to the regulators also.

Figure 3.5 Regulator Wrist Chords.

Many other chords can be produced by freeing one of the hands up to play the regulators as if they are a keyboard.[6] In my *Five Études for Uilleann pipes* (2009) I have explored some of the possibilities available through using this technique.[7]

Uilleann pipers often use a form of relatively wide *vibrato*, particularly in the playing of *slow air*s. This *vibrato* is produced by holding a note and then quickly

[6] A table of all these possible chords is presented in Appendix II.
[7] More details on these pieces are found in Chapter 4.6.

depressing and releasing the finger over a hole that does not cause an obvious change in pitch. What actually happens is that pressing the finger at this point creates a subtle microtonal change and so repeatedly pressing and releasing the finger at this point gives an impression of a *vibrato* with a slightly wavering pitch. This technique is often used by Irish flautists also. Skilled performers often vary the speed of this *vibrato* and use alternative fingerings for expressive nuance. There are many other characteristic piping sounds and techniques, which I discussed in Chapter 2.3.

3.1.1.2 Fiddle

> If a classical violinist was to take up a fiddle and play it and then a trad fiddler picked it up and play it, the same fiddle, the sound would be completely different.
>
> Charlie Lennon[8]

> The tone of a classical violin, what you strive for in terms of being good is so alien to a traditional fiddler and I don't like to hear a very polished sound in a traditional fiddle.
>
> Claire Keville[9]

> If you listen to the way Dennis Murphy brings a tone out of a fiddle, it's not a classical tone, but it's a tone and it's a tone that's ancient.
>
> Paddy Glackin[10]

The question 'What's the difference between a fiddle and a violin?' is one of the most common questions asked of Irish fiddlers. Those who ask the question do not realise that 'fiddle' is just another term for violin. It is common for classical violinists to refer to their instrument as a fiddle. When Irish language speakers talk about the instrument it is just as common for them to use the Irish word for violin '*veidhlín*' as the Irish word for fiddle '*fidíl*'. In his biography, Martin Hayes refers to 'his chosen instrument – the violin.'[11]

[8] Lennon interview.
[9] Keville interview.
[10] Glackin interview.
[11] *Martin Hayes' Official Website.* http://www.martinhayes.com/musicians.htm (accessed May 27, 2010).

The following diagram was taken from a website dedicated to folk fiddle playing. Classical violinists will recognise the instrument as being exactly the same as the violin they play.[12]

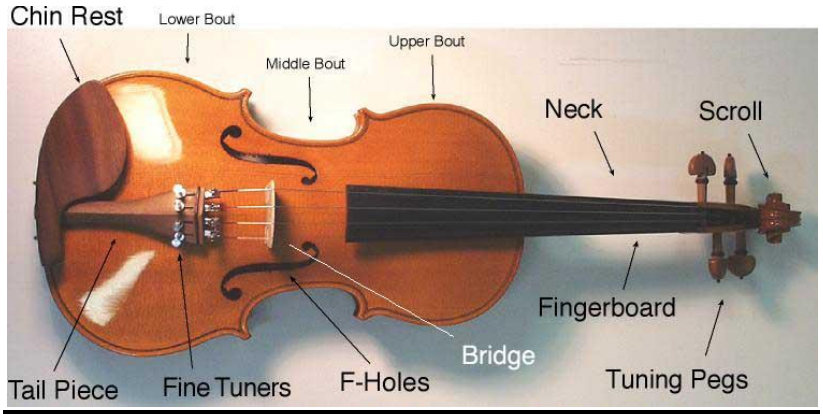


Figure 3.6 The Parts of a Fiddle.

So there is no physical difference between a fiddle and a violin. This makes the instrument unique in that it is the only instrument common to both the Irish folk and western classical traditions in its exact design.[13] There is, however, a considerable difference between the way Irish fiddlers and classical violinists play the instrument.

One might presume that the range of a fiddle is the same as the range of a violin, given that they are the same instrument. It is important to make a distinction here because fiddlers rarely go into high positions because the nature of the music means higher positions are rarely required. Some fiddlers such as Seán McGuire (1927-2005) and many Donegal fiddlers have explored higher positions, primarily for showcase tunes like 'The Mason's Apron'. McGuire's approach, assisted by his classical training, was initially so controversial that he was 'completely ostracised by the traditional music community'. (Glackin interview) The following range diagram reflects the fact that the higher range of the instrument is rarely used in fiddle playing.

[12] *Folk of the Wood.* http://www.folkofthewood.com/page366.htm - Accessed 21/07/2010 (accessed July 21, 2010).
[13] Unless one counts the fact that classical flute players used to use wooden simple system flutes similar to Irish flutes, before the Boehm system was invented in the mid-nineteenth century.

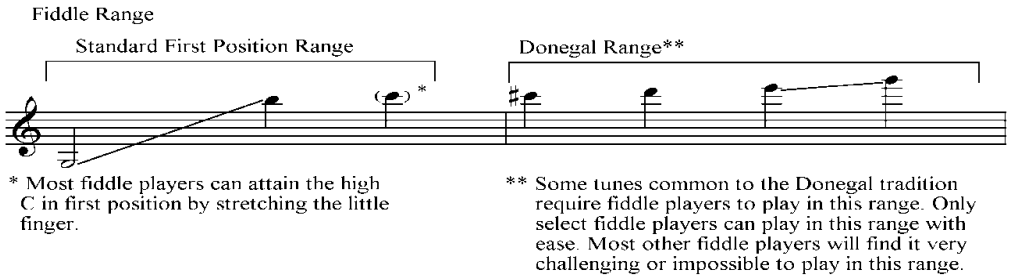


Figure 3.7 Fiddle Range.

These ranges can be extended slightly by the use of alternative tunings (*scordatura*). It is relatively common for fiddlers to tune their strings differently to achieve a brighter or lower sound or to match the pitching of another instrument. Fiddlers commonly relate their tuning systems to the *D* string. The standard violin tuning of *GDAE* is called '*D* tuning'. '*E-flat* tuning' involves all the strings being tuned up a semi-tone. The renowned fiddler Frankie Gavin (b.1956) regularly tunes up to this pitch. 'Flat tunings' involve the tuning down of the violin strings to match the pitch of a set of flat pitched pipes or another instrument tuned to a lower system. There is a less common effect of tuning the instrument *AEAE* in order to create special droning effects for tunes rooted in A such as the 'Foxhunter's Reel.' Patrick Kelly (1903-1975) and Caoimhín Ó Raghallaigh are two musicians who have experimented with this tuning.

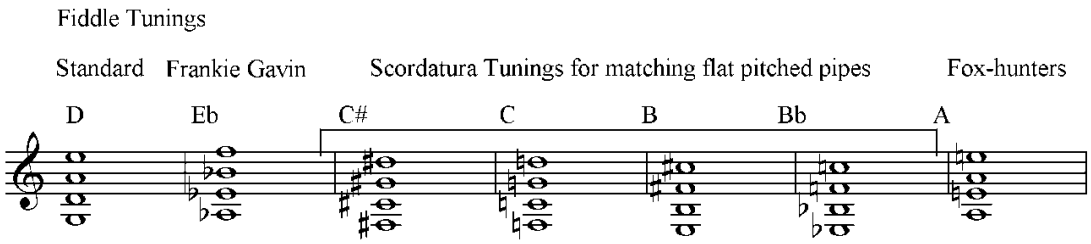


Figure 3.8 Fiddle tuning systems.

One of the main differences between classical and traditional string playing is the approach to tone. The quotations at the beginning of this section go some way to explaining these differences. Each musician elaborated on the matter of tone to me.

> It's a different tone in traditional music than it is in classical music. It's partly the way you bow and the way you finger. A lot of traditional players, it's a light touch that they have and it's a strange thing but it's just a different sound from the fiddle, it's like playing a different fiddle.
> (Lennon interview).

> When I say polished, there's a sweetness that you try and obtain but it's not a polished thing, it's an old sweetness, it's an old rawness but there's a total beauty in that as well.
>
> (Keville interview).
>
> I would think there's a particular tonality in traditional fiddle playing which I think escapes a lot of people. If you listen to Patrick Kelly of West Clare, there's a tonality in his playing that is not your standard European art music type tone.
>
> (Glackin interview).

Claire Keville teaches classical piano; Paddy Glackin studied classical violin in his youth and cites J.S.Bach as his favourite composer; Charlie Lennon studied classical piano in his youth and he also learnt the basics of classical violin technique when he was 18.[14] So they all have a good appreciation for classical music as well as traditional music. In this respect their comments on the differences between the tone of Irish fiddle playing and classical violin playing are hugely significant.

Some people would say classical violinists would have a more 'refined' sound than traditional fiddlers. The word 'refined' is problematic because it infers that the 'classical' tone is superior. In reality, it is just a different approach to tone more appropriate for a different style of music.

One can generalise a bit about what differentiates the tone of Irish fiddle playing from that of classical music. These differences are related to bowing, fingering and the treatment of open strings.

In Chapter 2.4.2.6 I discussed how *vibrato* is treated as an ornament in traditional music. Hillier (1997:205) makes 'a distinction between the small 'natural' *vibrato* inherent in most voices and the applied *vibrato* of many trained singers.' This distinction is very important when discussing traditional fiddle playing. The wide, applied *vibrato* is taught as standard by almost all classical violin teachers because it is now considered to be an essential component of the overall tone of classical violin

[14] Glackin, Keville and Lennon all expressed their appreciation for classical music when I interviewed them.

playing. As a result, many classical string players apply a constant, wide, wrist *vibrato* to their playing.

Almost every traditional musician I have spoken to refers to this classical applied *vibrato* as something that is completely inappropriate when applied to traditional music. Claire Keville was very adamant about this when I asked her how a classically trained musician might adapt to traditional music.

> They'd have to just relearn everything and get rid of *vibrato* absolutely and listen, listen to people who they're told 'This person has a really raw tone that's appreciated', like Bobby Casey.
>
> (Keville interview).

When traditional musicians react so negatively to classical *vibrato* it is really just applied *vibrato* they are speaking of. The subtle naturally inherent *vibrato* Hillier describes can be detected in most traditional musician's playing or singing.

In most of my scores which feature parts for classical musicians, I mark in the score that the musicians should not use *vibrato*. Many contemporary classical composers have a similar distaste for *vibrato*; Steve Reich often marks in his scores that *vibrato* is not to be used.

There are many different approaches to fiddle tone relating to the pressure, speed and placement of the bow. The type of tone goes in extremes from a very clean tone, similar to a standard classical violin tone, to a raw, rugged sound where the fiddler digs violently into the strings with their bow.

There are many instances in contemporary classical music where string players are asked to use extreme bow pressure. Yet when most classical musicians play standard repertoire, the roughest tone they produce would be equivalent to the cleanest tone found in traditional fiddle playing. Musicians who are attuned to traditional music often easily detect when a fiddler has had classical training due to the tone they produce.

> There's a lot of classical musicians who end up playing trad but they end up in a gray area because when you hear them playing traditional music you can hear that it's not Bobby Casey or it's not Paddy Canny or Joe Ryan.
>
> (Keville interview).

Martin Hayes has no classical training but he is capable of producing a very clean tone. He is equally likely to explore a much rougher tone than most classical violinists would ever use. His own views on his approach to tone are notable for their links to classical violin.

> I remember hearing Yehudi Menuhin playing some of these (Bach Partita's), in a church and I just thought, 'God this is magical'… then I think on one of those Eurovision things up popped (Stefan) Grappelli and Yehudi Menuhin as well and I was also intrigued by them. So then I went and bought records and tapes of Grappelli and I was thinking 'Jesus the sound of this' and for the life of me I couldn't figure out what he was doing but I was very intrigued with it. I loved the tones and the sounds. So it set me off on a journey to see if I could play this rustic music with the best fiddle tone I could find. I'm not a great believer in people making rustic sounds for the sake of rustic sounds because it's like antiquing a violin, it's like putting a scrape mark on the back of a fiddle to make it look older. I just don't find that to be very authentic.
>
> (Hayes interview).

So Hayes has been consciously influenced by the sound of Yehudi Menuhin, he also mentions the early classical music specialist Jordi Savall as an influence in his biography, yet he is so rooted in the East Clare musical tradition that his tone could never be considered to be inappropriate for traditional music. There are many other fiddlers with quite a strong and clean tone who had no classical training. Paddy Fahey and James Byrne are two who immediately spring to mind.

There were fiddlers who produced tones so far removed from the standard classical tone that they bear more relation to tones used in experimental contemporary classical music. Many fiddlers from Donegal have a very aggressive approach to bowing which results in a brash, gritty tone. This sound had a strong influence on my *String Quartet No. 2 -The Cranning*. In the performance notes I explain that the sound I desire is akin to this aggressive Donegal sound.

1. The sound I wish to have in this piece is quite different from the usual 'Classical' string quartet sound.
2. The tone of the instruments should be strong throughout but with a bright, unpolished quality.
3. The notes should generally be strongly attacked, even in the slow music.

4. It would be a great help to listen to recordings of Irish fiddlers from Donegal and *uilleann* pipers to get a sense of the sounds that inspired this piece.
5. I have asked for no *vibrato* throughout the piece. This is essential to creating the sound I desire. Some subtle finger *vibrato* is permissible only for the first violinist in movement II when they have the main melody, I will emphasise the word subtle here! Outside of this any use of *vibrato* is completely against the spirit of the piece.

(Flynn, Dave: *String Quartet No.2 'The Cranning'.* Spiddal: Frisbee Publications, 2005/2009).

Con Cassidy and Frank Cassidy (1900-1971) were fiddle playing cousins from Teelin in Donegal. They both explored the raw edges of fiddle tone in the mid-twentieth century in a way that few fiddlers since have done. Con Cassidy often used a wispy, glacial tone that sounded like he was bowing at the bridge (*sul ponticello*). I have been told by people who witnessed him playing that he actually bowed very lightly and over the finger board (*sul tasto*) and this contributed to his distinct tone.[15] Frank Cassidy explored different tones by bowing in different positions, from *sul tasto* to *sul ponticello*. This is an approach that Paddy Glackin admires greatly.

> Frank Cassidy playing 'Tiarna Mayo', I mean it's varied and it's majestic, but that's the great thing about it….I'm terribly conscious of that tone when I'm playing. I'm not trying to play like a classical player; I'm not trying to achieve a classical tone. I'm trying to achieve a tone that has an accent other than the sort of standardised type tone.
>
> (Glackin interview).

This approach to tone is rarely heard in traditional fiddle playing today. Traditional fiddle tone has been homogenised to a certain extent, partly due to the demands of fiddle competitions and professional stage productions where technical prowess has become important.

> It's something that people have tried to sterilise very much because they've been performing things on stage and becoming very self-conscious and applying this filter to it that says 'your tone should be acceptable' in this concept of acceptable….People don't see that the palette has become very narrow I suppose. It's something that if you go back to old recordings of people who, let's say were recorded in their own house, who weren't used to performing on stage, it's something that they didn't consciously clean up.
>
> (Interview with Caoimhín Ó Raghallaigh, July 9, 2009).

The links between contemporary classical approaches to tone production and older styles of traditional fiddle playing also interests Ó Raghallaigh.

[15] Donegal based Dublin fiddler Mick Brown told me this in an informal conversation, as did Rab Cherry, a fiddle maker from Donegal.

> I suppose contemporary classical is more of interest to me than let's say symphonic classical….I think of symphonic classical music as having a very clear spectrum of sounds, it's like you can tell the colour or tell what gases are in a cloud because you analyse the spectrum and there's these very clear lines and it feels like that tonally it's very concise and all the instruments are used just like that. They all have stereotypical roles…whereas the contemporary stuff is very interesting because they're much more exploratory in terms of each instrument rather than in the wider orchestral sound.
>
> (Ó Raghallaigh interview).

In the piece I composed for Ó Raghallaigh, *The Valley of the Lunatics* (2010), I have given him free reign to explore tone quality.

One of the biggest differences between Irish fiddle playing and classical string playing is that the vast majority of Irish fiddlers rarely move beyond the first hand position. One of the results of the use of the first position is that fiddlers use the open strings of the instrument a lot more than classical violinists would. In classical string playing it is common for musicians to move to higher positions to avoid using open strings. When the open strings are used out of necessity musicians generally try to blend the tone to match the sound of stopped strings. These are techniques I was taught when I studied classical guitar.

I believe there is a certain aspect of the opposite effect occurring in Irish fiddle playing. Fiddlers often make great use of the tonal effect of the open strings, sometimes accenting instances in a phrase where an open string occurs. I think the sound of the open string has a subconscious effect on the overall sound of many fiddlers and in this respect I feel that, rather than trying to match the sound of the open string with the sound of the stopped string, they do the opposite and try to match the sound of the stopped string with the sound of the open string. This difference is hugely significant. In a number of my scores I give directions to emphasise the importance of using open strings and the first position where possible.

In a recent performance of my composition *Music for the Departed* (2006) by Martin Hayes, Dennis Cahill (b.1954) and classical violinist Gregory Harrington (b.1975), I noticed that Harrington was moving into second position in places where it

would have been easy and more desirable for if he stayed in first position. It is just a natural habit for him to go into second position like this due to his classical training. My research has helped me to come to the decision that a number of works like this, which I composed previously to the commencement of this research, need technical revisions to clarify these aspects.[16]

The *uilleann* pipes have a reedy and at times raspy tone and some fiddlers try to blend with this tone. This tone is produced more through listening than technical analysis. So it is difficult to put into words how this tone is produced, but as Charlie Lennon said, it certainly relates to the speed and pressure of the bow and the amount of finger pressure used. The use of open strings and drone-like double-stops also contributes greatly to this sound. Since each player has a different approach, it would require a detailed analysis of different player's bowing techniques to really determine these factors and that is beyond the scope of this dissertation.

Many *Sean-nós* singers sing with a grainy, nasal tone which has little or no *vibrato*. This sound has had a strong influence on the tone many fiddlers produce, particularly in the playing of *slow air*s. One can almost hear a *Sean-nós* singer when the most expressive fiddlers play *slow air*s. They are obviously attuned to this sense of vocal tone quality. The late fiddler and composer Junior Crehan (1908-1998) was one such musician.

> All of Junior's airs relate to songs with which he is deeply familiar, and the way in which they are delivered reflects the performance of the traditional singer. Classically trained violinists, when playing airs, tend to copy the tone and intonation of the classically trained voice. Junior, on the other hand, with his somewhat raspy, hard tone, has much in common with the traditional singers. There is little use of vibrato or dynamics; instead, the fiddle sound emulates the slides, trills, and grace notes of the traditional singers.
>
> (Taylor, Barry: " Junior Crehan of Balymackea Beg." *http://www.mustrad.org.uk.* http://www.mustrad.org.uk/articles/crehan.htm (accessed June 20, 2010).

In *String Quartet No.3 'The Keening'* (2007), the string sound I desire relates strongly to this vocal quality because the piece is an imagined interpretation of the

[16] The performance occurred in the Irish Arts Center, New York. April 17, 2010.

keening[17] singing tradition. I based this sound on the playing of *slow air*s on the fiddle and its relationship to *sean-nós* singing.

According to Carolan (n.d.) the Irish fiddle 'owes its origins to the Baroque fiddle'. It is reasonable to assume therefore that Irish fiddle music was played using gut strings until the gradual introduction and acceptance of steel wound, steel-core and synthetic-core strings in the late nineteenth and early twentieth centuries. I have found no specific references to when Irish fiddlers changed from gut to steel and synthetic strings, but it is possible it coincided with the general change patterns in classical violin playing.

> During the last decade of the 19th century there were two notable players, Willy Burmeister and Anton Witek, who because of excessive perspiration, began to use the steel e" string when playing in public. But the use of gut e" a' and d' continued to be widely used until World War I, when shortages of material and the disruption of international commerce made it difficult to obtain high quality gut strings. At this time many violinists were forced by necessity to begin using the steel e" string, adapting to it rather quickly. Among these players were Jascha Heifetz, Fritz Kreisler, Maud Powell, Jacques Thibaud. In America, musicians adopted the steel e" string more quickly than did violinists in Europe. In Europe, however, violin soloists such as Mischa Elman and Samuel Gardner continued to play on the gut e" string. And as late as 1920, violinists in many orchestras in Germany still had to bind themselves by contract not to use steel strings.
>
> (Dlugolecki, Damian: "A history of gut strings." *Damian Strings.* http://www.damianstrings.com/sh-faq.shtml (accessed June 1, 2010).

From this information one can speculate that gut strings fell out of fashion in traditional music around the beginning of the twentieth century. This is coincidentally the same time as the beginning of the recording age and the first recordings of Irish fiddle playing. If one was to just go by these early recordings one might come to the conclusion that the fiddle sound we have grown accustomed to bears no relation to the sound of gut strings. It is possible however that when steel and synthetic strings became the standard type of string for fiddlers to use that fiddlers naturally adjusted their tone to something similar to what they previously obtained with gut strings. This sound then probably transferred to the next generation of fiddlers who never used gut strings. My speculation has some grounding in the fact that when I interviewed the Baroque violin

[17] Keening is a term used to describe the ancient Irish ritual of funeral singing.

specialist Claire Duff, the sound that she produced from the gut string Baroque violin was much closer to an Irish fiddle sound than a regular classical violin sound. Paddy Glackin said something that relates to this.

> Charles Acton[18] used to write years ago about tonality in traditional music and I used to dismiss a lot of what he said but I've gone back to that and thought 'well maybe he has a point'. He would argue that maybe we should have stuck with gut strings.
>
> (Glackin interview).

A minor, but very interesting aspect of tone in Irish fiddle playing revolves around the use of special effects to imitate natural sounds. The most prominent examples involve the imitation of bird sounds in a recording Neilidh Boyle (1889-1961) made of the air 'The Blackbird' (1975) and the imitation of a baby's cry in the air 'The Old Man Rocking the Cradle' (1977) as played by Pádraig O'Keeffe (1887-1963).

To mimic the 'Ma Ma' sound of a baby's cry, O'Keeffe placed a large iron door key in his mouth and as he played he touched the key on the wood of the fiddle. This had the effect of manipulating the sound of the fiddle so that as the key touches the fiddle and is then moved off a 'Ma Ma' sound is created.

Boyle's bird sounds were mainly ornamental fingered effects, in addition to the unusual use of the *tremolo* bowing effect[19], but the tone he produced whilst playing these effects also contributed greatly to their character. These are but two examples of tone-based experimentation within traditional music practice.

[18] Charles Acton (1914-1999) was the principal music critic for the Irish Times from 1955-1986.
[19] *Tremolo*, an effect where the musician repeatedly and rapidly bows the string, is very rarely used in traditional music.

3.1.1.3 Irish flute

The 'Irish' flute is in fact the same form of simple system wooden flute that was commonly used in Baroque and classical music until the invention of the Boehm system silver flute in the mid-nineteenth century. The Boehm system silver flute is occasionally used in traditional music however the tonal qualities of the simple system wooden flute and the fingering system make it much more suited to traditional music. The sound blends better with pipes and fiddle. The finger plates used to cover the holes on the Boehm system flute also make it more difficult to create the fluid attack necessary to produce Irish flute ornamentations.

One of the chief differences between the simple system flutes used in traditional music and Boehm system flutes is that the 'Irish' flute is not chromatic, unless half holing is used. Some traditional musicians use wooden Boehm system instruments to allow for total chromaticism. Most choose to remain keyless or to have a minimal amount of keys for producing the more common accidental notes such as *F-natural* and *G-sharp*. In this respect the limitations of the Irish flute system are similar to the *uilleann* pipes. Harry Bradley summed up the difference between the systems when I interviewed him.

> He (Paddy Carty) played what you call a reformed flute which is a Boehm system with a wooden body. Paddy Taylor did the same, he would have been from Limerick and he played in a similar-ish style. That type of flute lends itself to that sort of playing because all the tone holes are the same size, so you have a more uniform instrument where the notes are all of the same tone. Whereas with the conical simple system flute certain notes are stronger and lend themselves to being pushed, so you have a more dynamic thing.
>
> (Bradley interview).

Simple system flutes can be pitched in different keys, the most commonly used one in traditional music is pitched to *D*. *C*, *B-flat*, *F* and *E-flat* flutes are also common. Irish flute players tend to utilise a similar two octave range to the *uilleann* pipes. Higher notes in the third octave are occasionally used for special effect.

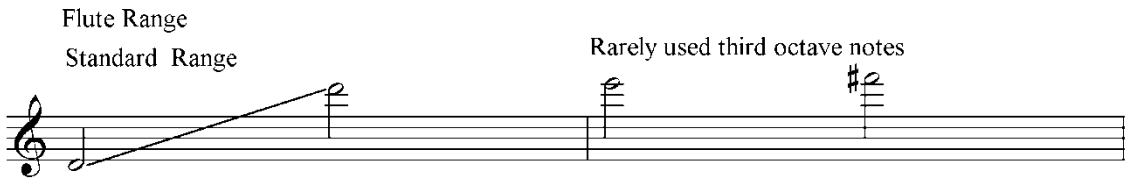


Figure 3.9 Irish Flute Range.

Within this range there is a similar approach to piping when it comes to the notes that are most commonly played. The easily playable notes are dependent on whether the flute has a full range of keys.

The wooden flute has a fuller, mellower tone than a silver flute. Approaches to tone in Irish flute playing are almost as varied as they are on the fiddle. The tone varies from a smooth, clean tone not far removed from a standard classical flute tone, to a strong, overblown and heavily accented tone. Harry Bradley explained the fundamental differences between these approaches.

> Brian Finnegan and a few more of those players would have evolved from listening to Matt Molloy. Their playing would be relatively flat. There wouldn't be many dynamic pushes and quacks. They'd go for an even tone, they mightn't emphasise the bottom *D* notes and things like that. They mightn't go to town on some of the tonal dimensions of the instrument. Then other players like Desi Wilkinson and Conal O'Grada, would be the prime examples of it. They'd be quacking and farting away, getting great mileage out of it. That would be a big contrast.
>
> (Bradley interview).

The more breathy approach would contrast greatly with standard classical approaches to flute tone. In classical flute playing there is an emphasis on making breaths as quiet as possible, so they do not intrude on the musical line. In the most extreme styles of traditional flute playing, breath and guttural sounds are used like they are part of the music. This is related to the fact that the tongue is rarely used by traditional flute players who play in this style, whereas tonguing is a regular feature in the articulation of classical music.

> Tonguing I would use rarely on the flute. It's generally full on staccato, so you try to use that to create a rhythmic effect. So tonguing doesn't work, so generally the way a lot of players especially play the sort of pulsey style or the sort of driving style associated with Leitrim more so, they've names for it like 'glottal stops' but it's not actually that you're stopping the note, it's done subtly, you're just giving it a push so the note never stops. It's actually a pulse. So that would be the main way of accenting things and then you can use that same technique to stop the note completely. It's like a cough in the back of your throat,

> you can feel it there. It's obviously the diaphragm, I think it's the throat that regulates it but it's the diaphragm working its way out. You sit beside someone playing that style, especially if they're smokers, you can hear that 'uh uh uh', pronouncements like that coming from their throat.
>
> (Bradley interview).

This breathy style bears a relation to techniques used in contemporary classical flute playing. Robert Dick (b.1950), a leading pioneer in contemporary classical flute playing, makes great use of over-blowing, breathy effects, microtones and key clicks.

The more *legato* style of flute playing espoused by players such as Paddy Carty (1929-1980) and Matt Molloy (b.1947) relies more on a constantly flowing melodic line, which is often highly ornamented. Some players have developed an ability to play this *legato* style to the point where one would strain to hear the breaths in their playing. This is usually because they are taking their breaths at specific places in the tune.

Breath is obviously a very important aspect of any wind instrument. Bradley explained to me how traditional players tend to place their breaths according to the phrasing of the tune, much like a fiddler uses their bow.

> When I'm teaching I always explain the importance of breath articulation by using the image that our breath is our bow. As a fiddler creates his accents by speeding up and slowing down the bow, we have to use our breath.
>
> (*Ibid*.).

Bradley also gave me a very detailed explanation of how the need to breathe affects phrasing in traditional flute playing.

> The basic way to explain it is, you're always taking a breath after the down-beat, either that or you're cutting a long note shorter to take a breath, a crotchet and dotted crotchet you'd cut short and take a breath or there'd be the case where you'd have to take out a note and take a breath, it'd be the one after the down-beat.
>
> Obviously you don't play the note on the down-beat or you'd lose the rhythm. There'd be sort of tidy phrasing based around the structure of the tune. Where you're taking a breath, either it's the very last note. If it's an awkward tune it's the last note of a phrase and just to the start of the next phrase. That often works better.
>
> (*Ibid*.).

The *uilleann* pipes have strongly influenced Irish flute playing. Some of the ornaments used by flute players were adapted from the pipes, particularly *cranning*.

> The obvious one is the whole thing of *cranning* which people do on the whistle but that's only comparatively recently and I'm fairly certain Patsy Touhey does it on the *E* and Matt Molloy was the first one to do the *D cran* on the flute.
>
> (Browne interview).

Flute players also imitate the *Hard D* effect of the pipes by completely covering the holes with their fingers and using very specific blowing pressure and embouchure.

Some flautists use *vibrato* quite commonly. This *vibrato* tends to differ from classical *vibrato*, it is related to the *uilleann* pipes *vibrato* whereby a *vibrato* effect is created by moving a finger on and off a hole that only subtly affects the pitch. Bradley and some other players also use a strong and fast pulsing *vibrato* which emanates from the diaphragm. This sound is closer to classical *vibrato* than any *vibrato* techniques I have heard from players of other traditional instruments.

3.1.2 Peripheral Influences

The tin whistle, fife, *bodhrán*, bones, spoons, *Céilí Band* woodblock, *Sean-nós* voice, Irish harp, piano and guitar have had a peripheral influence on the compositions I present with this dissertation. Three of the most common instruments used in traditional music; the accordion, concertina and banjo, have generally had no influence on these compositions. For this reason I have omitted discussion of them and related instruments like piano accordion, melodeon and mandolin. I have also omitted the low whistle on this basis.

3.1.2.1 Tin whistle

The tin whistle has influenced my works in two direct ways: as an instrument used in the pieces and as a sound which influences aspects of the pieces. The tin whistle comes in many pitches and designs. The most commonly used one is pitched to *D*. Most tin whistle players would have a collection of whistles pitched to other notes like *C, E-flat, F, G, A* and *B-flat*. The nature of the instrument means that techniques which are

difficult to master on the pipes are not as difficult on the whistle, as Peter Browne explained to me.

> The whistle is much more responsive. It's simpler and it's plainer and it's easier, it's more direct. There's not so much pumping and clumping…… I'd say the whistle is smoother and easier and that translates in the music.
>
> (Browne interview).

Many pipers and flautists began playing tin whistle but then moved on to play the other more challenging instruments. As a result of this there are very few musicians who specialise on the whistle. Mary Bergin (b.1949) and Seán Ryan (b.1949) are two notable modern day exceptions. Claire Keville, Caoimhín Ó Raghallaigh, Mick O'Brien, Peter Browne and Harry Bradley all play the whistle to a high standard, but they do not specialise in it.

The standard range of a tin whistle is two octaves from D^2 to D^4. Higher notes are possible through special fingerings and by blowing with more pressure; however these notes are rarely used in traditional music because they sound shrill and are difficult to tune. Notes in this higher range would occasionally be used to strongly accent a note.

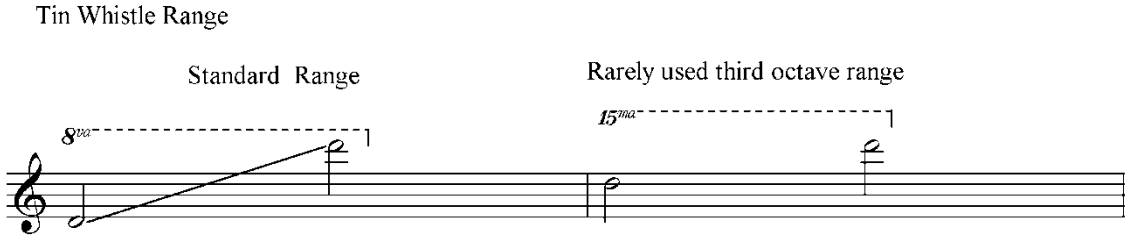


Figure 3.10 Tin Whistle Range.

The techniques used on the whistle are very similar to those used on the flute, so it is not necessary to detail them again here.

I have included the tin whistle in two of my compositions, *Taibhreamh Ó Riada* (2007) and *Le Chéile is in Aonar* (2010). The main reason the whistle was used in *Taibhreamh Ó Riada* is because two of the musicians in the group *Líadan*, whom the

piece was written for, play the whistle. I utilised this fact so that the two whistles play in polymetric contrapuntal patterns.

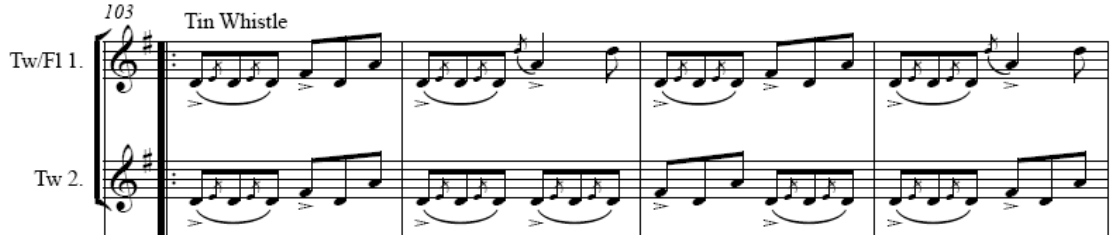


Figure 3.11 Flynn, *Taibhreamh Ó Riada*, 103-106.

The whistle is also used in a small section of *Le Chéile is in Aonar*. My main reasons for using it here were to create timbral change and to utilise the talents of the musicians the piece was written for. Harry Bradley, Mick O'Brien and Caoimhín Ó Raghallaigh can all play the whistle as well as their primary instruments. In the following example three whistles are used as the musicians play three different *polkas* concurrently.

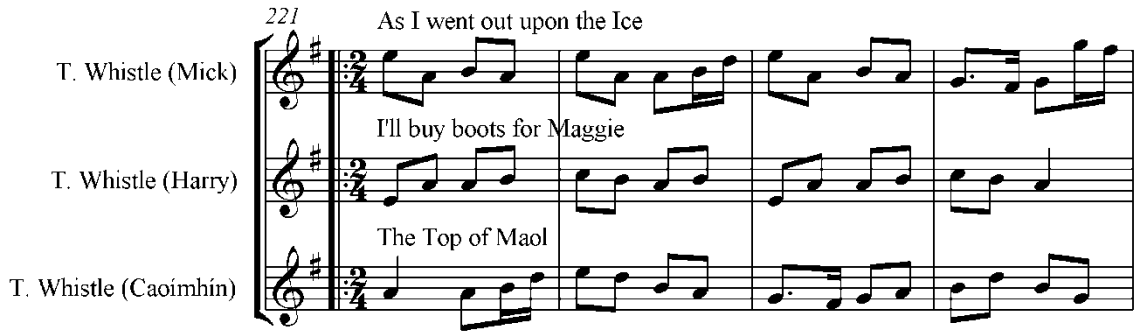


Figure 3.12 Flynn, *Le Chéile is in Aonar*, 221-224.

The tin whistle has also influenced my approach to orchestrating two of my pieces. This influence dates back to my orchestral work *Paddy's Rambles Through Africa and the Balkans* (2003). My use of the piccolo is related to the fact that it can sound similar to a tin whistle. Indeed according to Larsen (2003:56) 'The *piccolo* was quite commonly used in traditional Irish music in the early 20th century.'

Whilst composing this piece, I identified the similar high pitched nature of the piccolo to the tin whistle and so I used the piccolo to imitate a whistle-like sound in certain passages, such as the following *slow air* style example.

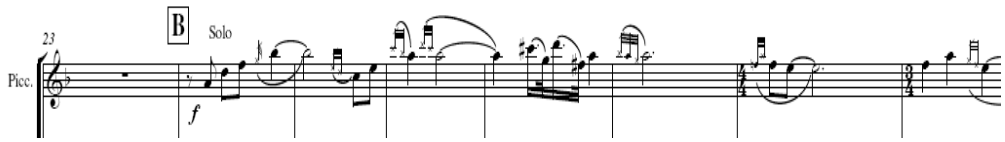


Figure 3.13 Flynn, *Paddy's Rambles Through Africa and the Balkans*, 23-30, piccolo part.

I used the piccolo again in *Aontacht* (2008). It is used only briefly, in a section where melodic ideas originating from a *reel* played previously by the soloist are transferred to the orchestra and played in a call and response nature. The following example demonstrates how the piccolo initiates a call and response with the flute.

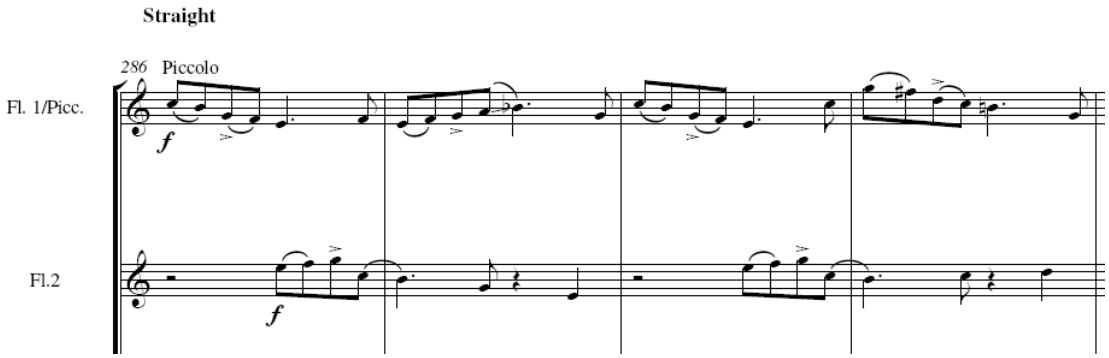


Figure 3.14 Flynn, *Aontacht*, 286-289, piccolo and flute 2 parts.

3.1.2.2 Fife

The fife is rarely used in the performance of traditional Irish music. It is primarily used in marching bands. Due to its obscurity in the tradition I do not go into much technical detail about the instrument here, other than to say its range and tone is similar to the tin whistle and the techniques used to play it are similar to that of the flute. The main reason I am including it here is because Harry Bradley plays the fife and he used it in *The Forest of Ornaments* (2009).

3.1.2.3 Bodhrán

The *bodhrán* is a frame drum that is widely considered to be Ireland's national percussion instrument. The history and development of the instrument have been well documented by other writers, including Ó Súilleabháin (1984). Its use as a percussion instrument in traditional music is a relatively recent development largely credited to Seán Ó Riada, who introduced it to the sound of his ensemble *Ceoltóirí Chualann* in the early 1960's. Since then it has been widely adopted. Some very skilled *bodhrán* players have emerged since the 1960's and a diverse array of styles has developed.

One of the most notable characteristics of the *bodhrán* is that it is possible to produce pitches on the instrument by using pressure and hand movement at the back of the goatskin, in tandem with beating the skin with the hand or various forms of beaters. This enables *bodhrán* players to play root notes of the tunes and some players such as Dónal Lunny (b.1947) even utilise this effect to play bass-lines on the instrument. Other players exploit the full range of pitches to produce *glissandi* effects.

I have not used the *bodhrán* in any of my works but the sound of the *bodhrán* has influenced my two main orchestral works *Paddy's Rambles Through Africa and The Balkans* (2003) and *Aontacht* (2008). In both pieces I use the timpani to imitate a subtle pulsing *bodhrán* technique.

There is a section in the style of a *slip jig* in *Paddy's Rambles Through Africa and The Balkans* where I use the timpani to create a *bodhrán*-like rhythm.

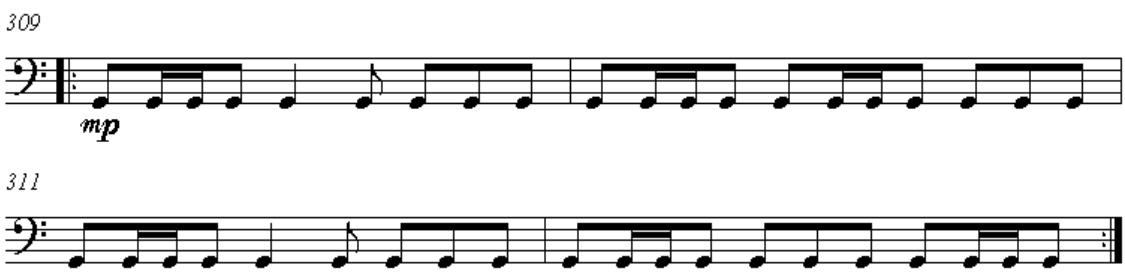


Figure 3.15 Flynn, *Paddy's Rambles*, 309-312, timpani part.

In *Aontacht,* the timpani are used at various points in a *bodhrán*-like style. In the opening *reel,* the timpani gradually develops from simple, on-beat pulsations to varying rhythms more readily associated with *bodhrán reel* rhythms. The timpani *rolls* imitate *bodhrán rolls*.

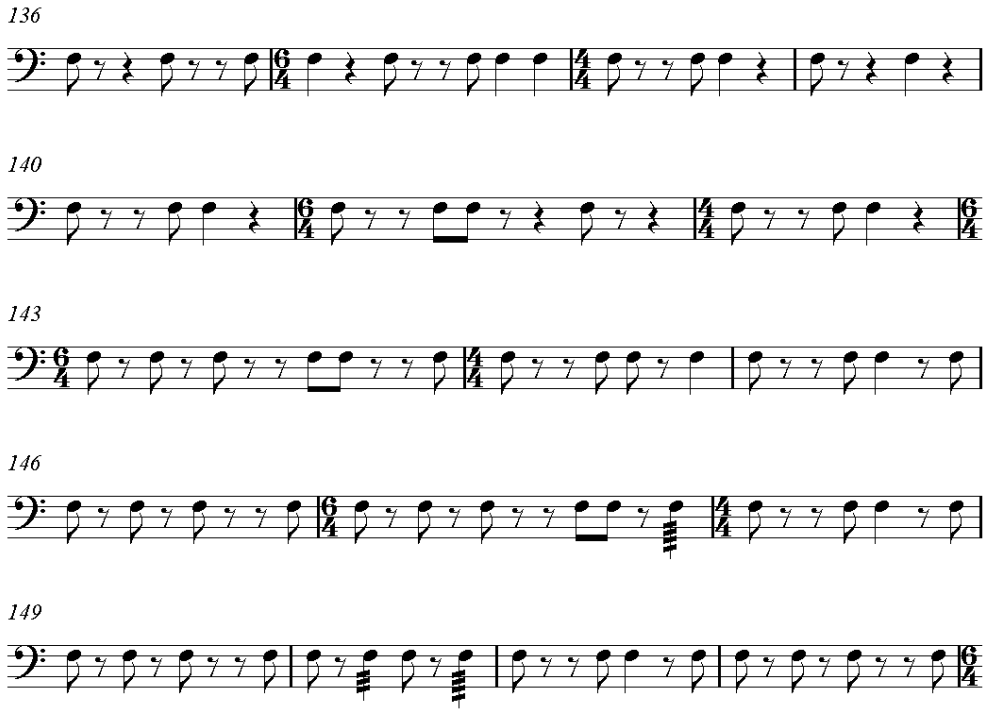


Figure 3.16 Flynn, *Aontacht,* 136-153, timpani part.

3.1.2.4 Bones and spoons

When bones and spoons were originally introduced to traditional Irish music they were literally the bones of an animal and silver table spoons. Now wooden versions of both instruments are being manufactured. The technique for holding bones and spoons is very similar. They are held between two fingers in one hand and allowed to ricochet against each other. In the hands of good musicians, such as Tommy Hayes (b. 1953) and Mel Mercier (b.1959), they are very effective percussion instruments, capable of intricate rhythms. I have not used either instrument in any piece, but their sound has partly influenced my decision to use woodblocks in a significant section of *Aontacht*.

3.1.2.5 Woodblocks

Woodblocks are commonly used by *Céilí Band* drummers, who vary the main rhythm they produce from the snare drum to the woodblock. Two accented woodblock beats often signal the end of a *Céilí Band* set, so they provide an important function in that sense. The rhythms played on the woodblock are similar to those produced by the bones and spoons and these rhythms strongly influenced the rhythmic accompaniment to the third *reel* that is played in *Aontacht*. In this section of *Aontacht* I use two woodblocks, played by two percussionists, who play constantly varying rhythms in a style that is related to bones and spoons rhythms and *Sean-nós* dancing.

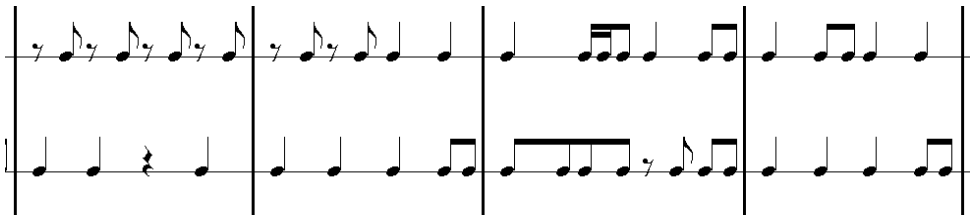


Figure 3.17 Flynn, *Aontacht*, 450-454, woodblocks parts.

3.1.2.6 Sean-nós voice

Unaccompanied singing in the Irish language is known as *Sean-nós* (Old Style) singing. It is a complex tradition with many different styles, usually divided between Munster, Connemara and Donegal regional styles. *Sean-nós* singers tend to sing in a pure toned, *vibrato*-less voice, using a relatively limited dynamic range. Some singers have very grainy, nasal voices; others are very sweet toned, without ever sounding like trained classical singers. The melodies they sing tend to be long melodies which gradually ascend and then descend through a range of little more than an octave. Singers tend to sing songs in ranges that suit their voice naturally, so songs do not go in to the extremes of ranges that some operatic songs do. The real skill in *Sean-nós* singing lies in the expression of the song and the use of complex ornamentation techniques.

Sean-nós singing has had a direct influence on three of my works. The opening section of *Taibhreamh Ó Riada* was composed for the group *Líadan*, within which there

are two very skilled singers, Elaine Cormican and Síle Denvir. The rest of the group also sing and so I chose to write in a polyphonic style, highly influenced by *Sean-nós* singing. The opening of the piece has a single *Sean-nós* voice accompanied by an accordion drone.

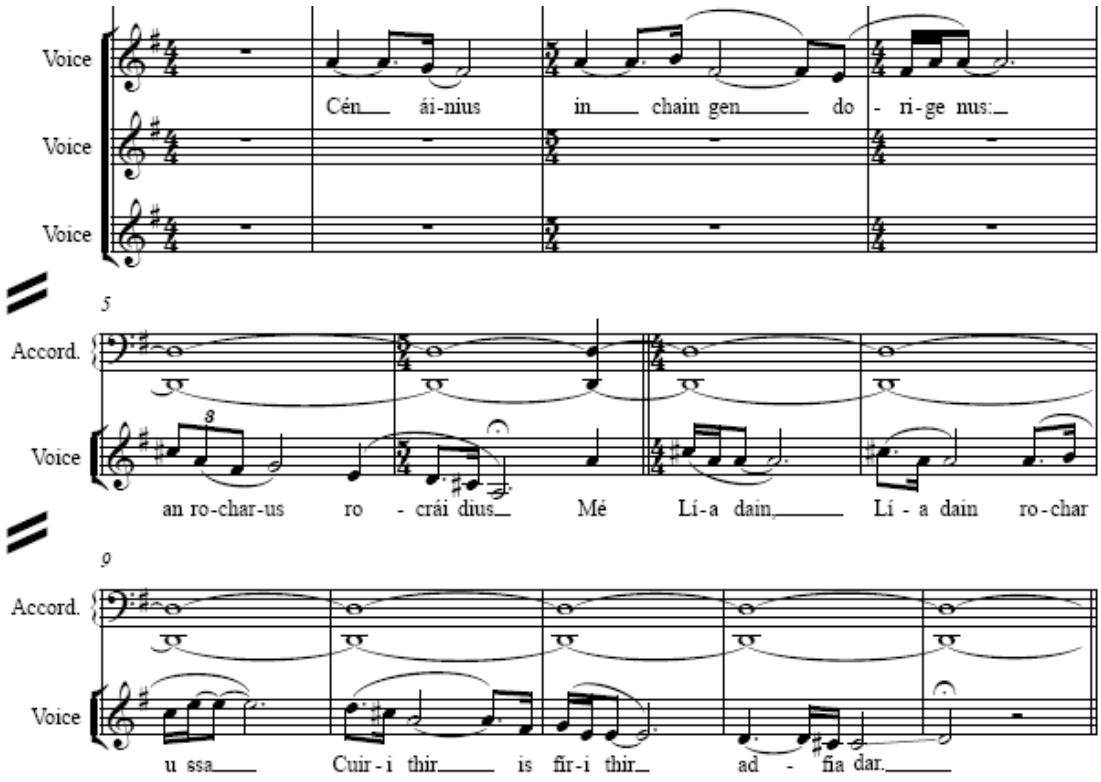


Figure 3.18 Flynn, *Taibhreamh Ó Riada*, 1-13.

The influence of *Sean-nós* singing is subtly apparent in *String Quartet No. 3 – The Keening* and *Stories from the Old World* which I discuss in Chapter 4.

3.1.2.7 Irish harp

The harp is widely known as Ireland's national instrument. It was prominent in the early eighteenth century when harpists such as Turlough O'Carolan (1670-1738) were at their prime; but it fell out of favour soon after that. It is only relatively recently that the harp has become an instrument for performing the music now considered traditional Irish music.

Harps are diatonic instruments, meaning the strings are all tuned like the white notes of the piano. In order to use the notes that correspond to the black notes of the

piano a mechanism is required to change the length of the strings. The Irish harp differs from the classical concert harp in the way this is achieved. The concert harp is a pedal harp whereby foot pedals are used to change the pitch of the strings; therefore the hands are free to play the harp continuously. The Irish harp is an older form of instrument, a lever harp. On this instrument, levers on the top of each string are required to change the pitch. The downside of this is that this means the hands are not completely free to play the strings. The reason this instrument has maintained within traditional music is that most tunes do not require a large amount of lever changes. Ones that do are pieces of great virtuosity. The mechanism required for the pedal harp makes that instrument very large and heavy. Irish lever harps are petite in comparison.

Some Irish harpers play a wire-strung harp with no pedal or lever. In the realms of historically informed performance some people feel this is the true 'Gaelic' harp, indeed it is the type of harp Turlough O'Carolan would have used.

> Paul Dooley is one of the very few Irish people who play the Irish harp in its historical form and style - using a wire-strung harp, playing with the fingernails, and using the fingertips to damp unwanted string resonance.
>
> ("Paul Dooley Biography." *The Irish Harp School Web site.* http://www.irishharpschool.com/paul.htm (accessed September 2, 2010).

Most Irish harpers would, like their classical counterparts, use nylon or gut strings and play with the finger-tip rather than nails. So in many respects there is a strong argument that playing the wire-strung harp with fingernails is more authentic for the music of O'Carolan.

The influence of the harp on my own music is relatively small. *Taibhreamh Ó Riada* contains a part for the lever harp which was performed by Síle Denvir. A lever harp is necessary for this piece due to the range and the use of accidentals, such as in the following excerpt.

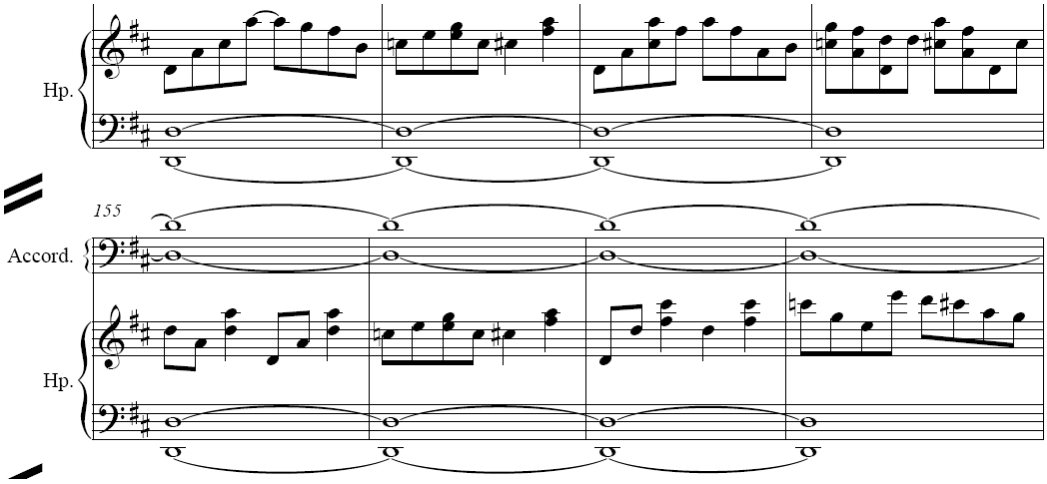


Figure 3.19 Flynn, *Taibhreamh Ó Riada,* 151-158.

I also use the harp in *Aontacht*. In this case it is a classical pedal harp. In the performance notes I say the following about the role of the harp in the piece. 'The harp acts as a bridge between the soloist and the orchestra at times and for this reason it is important that the harp is placed beside the soloist rather than in its usual orchestral position.' At various points in the piece the harp accompaniment is a vital element which provides the soloist with a reference point to the overall orchestral texture. This is discussed in the commentary in Chapter 4.

3.1.2.8 Guitar

The guitar has been used to accompany traditional music since at least the 1920's when guitars were occasionally used to accompany Irish musicians who recorded in the USA. The guitar's role in traditional music was revolutionised in the 1970's when guitarists developed new accompaniment and tune playing styles that were closer to the spirit of authentic traditional music than the basic strumming techniques previously used. An essential part of this innovation was the employment of new tunings such as *DADGAD* and *DGDGBD*. Since then, guitarists including Steve Cooney (b.1953) and Dennis Cahill have made further innovations. Cahill is notable for being one of the few traditional guitarists to use standard guitar tuning *EADGBE*. Tutors by McQuaid (1995);

Doyle (2004) and Kilkelly (2001), have covered the use of the guitar in traditional music extensively.

The guitar is my main instrument, yet I have not used the guitar in any of the compositions submitted with this dissertation. My main reason for omitting the guitar and indeed any similar typical accompaniment instrument in these works is that I wished to explore new forms of accompaniment textures. The guitar has influenced aspects of *Aontacht* however. This is discussed in Chapter 4.

3.1.2.9 Piano

The history of piano accompaniment in traditional music has been discussed extensively by Scahill (2005). The piano is usually used in traditional music as an accompanying instrument. Its use as a melodic instrument in traditional music is a relatively recent development, primarily through the playing of Mícheál Ó Súilleabháin (b.1950).

The piano as it is used in a traditional music context has had minimal influence on my compositions. It does not feature in any of the works I present with this dissertation. Jim Corry's accompaniment style with the *Tulla Céilí Band* had a very subtle influence on *Aontacht* which I discuss in Chapter 4.

3.1.2.10 Summary

There are a number of instruments common to traditional music. These instruments are either not common to classical music, such as the *uilleann* pipes, or the performing styles are different, as in the case of the fiddle and flute. Sounds and performance techniques deriving from these instruments have profoundly influenced my compositional voice and have thus been a defining element in all the compositions I present with this dissertation.

3.1.3 Traditional Irish Harmony

> These people out here heard no harmony, there was no harmony. There was no counterpoint, they didn't hear it. It didn't exist.
>
> Martin Hayes[20]

> I wouldn't describe it as harmony. To me it makes more sense to think of it as based around a drone.
>
> Caoimhín Ó Raghallaigh[21]

> Often times it's a discord but it can be a nice discord.
>
> Charlie Lennon[22]

It might seem more logical to place a discussion on traditional Irish harmony in Chapter 3.3, which deals with pitch. I include it in this section because the drone-based nature of the music makes it more relevant to the instrumental characteristics of the *uilleann* pipes. The drones and regulators have had a defining role in creating a distinct sound which I like to call 'traditional Irish harmony'. The simple function of the *uilleann* pipes drones has had a significant bearing on a harmonic world that has strongly influenced some of my compositions.

Traditional music was and in many respects still is primarily a soloist's art-form. When solo instrumentalists play together they usually play in heterophony.[23] In many other forms of music, harmony and/or counterpoint occur when two or more musicians play together. Counterpoint was not generally used in traditional music until relatively recently.[24] A flautist or whistle player cannot harmonise with themselves without resorting to multi-phonic techniques.[25] A fiddler can only clearly play two notes simultaneously. It is therefore natural that conventional harmony did not play a major part in traditional music up until relatively recently.

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[20] Hayes interview.
[21] Ó'Raghallaigh interview.
[22] Lennon interview.
[23] Heterophony occurs when two or more musicians spontaneously vary the same melodic line. See Fairbairn (1993) for more information on heterophony in traditional music.
[24] Groups including *Ceoltóirí Chualann*, *The Chieftains*, *Planxty* and *The Bothy Band* introduced counterpoint quite successfully to the music in the 1960's and 1970's, but it is still not a major feature of traditional music.
[25] Multi-phonics are two or more simultaneous pitches produced on one wind instrument through the use of special fingerings and blowing techniques.

The *uilleann* pipes are more capable of harmony due to the drones and regulators; however the regulators were a later addition to the pipes. So pipers only had drones to supplement the monodic capabilities of the chanter up until the introduction of the tenor regulator in late eighteenth century and the middle and bass regulators in the early nineteenth century. Therefore, the drones are the one constant in traditional music that gives the music a natural sense of harmony. Pipers often keep the drones on, even when playing a tune that is not rooted in a mode of that drone. This creates some distinctive harmonic effects.

3.1.3.1 D drones on tunes rooted in G

Throughout the playing of a G-rooted tune the constant *D* drone prevents the tune from resolving in a perfect cadential 'classical' way due to the *D* drone always being a lower pitch than the *G* root of the melody. If a G-rooted tune like 'Tommy Peoples' Reel' is taken in classical music terms as a tune in the key of G major without the effect of a *D* drone on it, a 'correct' bass harmonisation of the first four bars would be something like the following example.

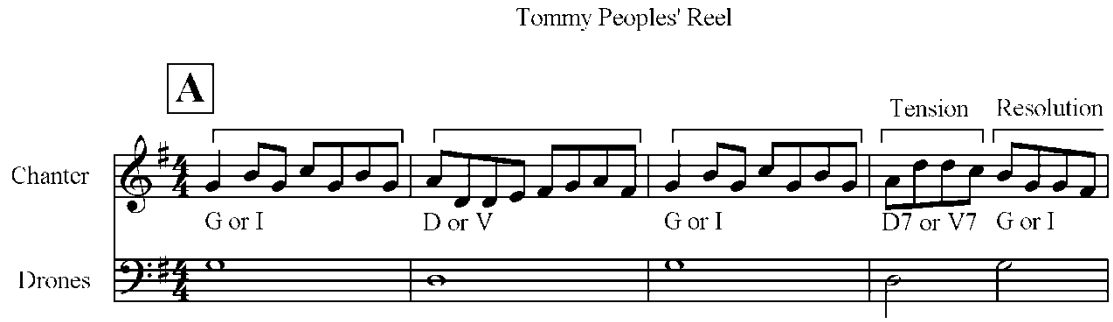


Figure 3.20 Standard approach to harmonising 'Tommy Peoples' Reel.'

I have indicated the terms 'tension' and 'resolution' according to points at which the melody either creates tension with, or resolves to, the bass note. This harmonic approach creates the opposite effect of tension and release that the drone would have. In the 'classical' approach the only real sense of tension occurs on the off-beat of the second beat in bar 4, where the note *C* above the *D* in the bass creates the tension before

a resolution to the tonic *G*. Many traditional accompanists would actually use this harmonic approach. It is a perfectly valid approach, but it lacks the tension that the drone approach has.

For sake of comparison with a standard 'classical' approach to harmonising a melody like this, I have indicated the chords that are implied by the addition of the drones to the melody in both letter and roman numerical forms in the following example, as per the standard practice in classical music of naming a chord according to its relation to the tonic key.

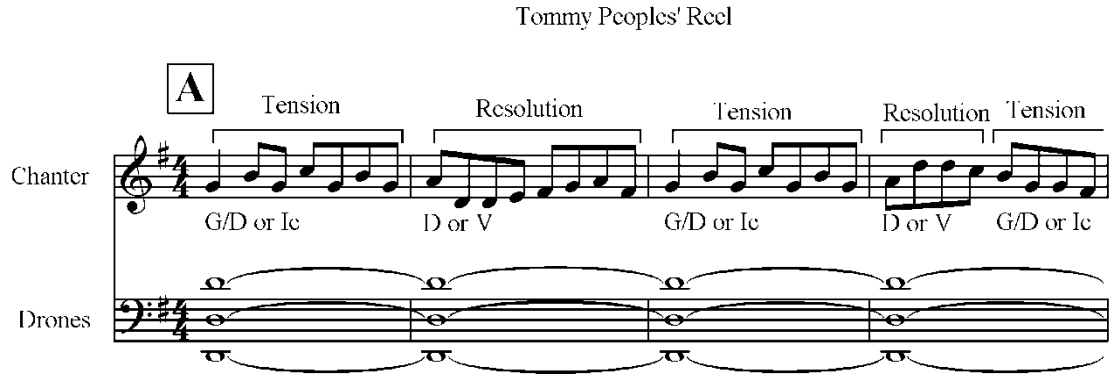


Figure 3.21 Drone approach to harmonising 'Tommy Peoples' Reel.'

The effect of the low *D* drones against the G-rooted melody creates unresolved tension in bar 1 with a resolution occurring in bar 2. Tension returns in bar 3. In bar 4 the drones create a more resolved sound on the first two beats and the end of the phrase sounds unresolved because of the low *D* notes below the *G*. The tension/resolution structure here is the complete opposite to the effect of the 'classical' approach.

Modern ears have got so used to the 'classical' approach that, to some, it may just sound wrong to have the *D* drones sounding over a tune rooted in G. Some pipers will not even use the drones on a G-rooted tune. However, most pipers and long time listeners to traditional music actually appreciate this sound. To me, the drones give the music a magical, soaring sound. It is different to what someone conditioned to standard classical and popular music harmony might consider correct, but it is certainly not wrong in the context of traditional music.

3.1.3.2 D drones on tunes rooted in E

If the piper plays a tune rooted in E, the drones will create even more tension. Most tunes based in E Dorian revolve around a melodic sequence rooted in E, moving to a melodic sequence rooted in D. Therefore the tension created by the drones over the E-rooted sequence is relieved when the melody is rooted in D. It is a stronger sense of tension than the tunes rooted in G. The skeleton notation of the opening of the *reel* 'Drowsy Maggie' illustrates the unusual tension/resolution effects the drone creates on an E Dorian melody.

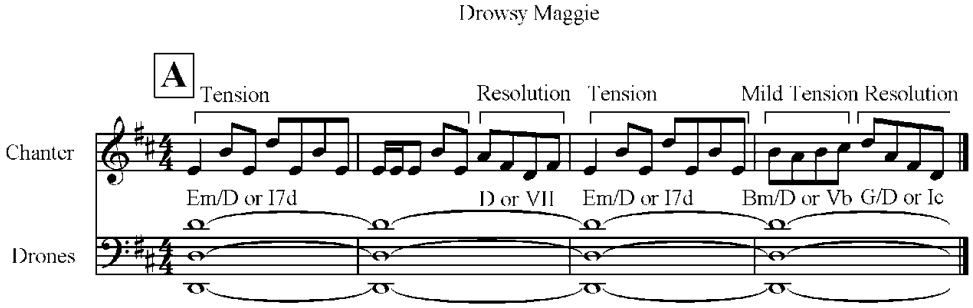


Figure 3.22 Drone approach to harmonising a tune in E Dorian.

3.1.3.3 D drones on tunes rooted in C

A similar effect occurs with tunes rooted in C which are essentially in the mode of D Mixolydian.[26] Tunes such as these often move from a C-rooted melodic sequence to a D-rooted sequence. This creates a reverse cadential effect where the tension occurs in the first two bars and it is resolved in the next two bars.[27]

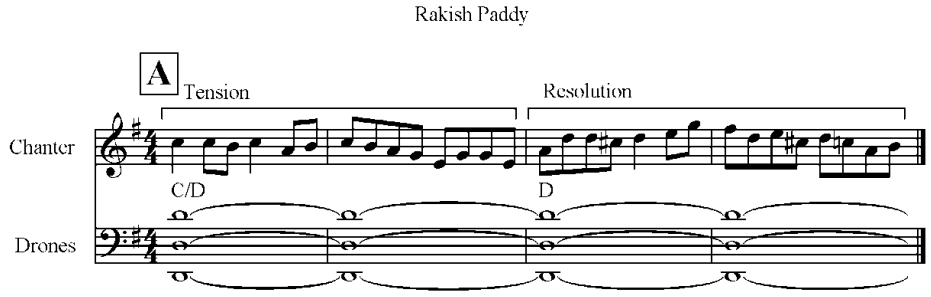


Figure 3.23 Drone approach to harmonising a tune rooted in C.

[26] By this I mean that all the strong notes in the tune, with the exception of some variable passing notes, are found in the D Mixolydian mode.

27 I use the word 'resolved' cautiously here because passing tension can be caused by the use of the *C-sharp* in this 'resolved' section. In practice, different players may choose to use a *C-natural* or a note in between *C-natural* and *C-sharp* here, therefore creating different levels of tension.

3.1.3.4 D drones on tunes rooted in A

Perhaps the most transformative harmonic effect of the drones occurs in tunes rooted in A. The application of a bass harmony in keeping with the type of chords an average guitarist would use to accompany 'The Jolly Tinker,' might produce the chords and bass line illustrated below.

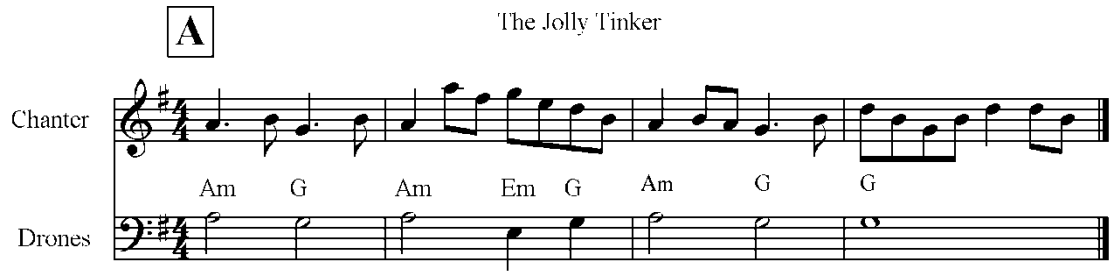


Figure 3.24 Standard approach to harmonising 'The Jolly Tinker.'

This gives a clear sense of the mode of A Dorian. When the drones are applied it changes the sense of mode closer to D Ionian. Nevertheless, the lack of a clear use of the 3rd and the complete lack of a 7th mean the opening four bars of 'The Jolly Tinker' have an open, unresolved, modal quality once the drones are sounded.

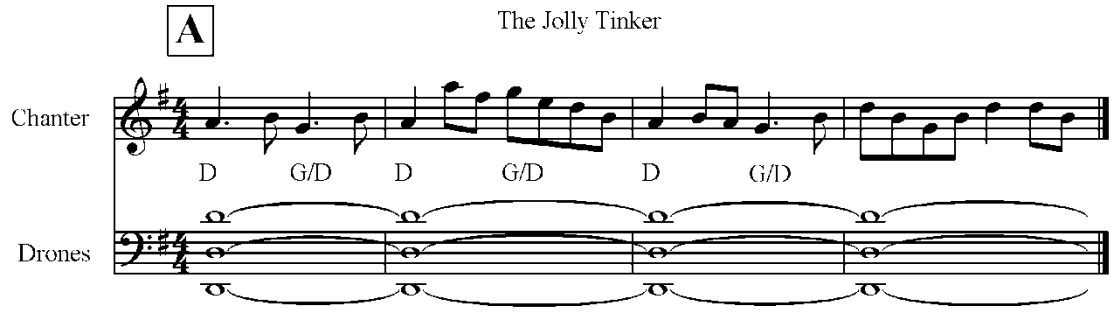


Figure 3.25 Drone based approach to harmonising 'The Jolly Tinker.'

Some traditional musicians without theoretical knowledge would say this tune is in D, rather than A minor or A Dorian.[28] This may be because when fiddlers play it they might be naturally inclined to sound the open *D* string with the note *A*. The following

[28] Traditional musicians often refer to tunes as being minor or major without distinguishing between Dorian and Aeolian or Ionian and Mixolydian. Others may just say the root of the mode/scale without saying minor, major, Dorian etc. Those with the most thorough knowledge of the modal system are likely to specify between Dorian, Aeolian and Mixolydian tunes yet still use the term 'major' instead of Ionian.

example is one possible approach a fiddler might take with regards to using the open strings to add a droning effect.

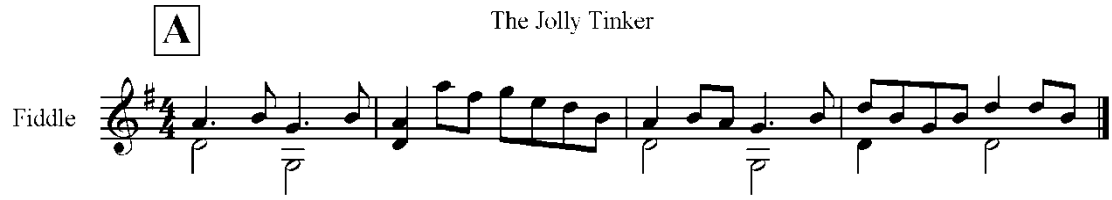


Figure 3.26 Fiddle droning on an A rooted tune.

For a melody in A Ionian, the presence of a *C-sharp* as a 3rd and *G-sharp* as a 7th creates even more tension with the *D* drone. It would be more common for a piper to turn the drones off for a tune like this, but many pipers will leave them on.

In A Ionian tunes such as 'Colonel Rodney's' the drones create a tension and release effect similar to the other examples, where the tension comes at the start of a phrase and resolves momentarily at the end of the phrase.

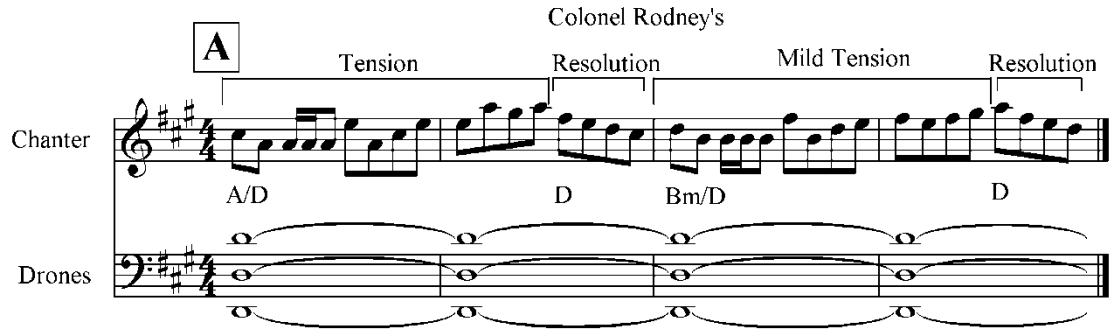


Figure 3.27 Drone based approach to harmonising 'Colonel Rodney's.'

In the first bar of 'Colonel Rodney's,' the drone and the implied harmony of the A major arpeggio create an unresolved tension because neither the *C-sharp* nor the *E* in the melody resolves to a *D*. It would be rare to find an accompanist who would choose to harmonise the first bar with any chord other than A major.

In summary, these examples demonstrate how the drones of the pipes create a natural and distinct harmonic world for traditional music that differs from standard classical or popular music forms of harmony.

3.1.3.5 The regulators

The harmonic sound-world created by the drones was further enhanced by the addition of regulators to the pipes. When they are combined with the drones they create some distinctive harmonic effects. The most commonly used full chords on the pipes occur when all the drones are used and the regulators are played with the wrist. This enables the following chords to be formed.

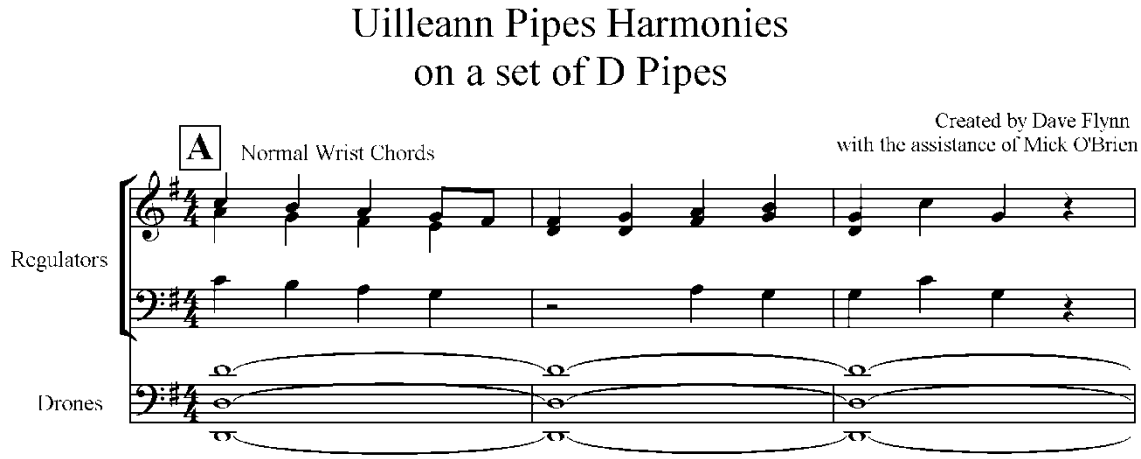


Figure 3.28 Uilleann Pipes wrist chords.

These chords are usually used sparingly, with one chord being held for a while before moving to another. The following example is a typical use of the regulators in a D Mixolydian tune.[29]

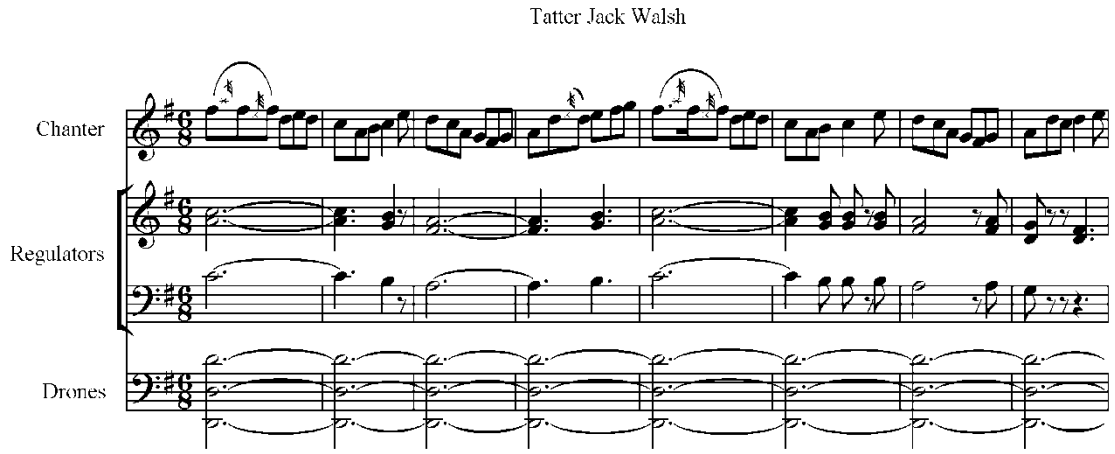
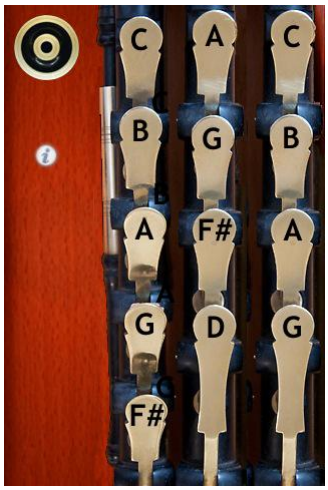


Figure 3.29 Uilleann Pipes wrist chords applied to 'Tatter Jack Walsh.'

[29] This is my own imagined example based on my experience of listening to pipers.

The stepwise movement of the regulators is completely logical when the technicalities of the regulators are taken into account.



The diagram on the left shows the layout of the regulators and the notes of each button.[30] When using the wrist to play these chords it is quite difficult to skip smoothly and with accuracy from the *CAC* chord straight to the *AF-sharpA* chord or the *GDG* chord. Therefore, it is logical to go stepwise to the *BGB* chord.

Figure 3.30 Regulator layout.

This technicality of the regulators has resulted in some distinct harmonic progressions occurring naturally to pipers. In the previous example, the drones and regulators combine to create the following chords.

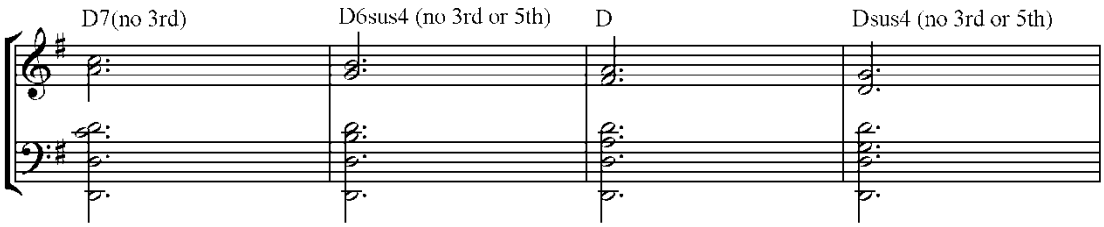


Figure 3.31 Typical Uilleann Pipes chords.

What is interesting about these four chords is that only the third one is a conventional triadic chord. The other three are ambiguous. If one considers them all to be rooted in D then none of them contain a 3rd. The second and fourth chords do not have a 5th either. These two ambiguous chords could be considered to be G major chords in second inversion (IVc in classical music terms), but I prefer to relate them to the drone.

[30] Diagram taken from *Trad Lessons.* http://www.tradlessons.com/4QSWiFi.html (accessed May 19, 2010).

The natural occurrence of chords like this contributes greatly to the distinct sound of modern *uilleann* piping. This has, in turn, had an influence on the way other musicians have approached harmonising traditional music. It is quite common for guitarists, bouzouki players, pianists, concertina players and accordionists to use similar chords to the ones in the 'Tatter Jack Walsh' example, rather than using more 'conventional' harmonic progressions. Prominent musicians who use this modal drone-based approach on accompanying instruments include the bouzouki player Dónal Lunny, guitarist Dennis Cahill and pianist Peadar Ó Riada. To my ears, this is the most successful form of accompaniment in traditional music because it emphasises the modal nature of the music and gives it a distinctive sense of harmony separate from other forms of music.

The limits of the regulators mean that the four chords above are commonly used no matter what the mode of the tune is. This has an unusual effect on tunes that are rooted in A.

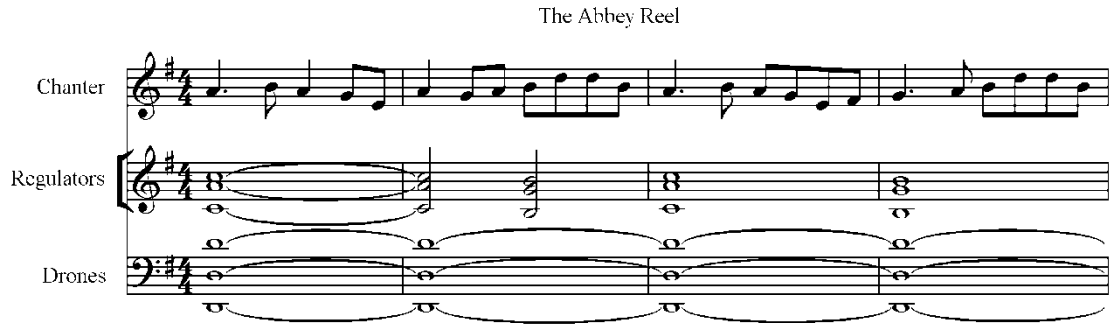


Figure 3.32 Example of Uilleann Pipes wrist chords applied to 'The Abbey Reel.'

The example above is a typical use of the regulators on a *reel* rooted in A such as 'The Abbey Reel'. The actual mode of this tune is ambiguous as there is no use of the 3rd; however the use of the notes *G-natural* and *F-sharp* suggest A Dorian. This all becomes irrelevant with the use of the drones and regulators. The *CAC* regulator chord would seem to confirm the mode as A Dorian; however the addition of the drones moves the harmonic emphasis towards D Mixolydian. So this ambiguity explains why some

musicians would say this tune is in A minor, whereas others might consider it to be in D.

3.1.3.6 Summary

The technicalities of the *uilleann* pipes have created a distinctive harmonic sound-world for traditional music. This sound-world is relatively simple but quite different to conventional classical or popular music harmonic principles. There is an ambiguity to it that helps to give an unresolved character to the music. I have been strongly influenced by this ambiguous sound-world in my compositions. I discuss this influence in Chapter 4.

3.1.4 Traditional Instruments in Contemporary Concert Music

The engagement between composers working in the field of notated concert music with traditional Irish musicians has been little documented. Perhaps the main reason for this is that there have been few such collaborations of note until relatively recently. This discussion centres on how traditional musicians and instruments have been integrated into newly composed works. Since this is a comparative study in relation to my own works there is a focus on works which utilise the main traditional instruments I have used in the works I have submitted with this dissertation: the *uilleann* pipes, fiddle, Irish flute and tin whistle. In Appendix IV I present a representative list of Irish concert works which feature all the main traditional instruments.

3.1.4.1 Uilleann pipes

In the list of compositions which feature traditional musicians in Appendix IV, thirty nine of these feature the *uilleann* pipes. The extent to which the pipes have been used in these works has varied considerably.

In 1973, Roger Doyle composed *Ceol Sidhe* for *uilleann* pipes, tin whistle and Irish harp. This work was the first significant piece composed by a contemporary classical composer exclusively for traditional musicians. Peter Browne was the original piper for the piece and he explained the work's genesis to me.

> The Oireachtas[31] had a competition for written music and Roger wanted to put a piece in and he thought he'd have pipes. So he called to me and asked could he see them. So he came to the house and I showed him the possibilities of the pipes, you've the chanter, you've two octaves, you've the regulators, you've the drones and he said ''That's great thanks a lot, if I write a piece will you play it?'' and I said ''I'll try''.
>
> So there's an interesting thing for a start, knowing the possibilities of an instrument from the start and then having a particular idiomatic take on it, which is all I had, is miles apart. So he came back with this yoke right which if you knew everything about rhythm, everything about tonality you couldn't do it. So he would have you playing 'da da da dum' while you were doing counter-rhythms with the regulators and it was all out of key like disharmony, atonal sort of stuff. The drones, he didn't want three *D's*, he wanted one in *D*, one in *C-sharp* and one in *E-flat*. So he was going for some extremity. You'd want to have full command of being able to read written music. So he showed me and I said 'Look, in a million years, I couldn't do it.' So he scaled it back quite considerably.
>
> (Browne interview).

[31] The *Oireachtas* is an annual festival of Irish culture.

Doyle's motivation for writing the piece was not really the *Oireachtas* competition; he just liked the idea of composing a piece for the selected instruments. 'I had no interest in traditional music then in 1973. I just thought: what an interesting combination of instruments.' (Interview with Roger Doyle, June 1, 2010).

Due to Doyle's admitted lack of interest in traditional music, 'Ceol Sidhe' does not bear much resemblance to traditional music and this did not gain favour with the *Oireachtas* adjudicator. 'The official printed comment from the *Oireachtas* was that the music was "not in the Gaelic mode" and was unplayable.'(*Ibid.*).

In retrospect this judgment was misguided. The piece certainly is playable, as evidenced by the subsequently released recording[32]. The recording process was not without its difficulties.

> Jolyon (Jackson) was the whistle, I was the pipes and Gráinne Yeats was the harp and there's a specific point in it where she's playing a 4/4 and in the middle of that I've to come in with a 6/8 and I just couldn't get it. So when you hear the recording, you'll actually hear the biro going on the music stand, going (taps a 6/8 rhythm) and then you'll hear (sings 6/8 melody), so that's the only way I could get that start of the thing. I couldn't start a 6/8 against her 4/4. So finally you get a take that works. I know she was getting weary. It was cold and the many retakes occasioned for the most part by myself. So finally there's a great take and it finishes off with her running the fingers up the full harp and next minute you see the tape it finishes and the tape just shot out, the end of the reel and they said ''God we got a good one and we'll have to do it again'' and she said, more or less ''We are NOT doing it again.'' So on the recording you hear this thing fading out. Which they got away with, it's fine.
>
> (Browne interview).

It was obvious from speaking to Browne that it was a great challenge for him and the other musicians to perform this work. Doyle was breaking new ground in asking traditional musicians to perform a work which required them to play in a way they were not accustomed to. However in the end it was a rewarding experience which Browne now views in a new light.

> I heard it again there recently and it is technically skilled because I actually met him again after twenty years and we were actually talking about doing it again but I would still be nervous about getting it right because there was a lot of dexterity involved in it….At the time I would have been callow, to me it was just something that you were asked to do and

[32] Browne, Peter, Jolyon Jackson, and Gráinne Yeats: "Ceol Sidhe." *Thalia/Oizzo No.* Comp. Roger Doyle. SIDO 012CD. 2002. Compact Disc.

> you did it because you were asked, but I now realise having listened to it that it's actually a very interesting, pleasant piece of music.
>
> (Browne interview).

Doyle has since composed a number of other works featuring traditional musicians, the most notable being his collaborations with another *uilleann* piper, Brian Ó hUiginn. Doyle explained to me his reasons for wishing to compose more music for the *uilleann* pipes and how that culminated in *Under the Green Time* (1995), a work for *uilleann* pipes, low whistle and electronics.

> I had a commission from the Santa Monica Museum of Art who wanted me to 'look at my roots', so I thought about using the pipes as a challenge. Without the openness and uniqueness of individual musicians none of this would be possible - these collaborations are an absolute joy for me as coaxer and editor. The programme note for 'Under The Green Time' is: An Image Of Ireland Without The Sweet Celtic Wrapping.
>
> (Doyle interview).

The use of the pipes in *Under the Green Time* is certainly unconventional and without any 'Sweet Celtic Wrapping'. Doyle recorded Ó hUiginn playing microtonal bends, ornaments and other characteristic piping sounds, outside of the usual tune-based context in which they might be found. Doyle recorded about an hour's worth of material in this fashion and then created the piece by editing and combining this material with electronically manipulated recordings of him typing on a typewriter. Doyle has never created a score for the piece, however Ó hUiginn has remarkably learnt the piece by ear from the recording Doyle produced and he is now able to perform it in concert. According to Doyle, Ó hUiginn produced his own short-hand score from the recording in order to aid this process.[33]

Doyle worked again with Ó hUiginn on *Tradarr* (1999) for *uilleann pipes, Seannós* voice and wind ensemble. Doyle's use of the pipes is more conventional here in that they are principally played melodically. Doyle explained the genesis of this piece to me.

> It was because of hearing 'Under The Green Time' on a CMC promotional CD that the Netherlands Wind Ensemble invited me to work with them. Brian Ó hUiginn came out to

[33] This information was obtained from a short video found on *Roger Doyle's Official Web site.* http://www.rogerdoyle.com (accessed June 14, 2010).and also from a brief informal discussion I had with Doyle on June 11, 2010.

> my studio many times before I scored the piece and went to Holland for the Dutch tour in 1999. I had a chord progression going and he started to play 'An Buachaillín Bán' against it and it worked like magic. Couldn't have happened otherwise.
>
> (Doyle interview).

The following excerpt demonstrates the relative simplicity of the pipes part, although the lack of a clear melody in the part is quite at odds with traditional music. The repetition of the single *E* note with slight ornamentation bears more of a relation to minimalism.

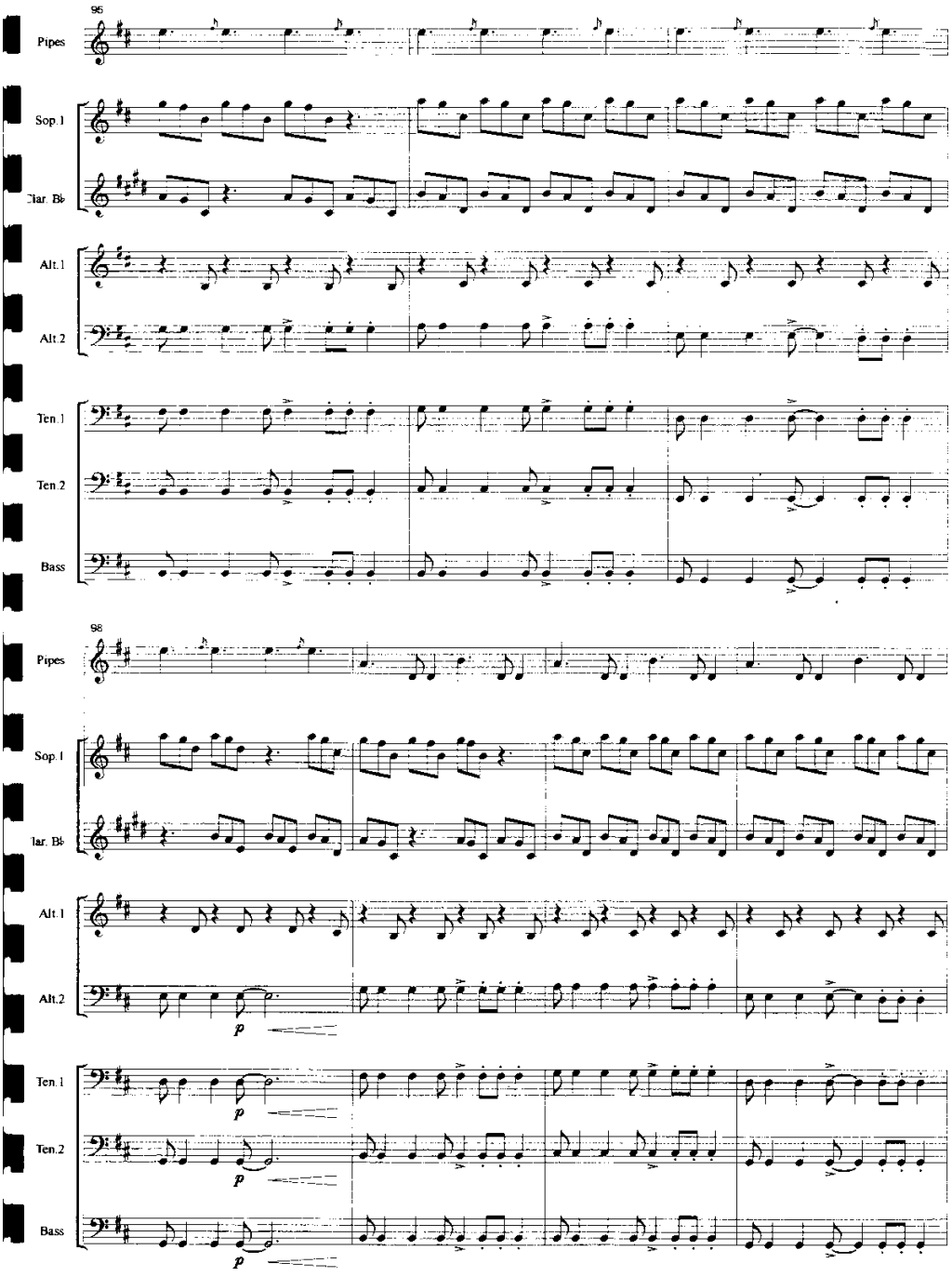


Figure 3.33 Doyle, *Tradarr*, 95-101.

Doyle also briefly uses the pipes in his six hour electro-acoustic *Babel* (1981, 1983-86 and 1988-1999).[34] He incorporated outtakes from the recordings he made for *Under the Green Time* into this work.

Shaun Davey's (b.1948) *The Brendan Voyage* (1979) was the next major work to feature the *uilleann* pipes. This work is ground-breaking in its integration of the *uilleann* pipes of Liam O'Flynn with a full symphonic orchestra. Davey followed *The Brendan Voyage* with a number of large scale works in a similar vein including *The Relief of Derry Symphony* (1990), *Concerto for Uilleann* Pipes (1986) and *Granuaille* (1985). Whilst Davey himself acknowledges that the musical language of these works is not considered to be ground-breaking in the contemporary classical music world,[35] Davey's use of the pipes in a large orchestral context certainly was ground-breaking. Davey credits O'Flynn for giving him the belief to compose the first ever *concerto* for *uilleann* pipes and orchestra.

> Liam is the lynch pin of my career in the sense that when I want to write music for the uilleann pipes I went to him, because I knew him from Planxty, and admired his playing a lot. And if he said no, he didn't want to pursue the idea, I probably would never have tried to write The Brendan Voyage. The fact is he said yes, and we've remained collaborators ever since.
>
> (Harper, Colin. "Of Wings and Prayers. Article originally published in The Irish Times Newspaper." *Shaun Davey's Official Web site.* 1994. http://www.shaundavey.com/interview.htm (accessed June 21, 2010)).

The Brendan Voyage's influence can be felt in a number of other large scale works featuring the *uilleann* pipes including Neil Martin's *No Tongue Can Tell* (2003) and Robinson McClellan's *Flight of the Earls: Concerto for Uilleann Pipes* (2007).

The only works from 1980's in the database of the *Contemporary Music Centre* to feature *uilleann* pipes are Davey's *Granuaille*, Declan Townsend's (b.1938) *Songs of Farewell* (1989) for *uilleann* pipes and orchestra and two works by Raymond Deane, *Thresholds* (1987) for symphony orchestra and his incidental music for the film

[34] Doyle, Roger: *Babel; KBBL*. SIDO 003-007. 1999. Compact Discs (5).
[35] Harper, Colin. "Of Wings and Prayers. Article originally published in The Irish Times Newspaper." *Shaun Davey's Official Web site.* 1994. http://www.shaundavey.com/interview.htm (accessed June 21, 2010).

Mórchuid Cloch is Gannchuid Cré (1987), which is scored for concertina, *uilleann* pipes, percussion, two harps, guitar, mandolin and chamber orchestra.[36]

The function of *Mórchuid Cloch is Gannchuid Cré* (1987) as film music has meant it has never been performed in concert.

> The music has never been performed separately (to the film), but actually I composed it as a "suite" of separate pieces in the hope that it might be detached from the film. So it's potentially a concert work……it's the work in which I most consistently and purposefully used traditional instruments.
>
> (Raymond Deane email correspondence, July 31, 2010).

In the following example the *uilleann* pipes part is integrated into the ensemble texture, it is placed below the flute and trumpet on the third stave of the score.

[36] Davey's *Concerto for Uilleann Pipes* (1986) is not in the CMC database (as of November 9 2010), but it is held in the library. Charlie Lennon's *Island Wedding Suite* (1990) and *Emigrant Suite* (1985) both feature the pipes. Lennon is not registered with the CMC.

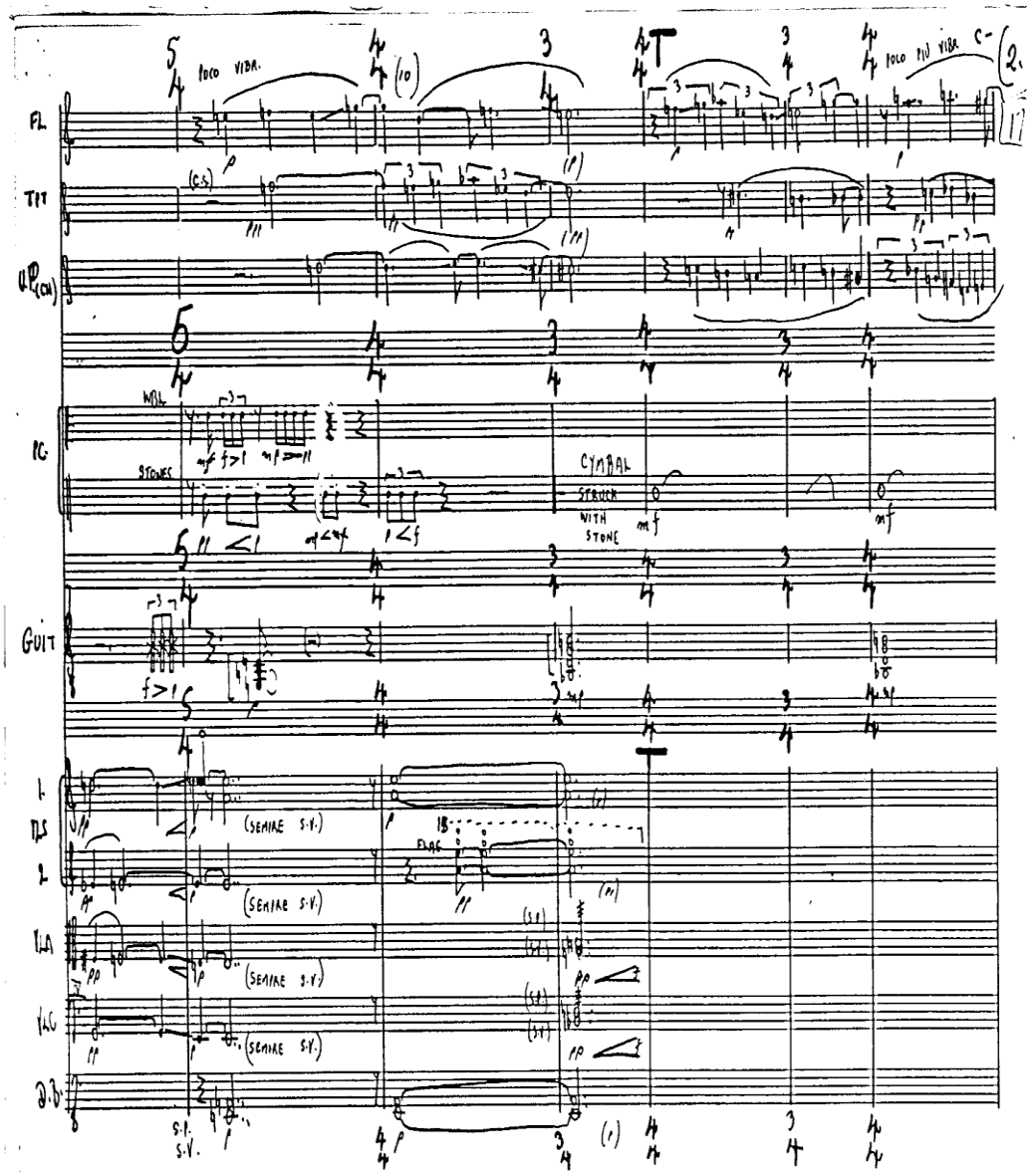


Figure 3.34 Deane, *Mórchuid Cloch is Gannchuid Cré*, 8-14.

In *Thresholds*, the piper is reduced to just sounding the drones of the instrument, as can be seen in the following extract from the score. (The pipes part is the bottom stave).

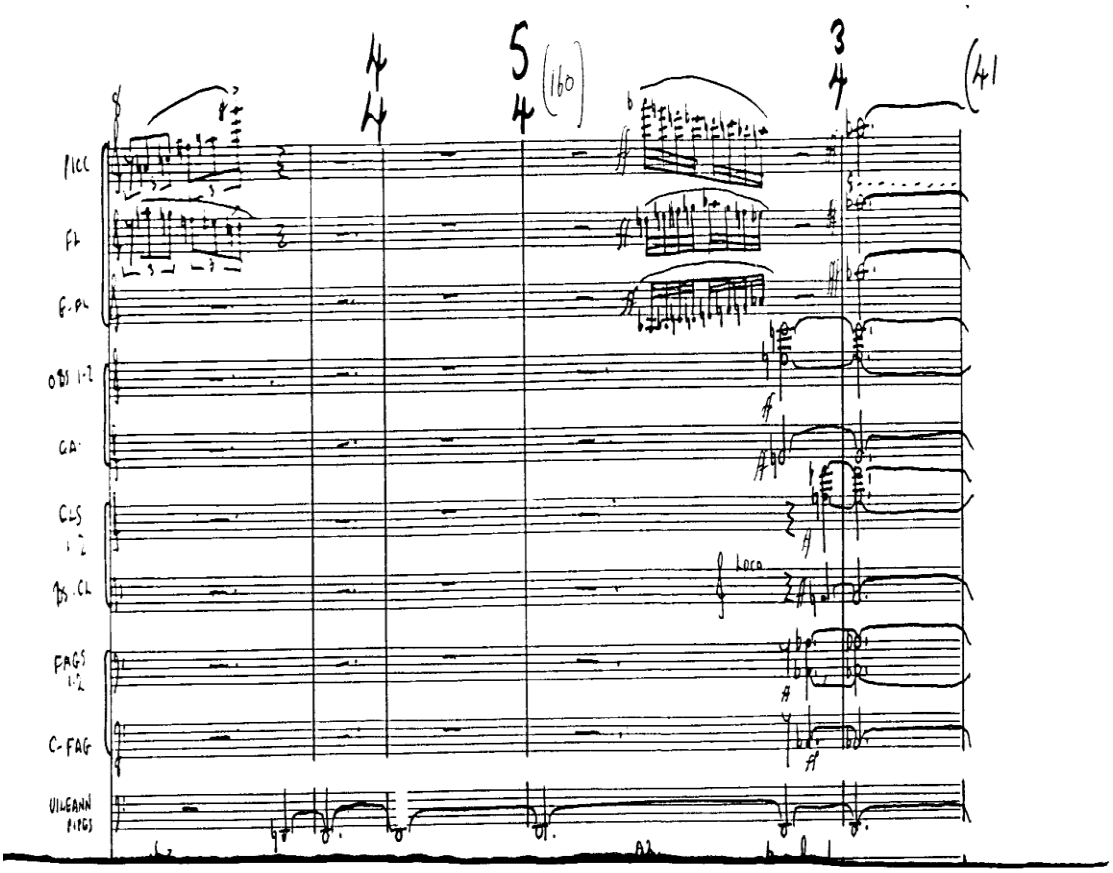


Figure 3.35 Deane, *Thresholds*, 157-161.

When I asked Deane about his use of pipes in *Thresholds* he had this to say:

> Thresholds was written 23 or 24 years ago, as far as I can recall. Not long before that - in 1985 - I had given a talk on my work in the University of Oldenburg, where I lived at the time. One of the students commented on the presence of pedal-points in certain pieces, and asked me "was this the influence of listening to the Irish pipes?" I had certainly never thought of it in this way, but I told her that she might well be right. I thought about this a lot and rather liked the idea, and when it came to writing 'Thresholds' and I found myself using pedal-points, it seemed natural to use the drone of the pipes to bring out the analogy. With hindsight I think this was both curiously subjective and rather literal-minded, not to say uneconomical. I think I also had the idea that it would be nice to introduce a sound I associated with rural Ireland into a piece composed for the Dublin millennium - rooting the city in the country, or something like that.
>
> (*Ibid.*.).

The 1990's saw a burst in activity regarding the use of the *uilleann* pipes in new compositions. In addition to Doyle's *Under the Green Time* and *Tradarr*, large scale works including Paul Hayes' (b.1951) *The Wounds of Art* (1990), Deirdre Gribbin's (b.1967) *His Eyes* (1993) and Stephen Gardner's (b.1958) *Crécht Mór* (1996) contain

parts for the *uilleann* pipes. In the Hayes and Gardner pieces the pipes are not used extensively. Gribbin's *His Eyes* contains an extensive part for the *uilleann* pipes which is quite removed from the instrument's usual use in traditional music. Gribbin described the effect the pipes had on the composition.

> The limitations of the uilleann pipes governed to a large extent the structure of the piece. The instrument has a range of less than two octaves, it is not chromatic and outside the white notes only Eb and F# are possible. It is not possible to adjust dynamic levels. It is only loud.
>
> (Gribbin, Deirdre: *His Eyes performance notes.* Belfast: Deirdre Gribbin Publications, 1993).

Gribbin's understanding of the pipes differs from my own description of the technical possibilities of the instrument in Chapter 3.1.1. The most obvious discrepancy is the fact that the note *C-sharp* is technically possible with relative ease on the pipes, whereas Gribbin understands that only *E-flat* and *F-sharp* are possible outside of the white notes *C D E F G A B.*

Technicalities aside, the pipes are utilised in an unusual way in this piece. The first major difference between the use of the pipes in this work and their usual use occurs in the opening bars whereby the piper sounds a number of fragmentary phrases, rather than any continuous stream of melody or strong rhythmic pattern.

It is unidiomatic for a piper to regularly start and stop as Gribbin asks and for that reason alone this is quite a challenging part. Gribbin also makes considerable indications as to where the piper should use *rolls* and *crans*. Since pipers also tend to spontaneously add ornaments, it would be challenging for a piper, with no background in classical music and sight-reading, to perform this piece. Neil Martin's training as a classical cellist was therefore of undoubted benefit in helping him perform the pipes part in the premiere of the piece.The opening bars of the pipes part illustrate both the start/stop nature of the part and specified use of ornamentation.

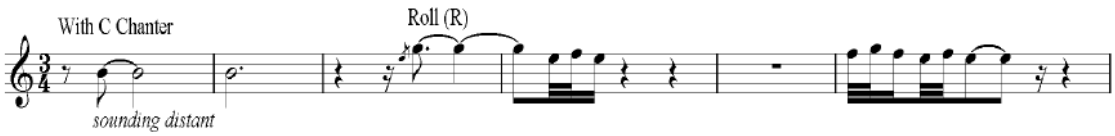


Figure 3.36 Gribbin, *His Eyes,* 1-6, Uilleann pipes part.

Gribbin specifies the use of a *C* chanter. This is the only example I have found, other than Davey's *The Brendan* Voyage and *The Pilgrim,* where a composer asks for a chanter other than the concert *D*.[37] Gribbin also places the piper 'off-stage', this would be an extremely rare experience for any piper.

The harmonic language of the piece is also quite unusual for a piper to adapt to. It is the most atonal, dissonant work of all the works I have found which feature the *uilleann* pipes. The unusual nature of the piece impressed the writer Bob Gilmore.

> It's one of the strangest pieces I've ever heard – utterly compelling and magical, with plaintive fragments of melody from the pipes against the banging and ticking of the percussion. It's experimental, profoundly Irish, and quite different in tone and content from any music I can think of.
>
> (Gilmore, Bob: "Unity of Being – The Music of Deirdre Gribbin." Edited by Toner Quinn. *The Journal of Music in Ireland*, May/June 2005).

Two other major works from the 1990's which feature the *uilleann* pipes are Gerry Murphy's (b.1947) *Dialects* (1993-1994) and Michael Holohan's *The Dream of Aengus* (1997).

Murphy's *Dialects*, is significant in the fact that it presents the *uilleann* pipes in an orchestral context that is, for the most part, quite different to Davey's use of the pipes. There are several references to traditional music styles but the melodic material given to the pipes is often not particularly idiomatic of traditional music. The writing is infused with chromaticism and the orchestral palette, though often tonal, is decidedly more dissonant than that of *The Brendan Voyage*. The chromaticism in the pipes in bars 17-24 is quite striking for its unconventionality in relation to traditional piping.

[37] Davey asks for *D* and *C* chanters in *The Brendan Voyage* and *D*, *C* and *B-flat* chanters in *The Pilgrim.*

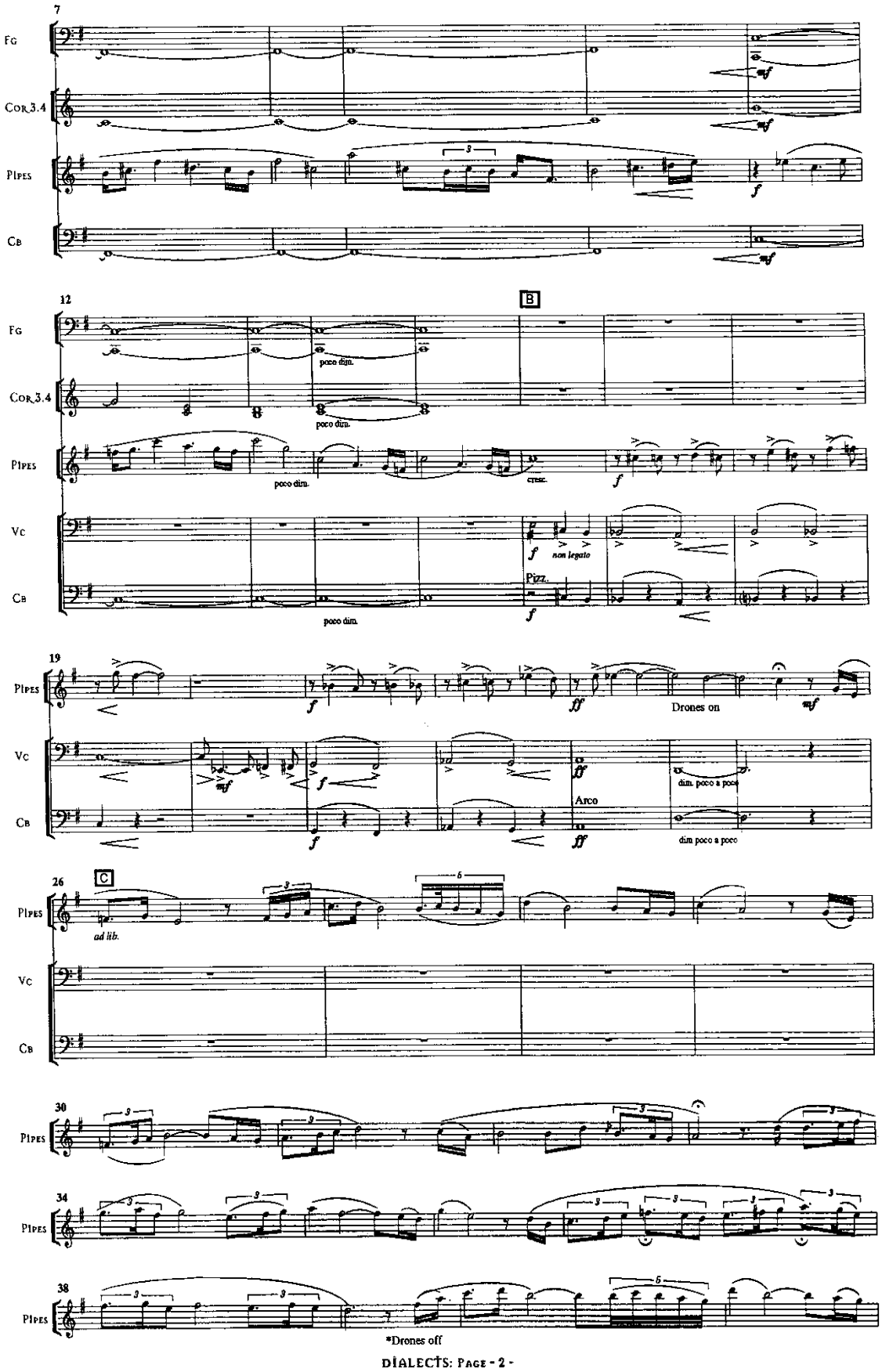


Figure 3.37 Murphy, *Dialects*, 7-41.

This dissonance and chromaticism was a very intentional aspect of Murphy's approach, although the limitations of the pipes meant the piece is perhaps not as dissonant or chromatic as Murphy would have liked.

> The complexity of the instrument presented many difficult problems in the writing of the piece. Gerry's aim was to write difficult music in keys which were foreign to the instrument, leading to many problems in chromatic runs. Some of the problems being the severe difficulty in the cross fingering of the notes and also the fact that Ab did not actually exist. This led to a collaboration between composer and soloist especially due to the fact that Gerry did not play the pipes. According to him
>
> "I tried to play the pipes once, but I decided that life was too short…"
>
> Gerry also spoke about the discussions they had
>
> "David (Downes)[38] would come around every few weeks when I had a bit written and sometimes he'd say 'well I can play that bit but it'd sound no good', he'd play the passage and I'd ask is that the best you can do, he'd say 'yes' so out it would go."
>
> Gerry frequently had to recast several parts because they were unplayable. He finally decided that the pipes sounded best in a traditional mood, so he used a lot of *jig* and *reel* time.
>
> (Kelly, Elaine: *Contemporary Music Project: Gerry Murphy* (BA (Mus) 4th Year Paper). Waterford: Waterford Institute of Technology:7).

Michael Holohan has written a number of works featuring the *uilleann* pipes, indeed he describes them as 'possibly my favourite instrument'.[39] His main collaborator in this regard is Mick O'Brien. Some of these works, such as *The Road to Lough Swilly* (2001) and *An Fear as an Fine Gall* (2003) rarely deviate from traditional approaches to melody and rhythm, as in the following example, which comes from the string orchestra version of *The Road to Lough Swilly*.

[38] David Downes is the piper who premiered *Dialects*.
[39] Grimes, Jonathan: "An Interview with Michael Holohan." *Contemporary Music Centre Web site.* 2004.

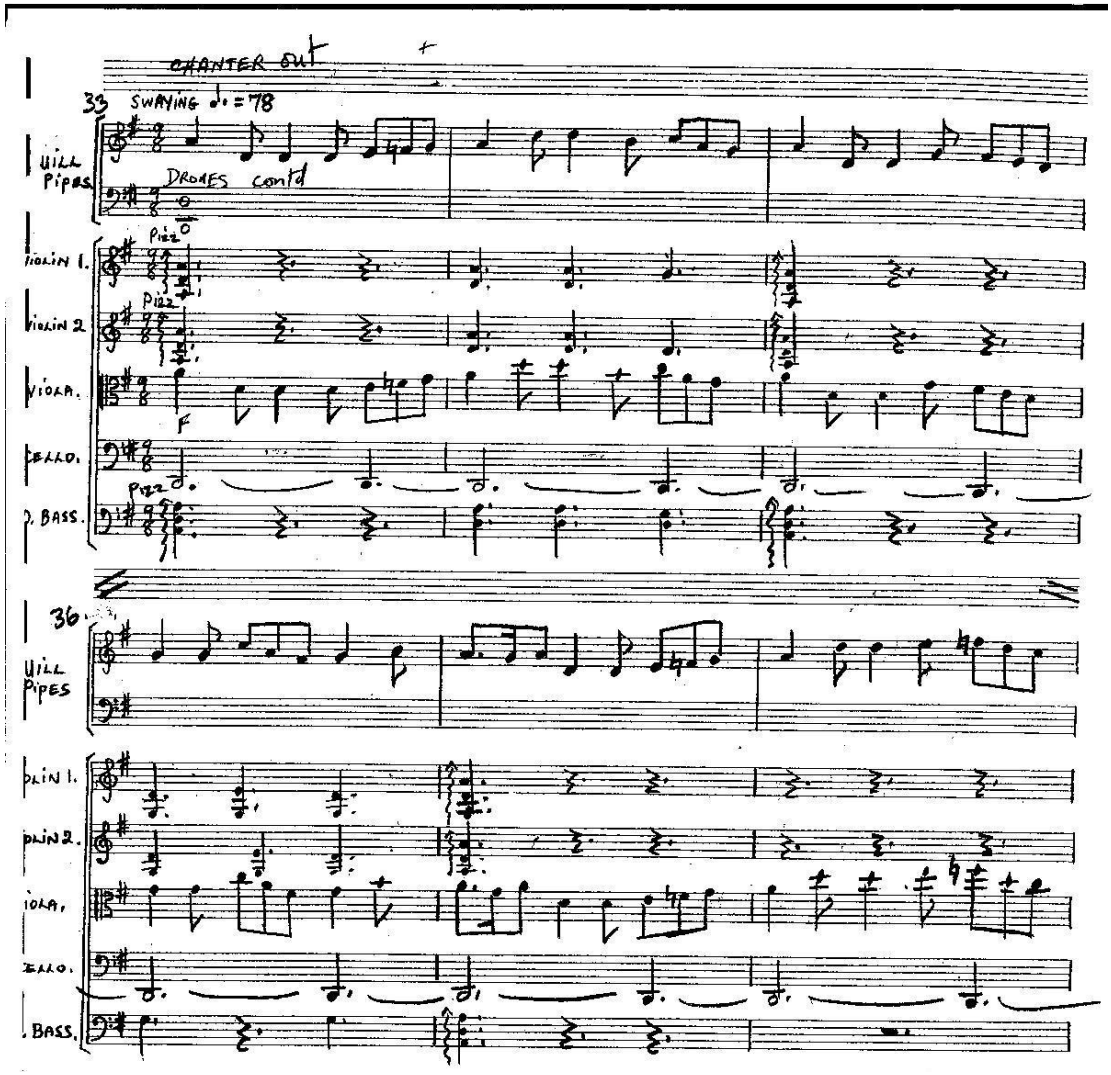


Figure 3.38 Holohan, *The Road to Lough Swilly*, 33-38.

The melody in the pipes' part is in a typical *hop jig* rhythm and it is rooted in *D* with flexibility around the notes *F* and *F-sharp*. These are very characteristic aspects of traditional music. One notable exception to the use of typical characteristics like these is the section of *The Road to Lough Swilly* called 'The Running Beast' which is in the metre of 7/8.

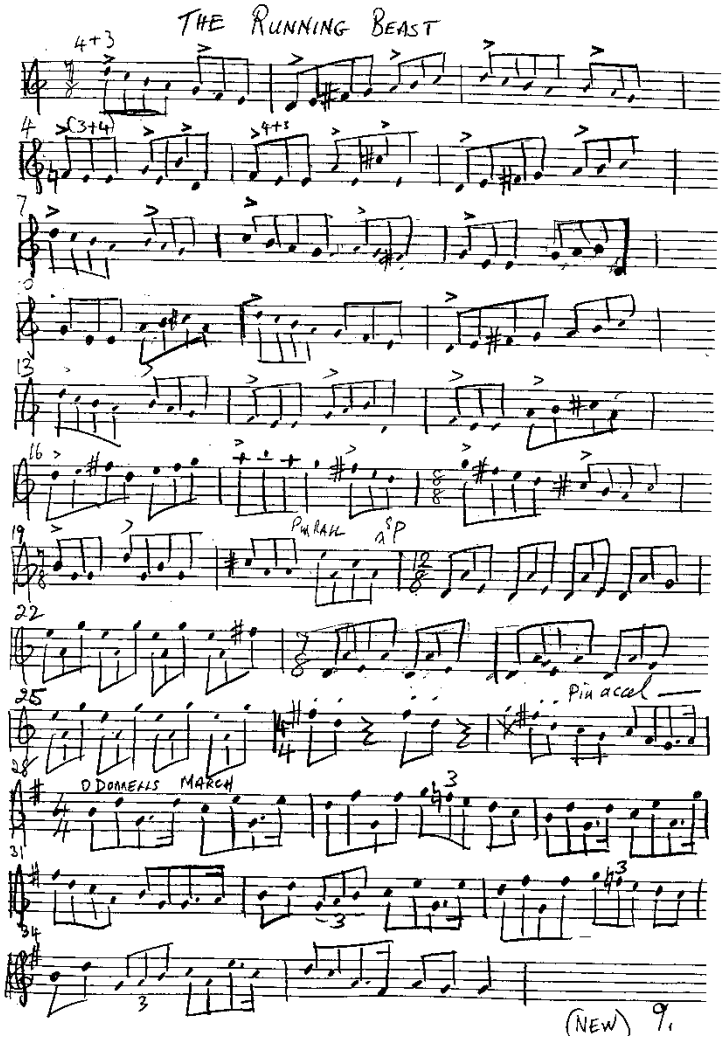


Figure 3.39 Holohan, 'The Running Beast' from *The Road to Lough Swilly,* 1-35.

The 7/8 metre is not a general feature of traditional music. Mick O'Brien explained to me how he found this to be a challenging part of the piece because of that fact.

> The battle scene ('The Running Beast') was a 7/8 piece, not generally played in Irish music. That was a challenge to learn that off by heart because it doesn't fall into any pre-determined box that I have in my head…because it's not something we're used to listening to I have to break it down and get the structure in my head. We're used to listening to jigs and reels but we know the structure already, it's going to be an eight bar, eight bar and eight bar or similar, some *set-dance*s have maybe twelve bars or fourteen bars or sixteen bars at the end but still it's in the same genre, but this one was different.
>
> (Interview with Mick O'Brien, March 6, 2009).

The large scale work *The Lost Land* (1996) also has a significant part for the *uilleann* pipes, first performed by Michael McGoldrick (b.1971), however again the music does not deviate considerably from traditional approaches.

The Dream of Aengus (1997) contains a less conventional part for *uilleann* pipes in that it features the instrument as part of a chamber ensemble rather than as a solo

instrument. Holohan scores the pipes with voice, flute, French horn, violin, percussion and two bronze age horns. This unique instrumentation is utilised to create some very interesting musical colours. There is pointillistic use of the instruments at times which means the piper often has to play short phrases or individual notes in isolation. This is a considerable change from the melodic stream that is idiomatic of the pipes and for this reason this piece is significant within the canon of contemporary concert works which utilise the pipes.

Two other major works of Holohan's to feature the pipes are the collaboration with the poet Paul Durkin, *A Snail in My Prime* (2000) and *The Mass of Fire* (1990 rev. 1995). *A Snail in My Prime* was conceived as a radio programme for RTÉ, it featured Peter Browne on the pipes along with Bronze Age horns and bells, Iron Age trumpa créda, bodhrán, cello, marimba, flute and voice. In the original version of *The Mass of Fire*, Holohan featured a traditional music ensemble consisting of four singers, pipes, two flutes, concertina and bronze age horns, alongside a full orchestra and choir. The revised version omits the parts for the traditional musicians.

Finally with regards the use of the pipes by other contemporary Irish composers, mention must be given to the work of Ronan Guilfoyle (b. 1958). Guilfoyle is one of the leading jazz musicians in Ireland. He has also written many works for contemporary classical performers, so some consideration must be given to the works on his album *Exit*[40] such as 'Foundation Garment' (2003) which are scored for *uilleann* pipes, saxophone, guitar, bass guitar and percussion. This is music which defies easy categorisation, but the composer's own description of the music as 'contemporary jazz blended with Irish traditional music'[41] would seem to confirm my opinion that these pieces are more in the genre of contemporary jazz than contemporary classical music. The pipes are used in a very traditional way in these pieces; they mainly play traditional

[40] Guilfoyle, Ronan: *Ronan Guilfoyle's Lingua Franca – Exit*. Pmp recordings. 2003. Compact disc.
[41] *Ronan Guilfoyle's Official Web site.* http://www.ronanguilfoyle.com/ (accessed June 15, 2010).

tunes around which the jazz ensemble improvises, whilst obviously referencing the source tunes.

The first major work after Doyle's *Ceol Sidhe* to incorporate the *uilleann* pipes in an experimental music context was *Roaratorio: An Irish Circus on Finnegan's Wake* (1979) by the American composer John Cage (1912-1992). In *Roaratorio*, Cage utilised the talents of six of Ireland's leading traditional musicians of the time, singer Joe Heaney (1919-1984), flautist Matt Molloy, *bodhrán* playing father and son Peadar and Mel Mercier, fiddler Paddy Glackin and piper Séamus Ennis.

The use of the pipes in this work is similar to the use of all the other instruments. Paddy Glackin explained the process Cage used to put the music together.

> I got a phone call one day from this fella at work and he said 'Hi, I'm John Cage' and I said 'Howya', I'd never heard of him! So he said 'I'm composing this piece of music and I'd like you to play in it', so I said 'right, grand'. So he said 'Can I come and record you?' and I said 'Well listen, you're going to have to come down to Clare to record me,' cos I was going down to the Willie Clancy Week. So he said 'Where's that?' and I said 'It's on the West Coast of Ireland' so I thought I was getting rid of him to be honest with you and he said 'Well I'll come down so'. So we came out of the class and this guy came up said 'Hi, I'm John Cage' so I said 'Howya, grand'. He say's 'I spoke to you over the phone last week' I said 'Yes' and he says 'Can I record you now?'. So, to get rid of him I said 'Look, ok I'll do it'. So we went back and I recorded twenty minutes cos he said 'Well I just want 20 minutes of music exactly' and I said 'yeah, grand'. So he had a stop-watch and I'd play away and stop and he'd say 'Right, you've got seventeen minutes to give me.' So we worked our way through it and when we were finished he said to me 'When I get this finished would you be available to come and perform this piece of music in the Pompidou Centre in Paris.' I said 'Yeah, talk to you again'. I didn't believe him and within three weeks I was off in the Pompidou Centre doing this piece. Séamus Ennis was supposed to do it, he couldn't so Liam O'Flynn did it. Matt Molloy was supposed to do it, he couldn't do it so Séamus Tansey did it, the two Merciers (Peadar and Mel) and the great Joe Heaney and that was it. It was an extraordinary thing but I remember when we came in thinking 'Jesus, this guy is absolutely mad.' It didn't make any sense to me whatsoever what he was doing and the first time, I remember when we did it. We did it in Toronto. I remember looking at Liam, I said 'What are we doing here?', but after a while I think the whole thing began to make a lot of sense and we loved doing it and we did it all over the world and then Merce Cunningham became involved and put dance to it and that really went well. So the whole sort of thing of the coming together of dance, this 'chance operation' musically, something that hadn't been rehearsed and then it goes on the stage. It was extraordinary, it was great fun and he was an extraordinary man to know, John Cage. I got to know him very, very well and he had a deep, deep understanding of what our music was all about. He could see below the surface of it.
>
> (Glackin interview).

Whilst Séamus Ennis was not available for the live performances, he was the original piper on Cage's recording and Cage no doubt used the same process of recording Ennis'

playing as he did with Glackin. He then used these recordings and incorporated them into the extraordinary sound collage that makes up the *Roaratorio*.

The pipes are played no differently in this work as to how they would be in traditional music, however the context into which the pipes are placed is particularly unusual and in the wider world of music this work was considered particularly ground-breaking. Cage received the prestigious *Carl Sczuka Prize for Radio Art* for *Roaratorio* in 1979. In his acceptance speech, Cage described his use of elements from traditional music.

> All along I had in the back of my mind the plan to make a circus of Irish traditional music. When following Helen Schneyer's advice I tried to get in touch with Joe Heaney, "the King", as she said, "of Irish singers. John Fullemann and his wife Monika and I went to Norwich in England in late April of this year to hear him sing in a pub. It was a delightful experience. He is a marvelous singer and excellent for the part of HCE, the aging father in *Finnegans Wake*. I tried to explain my project to him though I knew very little about it and happily he agreed to come later to Paris, to IRCAM, to be a part of it with his singing of songs, many of them in Gaelic. He also advised me to include music for fiddle, flute, uilleann pipes, and *bodhrán* drum and gave me the name of Séamus Ennis, a pipes player, who lives in a trailer on the outskirts of a village north of Dublin.
>
> Ciarán MacMathuna, in charge of traditional music for the Irish Radio, gave us a list of Irish musicians and his first, second and third choices. He agreed with Joe Heaney's choice of Séamus Ennis for the pipes. He suggested Paddy Glackin for the fiddle and Matt Malloy (sic) for the flute, and Peadher (sic) Mercier and his son Mell (sic) for the drumming. All of these I contacted and they were all delighted to make recordings to us.
>
> (Cage, John: "On Having Received the Carl Sczuka Prize for Roaratorio." *The Modern Word.* 29 October 1979. http://www.themodernword.com/joyce/music/cage_roaratorio.html, accessed June 14, 2010).

Roaratorio lasts for over one hour and remains unprecedented for its scale and the incorporation of six of the finest traditional Irish musicians of the time into a piece of experimental music.

In the works I have submitted with this dissertation, I have made significant use of the *uilleann* pipes in three works: *Five Études for Uilleann Pipes* (2009), *Stories from the Old World* (2008) and *Le Chéile is in Aonar* (2009). The use of the pipes in these compositions is discussed in Chapter 4.

3.1.4.2 Fiddle

The *Contemporary Music Centre* lists just eight concert works other than my own to feature a part for a traditional fiddler. By adding my own works and works by Charlie Lennon (b.1938), Mícheál Ó Súilleabháin and Bill Whelan which are not in this database I have developed a list of twenty six works, which are detailed in Appendix IV.

Charlie Lennon must be credited with creating the first orchestral work to feature a major soloist's part for an Irish fiddler. The fiddle part in Lennon's *Island Wedding* (1986) was originally composed for Frankie Gavin. Lennon described the process which led to this work to me:

> I got a chance to do an album on my own with Gael Linn called 'The Emigrant Suite' and that gave me an impetus to think more about creating music. I was also thinking about slower music and so I came up with the little suite. I was looking at strings and pipes and things. Shaun Davey had arrived on the scene sometime around then or maybe just before that and he had produced 'The Brendan Voyage' and so things were happening in that area generally…..Then I realised I wanted to be involved in a bigger scene and wanted to have Irish based new melodies but that an orchestra could play. I was thinking about slower stuff again. So I went to Tommy Quigley who was living beside me in Howth and who used to work for the symphony and the concert orchestra, arranging and so on and he agreed to work with me. So we started with a couple of slow pieces that wound up as being part of 'Island Wedding'. Then we got a bit adventurous, I suggested we look at faster pieces, so we began to look at different rhythms. So that was a new experience for me. Then we went in around 1990, we were invited by RTÉ to try it out on their orchestra. We went in and we did a session in the radio centre. That was a bit intimidating to be honest with you. I was fortunate that Tommy was there because I didn't know what kind of questions we would be hit with and sure enough there were all kinds of questions coming up, some of which the conductor Proinnsias Ó Duinn would handle and some would be passed all over to us. So Tommy was there if I was having difficulties.
>
> (Lennon interview).

Lennon's orchestral works are unusual in that they are the only orchestral works I know of to feature newly composed melodies which have entered the general repertoire of traditional musicians. The jigs 'The Handsome Young Maidens' and 'The Smiling Bride' are now part of the traditional repertoire. The orchestration style is linked to Baroque and Romantic classical music styles; this is partly due to Lennon's admitted lack of engagement with contemporary classical music. 'I love classical music, I

suppose I haven't got into modern music, I've never really been exposed to it in any great way, so I should move into the last fifty years'. (Lennon interview).

In the context of experimental music, Roger Doyle must again be considered a pioneer through his work in 1991 with Ger Flanagan on 'Earth to Earth' from *Babel*. There is no score for this piece and that is due to the way the piece was constructed.

> I had met many violinists in my search for musicians for the concert-hall gig before I first met Ger. I was so impressed with him that in 1991 when I was looking for someone to do a solo in a piece I was working on called 'Earth To Earth' in 'Babel', I asked him. By verbal coaxing and some technical surgery, he came up with a really beautiful thing.
>
> (Doyle interview).

The 'verbal coaxing and technical surgery' Doyle refers to are the same recording and editing techniques which Doyle used with Ó hUiginn in *Under the Green Time*. The results are quite similar also, albeit on different instruments. Flanagan utilises some characteristic sounds of fiddle playing including *cuts*, *rolls*, *unison double-stops* and other ornaments, alongside bow pressure and timbral effects to create a soundscape that is not melodic in the conventional sense. It is more of a textural piece in this regard, just like *Under the Green Time*.

The first decade of the twenty-first century saw further developments in this field. Rachel Holstead created three imaginative pieces with parts for fiddlers. *Thar an bhfarraige gheal* (2003), *The Tune Ship: Longphort: Tuneskipet* (2004) and *Ardee Dances* (2005). The later of these is perhaps the most significant because it presents a traditional fiddler performing with a Baroque string orchestra in a style that bears little relation to traditional or Baroque music.

Holstead's use of the fiddle in her works is a natural result of her musical upbringing.

> As a kid I grew up playing fiddle and taking violin lessons at the same time. And it was really through playing sessions in pubs and improvising that I started composing -- so it's really at the core of my own background.
>
> (Grimes, Jonathan: "An Interview with Rachel Holstead." *Contemporary Music Centre Web site*. 2006. http://www.cmc.ie/articles/article1074.html (accessed June 15, 2010).

Holstead relished the opportunity of bringing both fiddle and violin styles together for *Ardee Dances*.

> Fiddle and Irish fiddling is something that also interests me a lot, being a very lapsed fiddler myself. As well as the instrumentation, the actual players involved were really interesting. There was Gerry O'Connor, the fiddler, who's from Dundalk, which is quite close to Ardee, and I really liked that idea of having somebody who had a connection with the area. Elizabeth Wallfisch was guest director of the Irish Baroque Orchestra for the festival and she was just amazing. I got an opportunity to meet both of those players before I started working on the piece, and as soon as I'd met them I knew that they could lead a lot of the music and that the music would work around them as players. During the festival I got to spend a week rehearsing with the orchestra in Ardee, which is so luxurious to have that time with players. They were so lovely to work with. They have a very different approach to players who play more modern repertoire. They're working with facsimile scores, often with no dynamics or expression marks so they're used to interpreting the music. I was keen that they would take that approach to my score as well; I wanted them to find their way into it.
>
> (*Ibid*.).

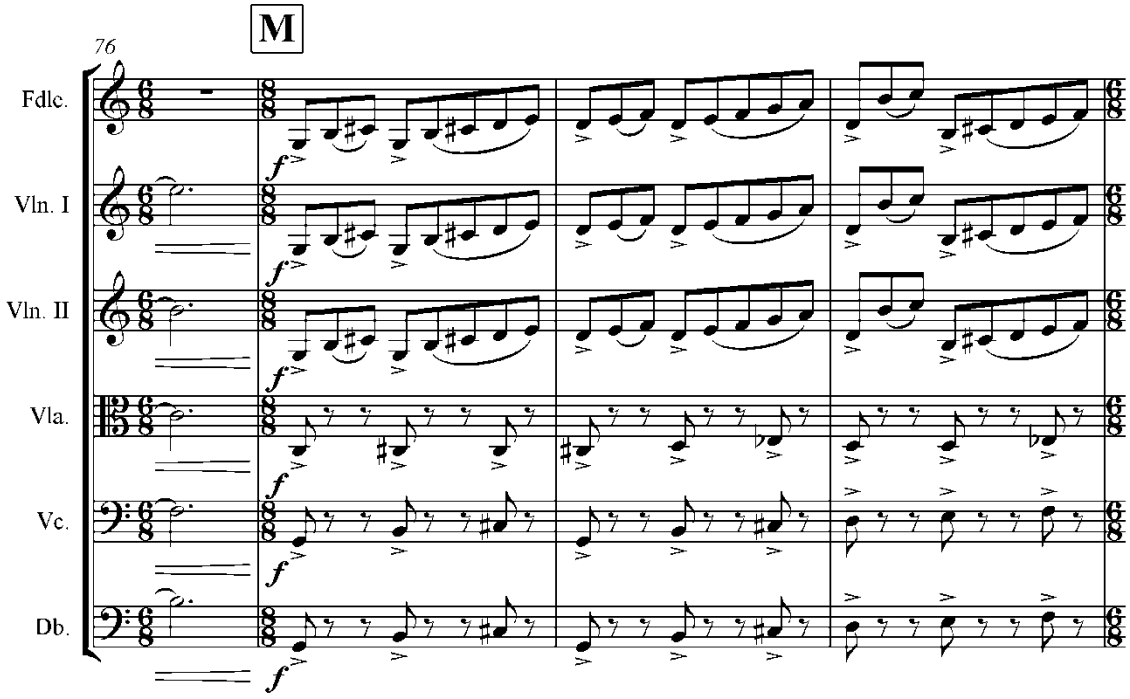
The piece could be seen as a double *concerto* for fiddle, Baroque violin and Baroque strings. Holstead's programme note hints at the reasons for the deliberate lack of virtuosity in the work.

> The five movements of Ardee Dances follow the flow of the Ardee landscape through the never-ending cycle of ice-age, thaw and re-growth. Drawing on the languages of two contrasting styles of fiddling, each with its own sense of time and place, the music moves from moments of stillness to wild dances. Its flow, like that of the landscape, is part of a larger dance which continues, unheard, long after the last note has sounded. The solo violin opens the work in a still prologue with hushed interjections from the ensemble and a tentative response from the fiddle at the close. The fiddle then leads the ensemble in the second and third movements, before the solo violin takes charge once again in the fourth. A meditative epilogue for fiddle and violin brings the work to a close.
>
> (Holstead, Rachel: *Ardee Dances programme note.* Unpublished score obtained from the composer, 2005).

Holstead's use of the Irish fiddle in this piece is noteworthy in that she requires the fiddler to play in a manner he or she might not be accustomed to. Movement V is vaguely reminiscent of a *slow air* and Movements II, III and IV contain material which is similar to some Irish dance music forms, however there are few sections which exactly replicate any melodic or rhythmic patterns that would be idiomatic of traditional music. Much of the melodic material the fiddler is required to play is infused with a chromaticism that would not usually be found in traditional music. This is something which impressed the Irish Times' critic Andrew Johnstone.

> Despite clear-cut phrasing and the odd hint of a jig or a reel, this is essentially a cosmopolitan work that steers well clear of the portentous nationalism, derivative neo-classicism or shallow commercialism that could so easily have characterised it. In its slightly chromatic environment, both fiddler and period ensemble hold equal status as guests.
>
> (Johnstone, Andrew: "Ardee Festival 2005 Review." *The Irish Times*, 30 November 2005).

Movement III would be particularly difficult for a fiddler with no background in classical music to learn as it contains regular changes of metre. The section between bars 77 and 91 requires the fiddler to count seven separate metrical changes including 5/8 and 7/8 time signatures. Such regular metrical changes do not generally occur in traditional Irish music.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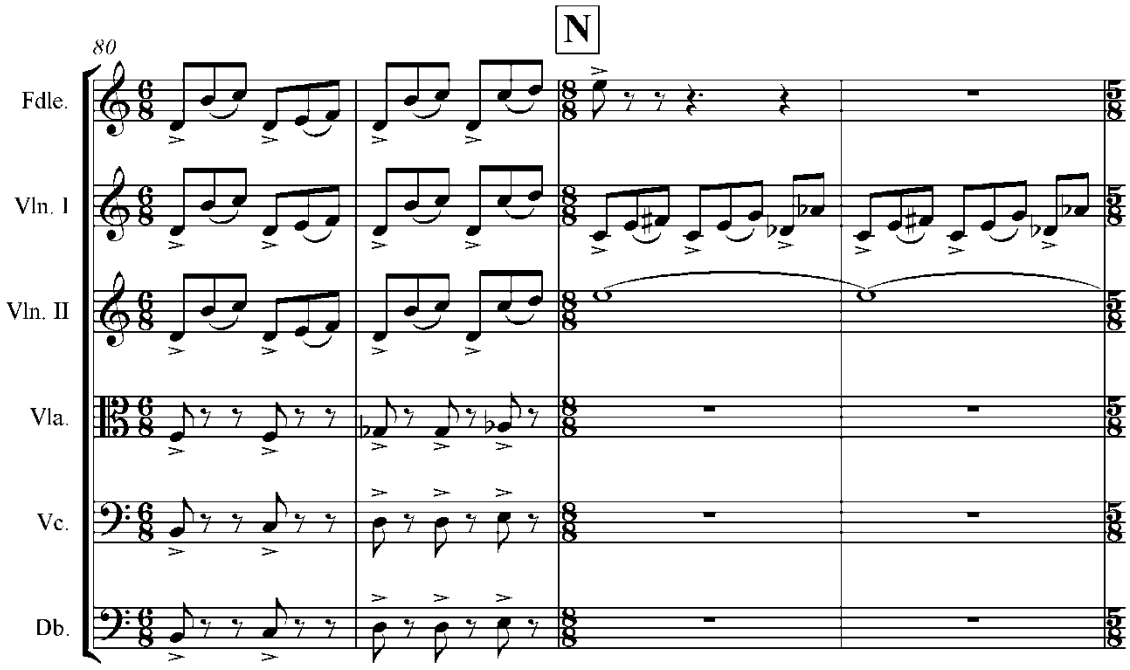
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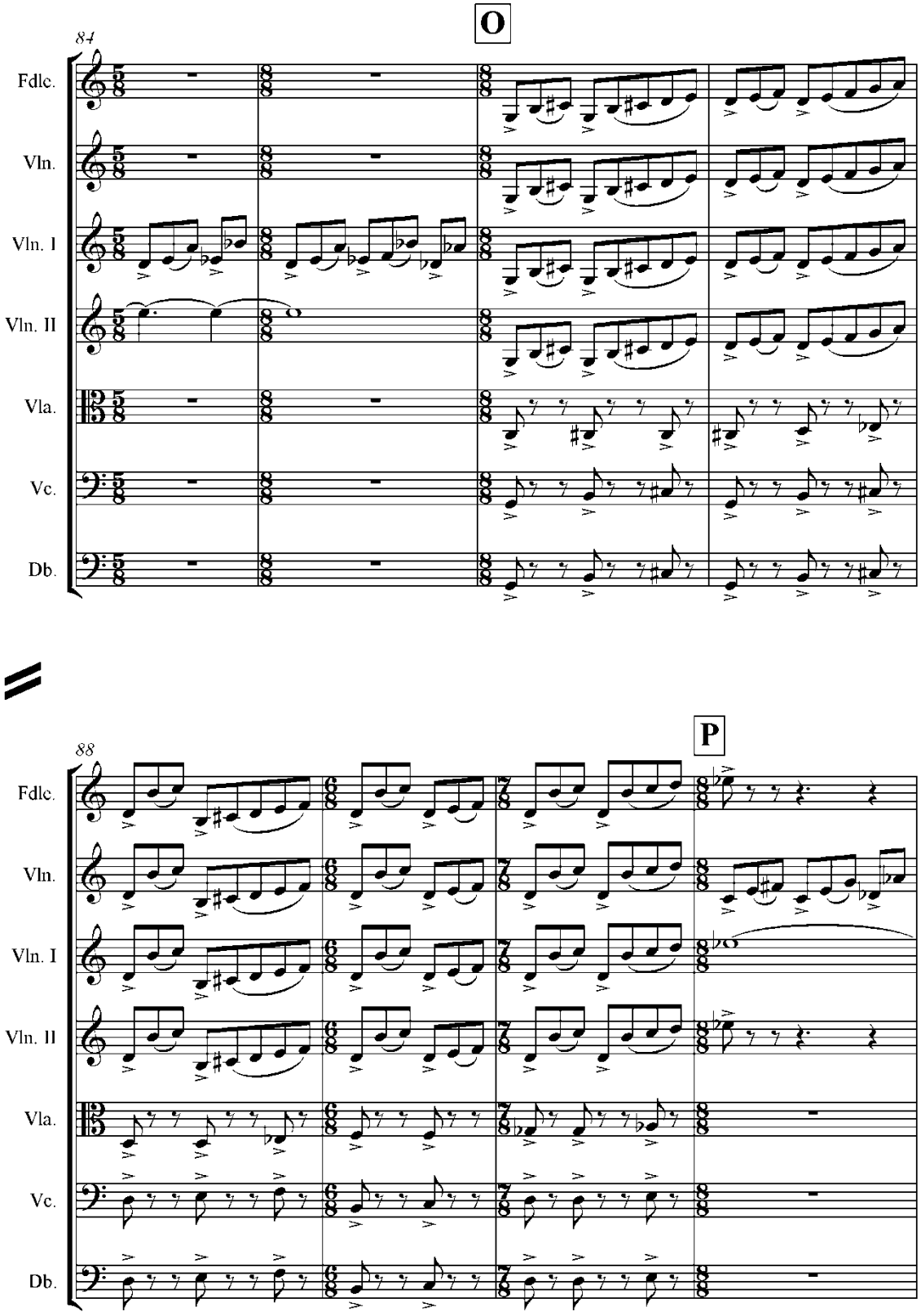


Figure 3.40 Holstead, *Ardee Dances*, III, 76-91.

Another difficulty for a fiddler might be the sections where they must play short phrases in isolation, for example bars 110 to 115 in Movement III and bars 11 to 13 in Movement IV.

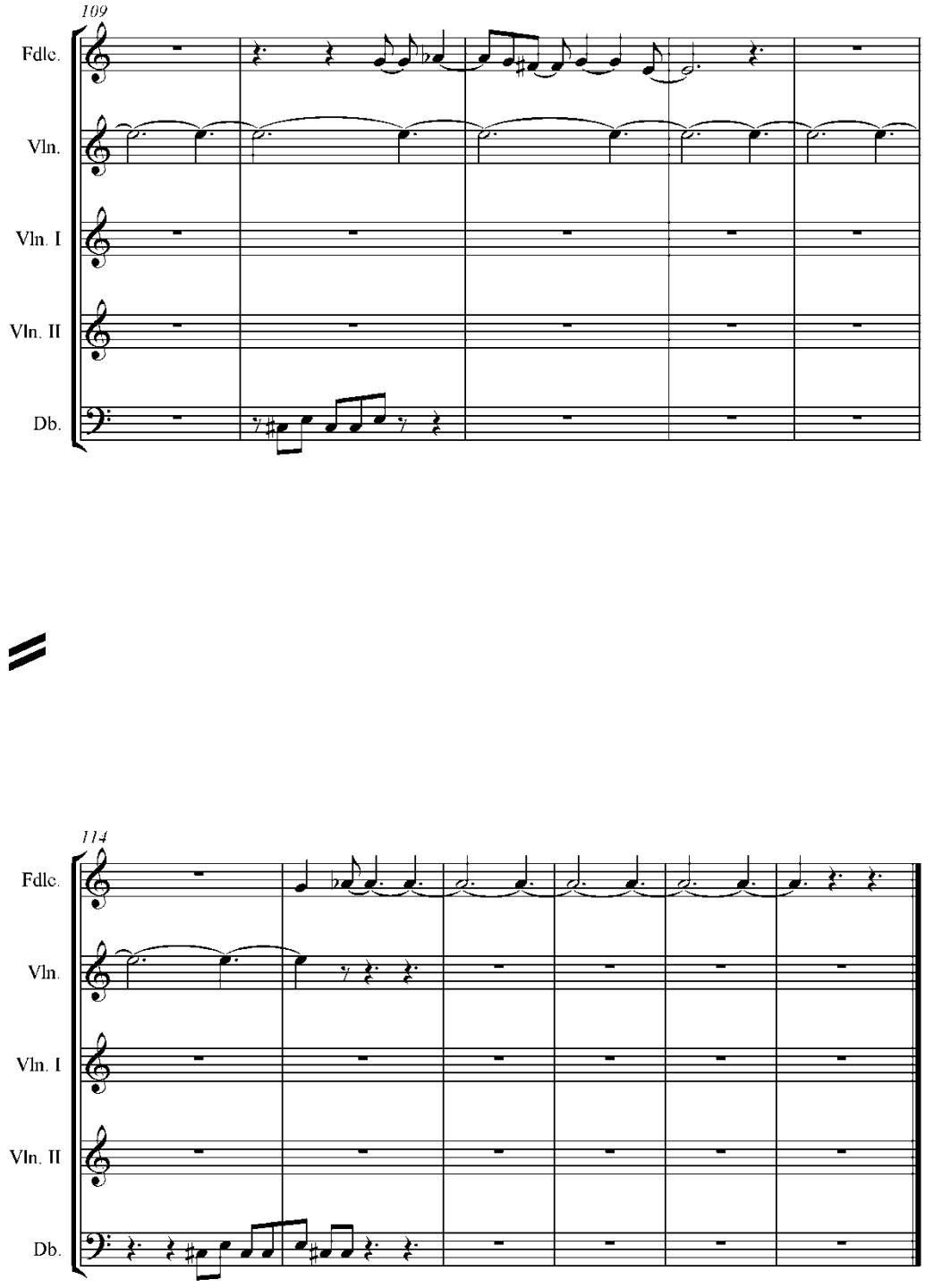


Figure 3.41 Holstead, *Ardee Dances*, III, 109-119.

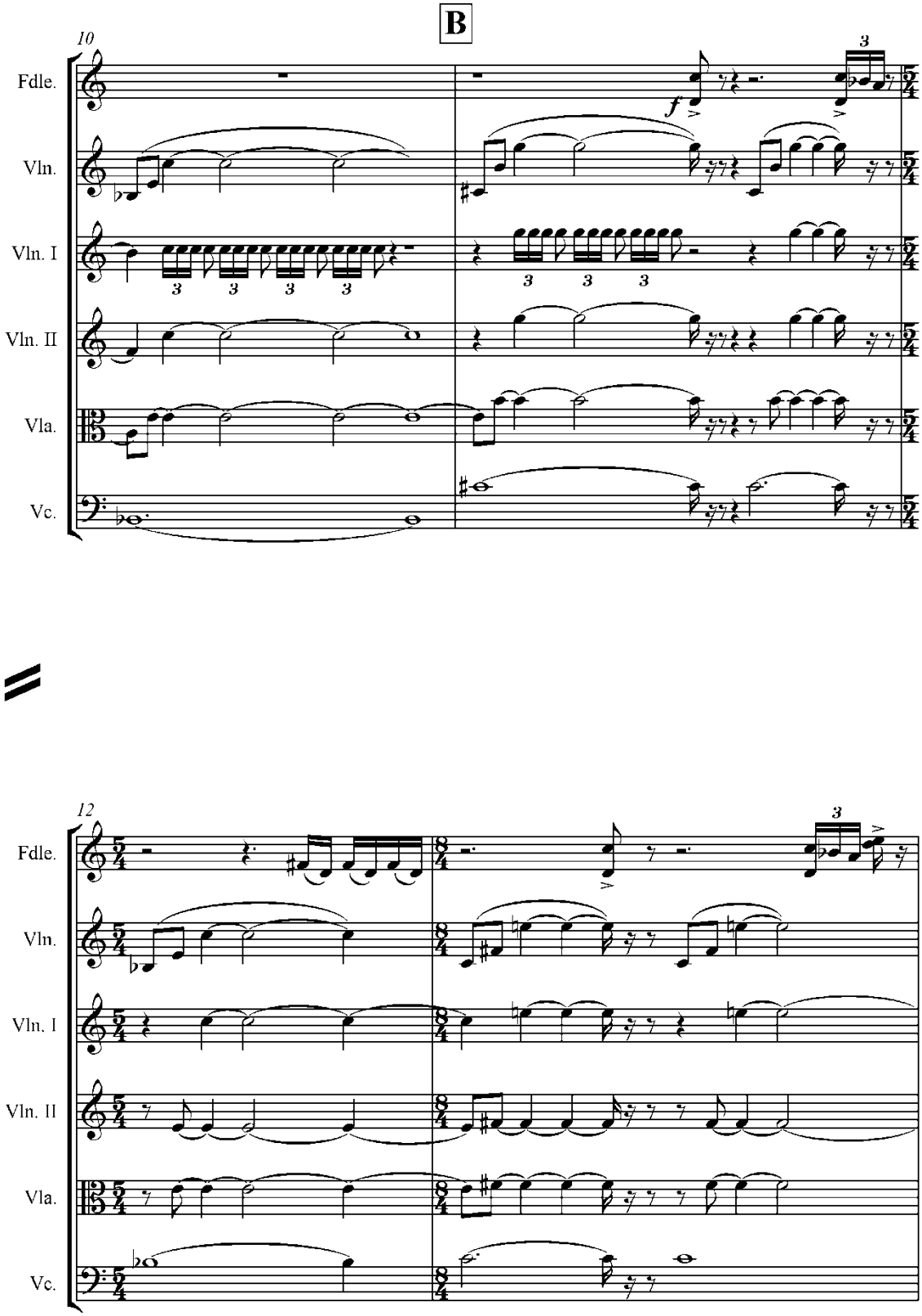


Figure 3.42 Holstead, *Ardee Dances*, IV, 10-13.

Technically the fiddle part falls easily on the fingers, it does not go out of the first position, so it would just require some adjustment time for the fiddler to get used to the melodic material and the rhythmic challenges the score presents. Holstead does not ask the fiddler to perform any unusual techniques and the only noticeable point where the fiddler is asked to use any idiomatic ornamentation is the 'tune' which starts Movement II. Here Holstead uses the *turn* sign to indicate *rolls* and grace notes to indicate *cuts*.

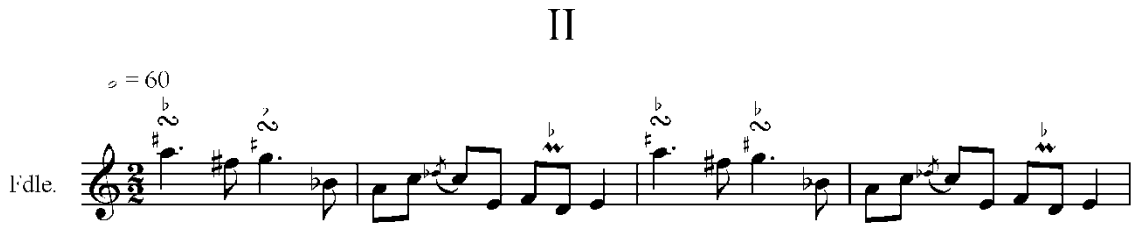


Figure 3.43 Holstead, *Ardee Dances*, II, 1-4.

There is idiomatic use of open string droning in large sections of Movements II and IV, as demonstrated by this short example from Movement IV where the utilisation of the open *E* and *D* strings creates double-stops.

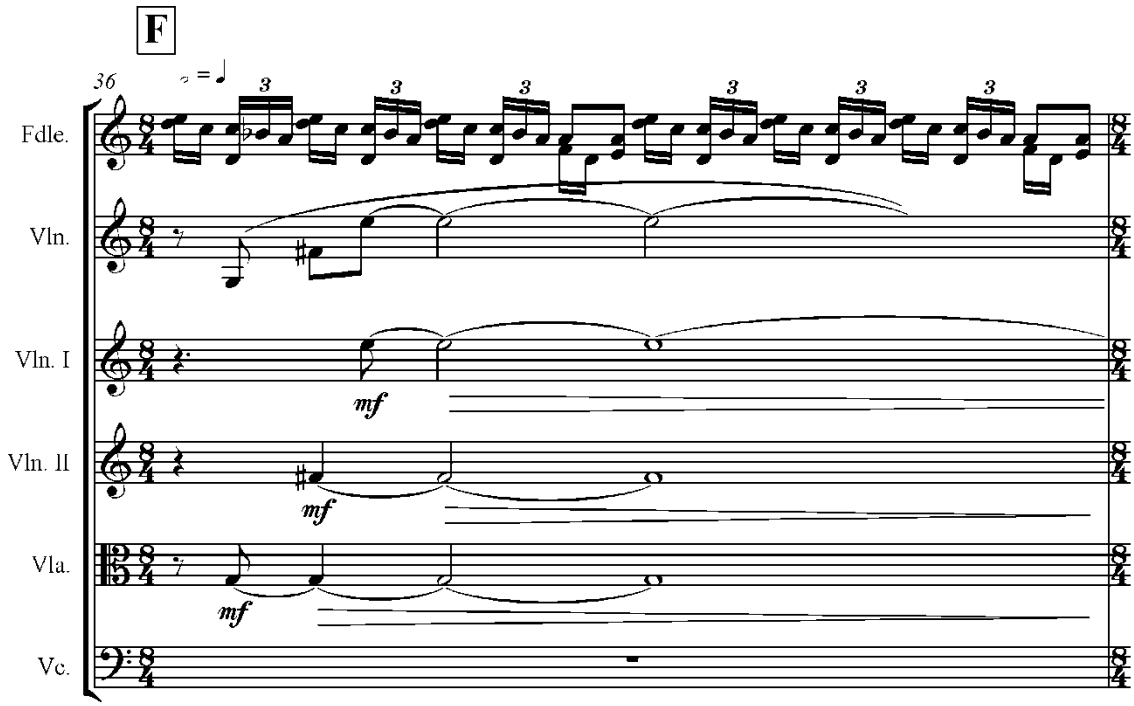


Figure 3.44 Holstead, *Ardee Dances*, IV, 36.

Besides this, the only instruction in the score relating to traditional music comes in the performance directions where Holstead states 'The rhythm of the fiddle part may vary slightly from the notated score.' (Holstead, 2005).

A fiddler might initially find this a challenging piece to perform due to the melodic and harmonic language, the rhythmic aspects mentioned and the fact that most fiddlers will never have had to learn a piece like this from sheet music and then play it with an orchestra. Holstead explained this challenge to me:

> What I was asking him (Gerry O'Connor) to do and the context in which I was asking him to play was really very alien to him. That's something I'm always most conscious of, that actually the single biggest challenge for traditional players is the context of sitting and playing in an ensemble where everybody is playing something different is very different from their normal way of working and that in itself is the most challenging thing.
>
> (Interview with Rachel Holstead, April 22, 2009).

Gerry O'Connor aptly demonstrated in the performance of the work I attended,[42] that once these initial obstacles are overcome, the piece presents few difficulties for a skilled fiddler.

Holstead's *Thar an bhfarraige gheal* (Over Bright Sea), is a complex work, for *Sean-nós* singer, Irish fiddle, three violins, two violas, two cellos and tape, of eleven minutes duration, in which the fiddler (originally Aoife Granville) is required to play music which, though always in the first position, is rhythmically challenging from the first fiddle entry at bar 27. From this point until bar 79 there is a constantly changing metric pattern, which settles at bar 31 into bar by bar changes from 7/16 to 3/4.

[42] This performance took place at the National Music Symposium at St. Patrick's College, Drumcondra. March 23, 2009.

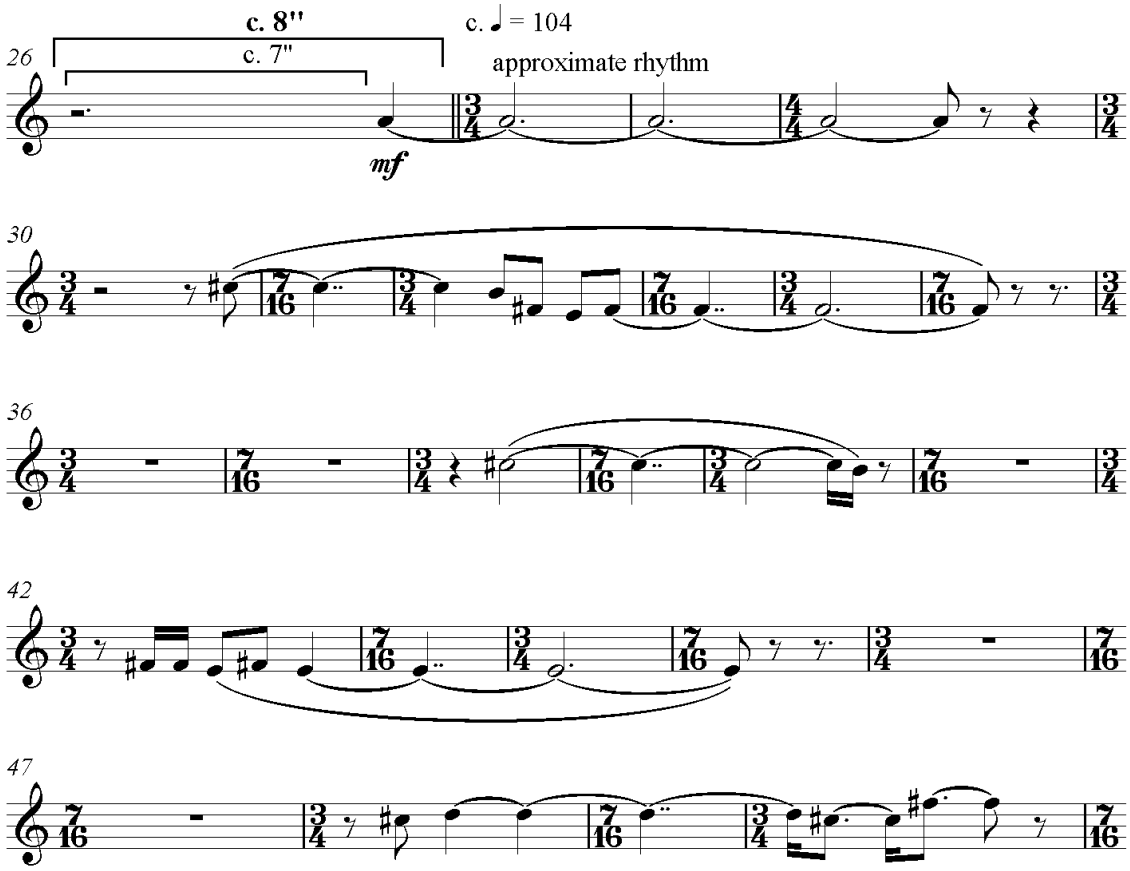


Figure 3.45 Holstead, *Thar and bhfarraige gheal,* 26-50, fiddle part.

The material the fiddler plays over this metrical pattern is a sparse, meandering melody with no repetition or definite sense of rhythm. Holstead indicates in the score that the notated rhythm is an 'approximate rhythm', therefore leaving the fiddler some rhythmic freedom with these melodic phrases. However, the fiddler would need to somewhat co-ordinate with the rest of the ensemble; therefore this part would be a considerable challenge to a fiddler without good sheet-music reading skills. Aoife Granville is classically trained so she has the reading skills to face the challenges this work presents.

A particularly noteworthy aspect of this piece is the dynamic markings in the fiddle part. Fiddlers are used to choosing their own dynamics spontaneously, so it is quite unusual to find a score where the fiddler is given specific dynamic markings. Therefore the sections from bar 97 to 104 and from bar 163 to 171 might prove initially challenging for any fiddler to perform accurately unless they had classical training.

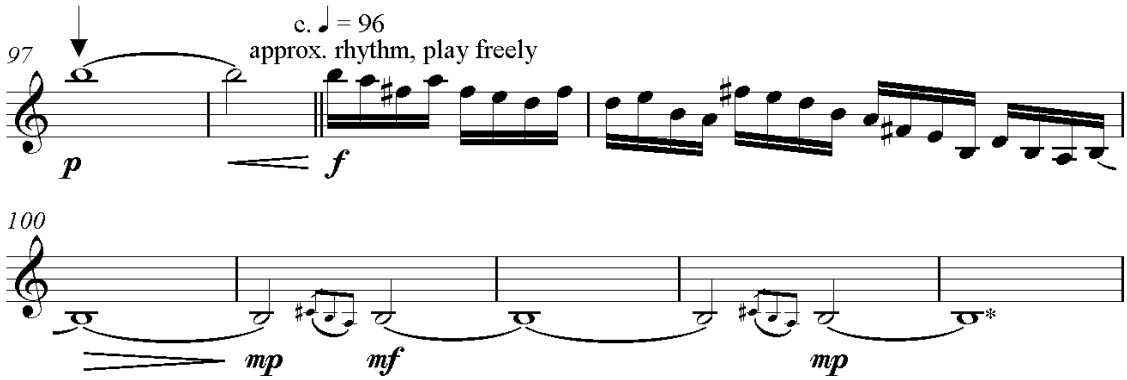


Figure 3.46 Holstead, *Thar an bhfarraige gheal,* 97-104, fiddle part.

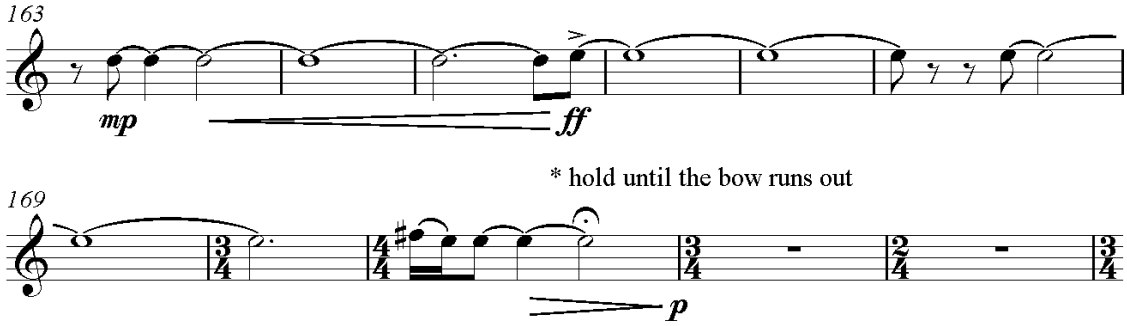


Figure 3.47 Holstead, *Thar an bhfarraige gheal,* 163-173, fiddle part.

The *crescendo* from ***mp*** to ***ff*** on the single note *D* from bars 163 to 165 could prove particularly challenging, as this technique is not generally used in traditional music.

Overall the fiddle part in this piece is technically straightforward and it should not provide too much difficulty to any competent fiddler, once they adapt to the rhythmic challenges and the ensemble setting.

Bill Whelan (b. 1950) earned international fame for his music to the stage production *Riverdance* (1994). In recent years he has composed three pieces featuring a fiddle soloist performing with a chamber orchestra: *Inislacken; Errisbeg;* and *Carna*. These works combine to form his *Connemara Suite* (2007). Zoë Conway (b.1981) was the fiddle soloist who inspired Whelan to compose these works.

> I would be inclined to let the tradition, or my sense of the tradition, lead, and then try and tuck the rest in behind it, rather than write something very smart that pulls bits out of the tradition but doesn't seem when you listen to it to be anything more than a nod towards it. Zoë Conway came to me in a roundabout kind of way. My son was playing with a band in Lorient. When he came back he said I had to hear this young fiddle-player. That started a musical relationship that led to both me producing her solo album and also to all of The Connemara Suite, which was written in some way with her in mind. The thing about Zoë is that she is such a well-schooled musician you can virtually write anything for her. She reads

perfectly, and yet because she has been going to the Willie Clancy Summer School and all points north, south, east and west of it for a long time, she is steeped in the tradition. You write a melody for her, and, as long as you are careful with it, as soon as she plays it, she validates it in some way.

(Quinn, Toner: "Ireland's Dance with Music: An Interview with Bill Whelan." *http://tonerquinn.wordpress.com.* http://tonerquinn.wordpress.com/2008/07/01/irelands-dance-with-music-an-interview-with-bill-whelan (accessed July 31, 2010).

The following excerpt demonstrates the virtuosity of the fiddle part in *Carna*. The use of third position notes and fast runs would prove challenging to any fiddler, particularly ones who do not have the classical training that Zoë Conway has had.

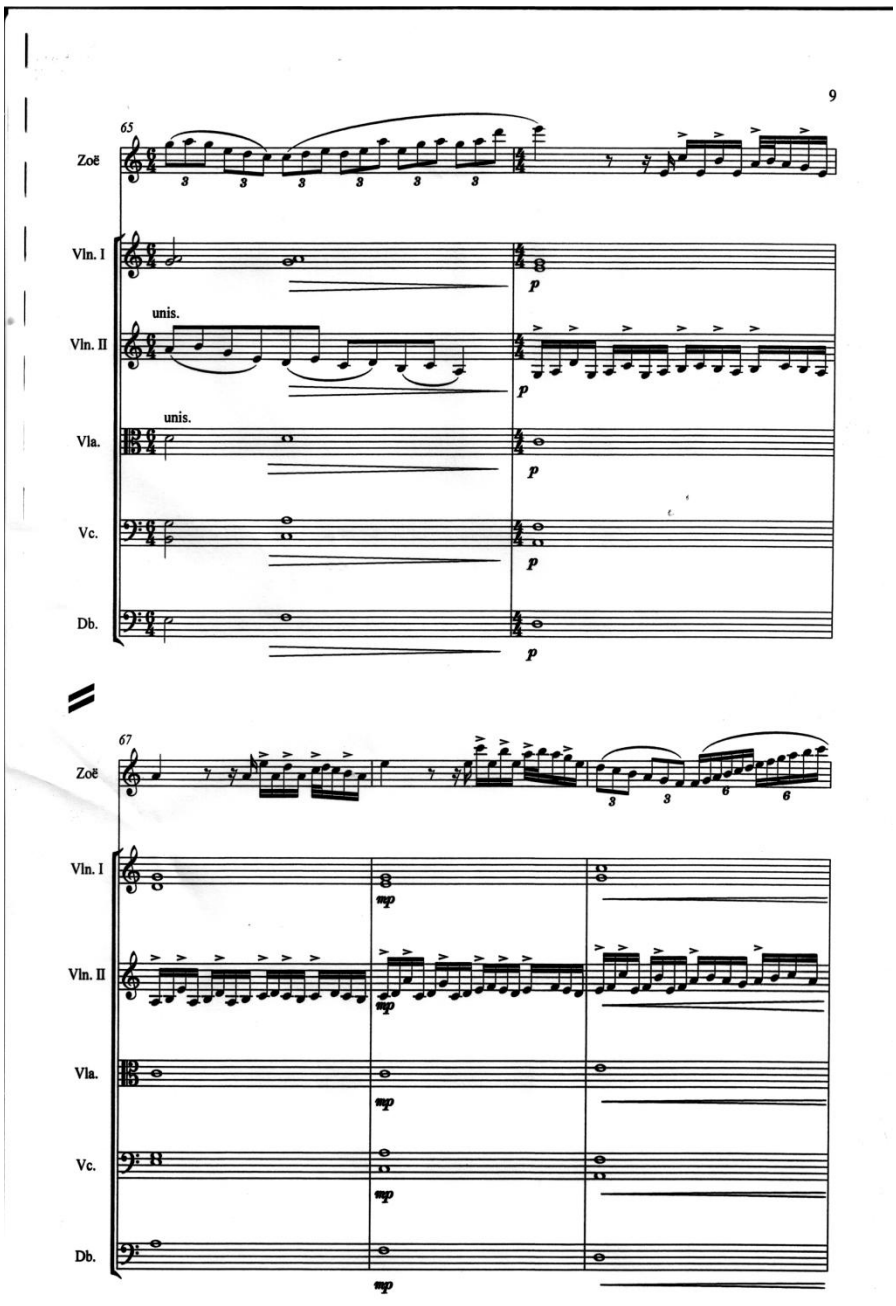


Figure 3.48 Whelan, *Carna*, 65-69.

Philip Martin's (b.1947) *Thalassa* (1990) was composed as a community workshop piece for children. It features a fiddle part. Martin does not seem too enamoured by this work himself, due in part to its similarity to *Riverdance*.

> It's quite a big piece and I used traditional Irish musicians in it and a lot of folk music. But that had its own purpose…..while I wouldn't call it in the style of Bill Whelan, at the same time I suppose there are parts of *Thalassa* which have a slight *Riverdance* feel. I guess what I'd say is that I could write like that if I chose, but it's usually out of choice that I don't.
>
> (Dungan, Michael: "An Interview with Philip Martin." *Contemporary Music Centre Web site.* 1996. (accessed June 13, 2010).

I have found two other twentieth century works by non-Irish composers which also feature a traditional Irish fiddler. Cage's *Roaratorio* featured Paddy Glackin on fiddle; however Glackin was not playing any newly composed music in this piece, just traditional tunes. So the actual use of the fiddle in this work is not particularly noteworthy other than the unusual context into which it is placed.

Another American composer, Evan Chambers (b. 1963) produced his *Concerto for Irish Fiddle, Violin, and Orchestra* in 1998. Nollaig Casey premiered and recorded the work with the Albany Symphony Orchestra.[43] I was not aware of the work until very recently and so it had no influence on my own fiddle *concerto Aontacht* (2008). It is interesting to note that Chambers coincidentally took a similar approach to me of unifying the soloists with the orchestra.

> This concerto features two soloists playing the same instrument in two different styles, yet the piece does not pit them against each other in the kind of titanic struggle one often finds in many concertos. Rather, the fiddler and violinist are more like two complementary halves of a personality--they and the orchestra support each other and take the leading role in turn without conflict.
>
> (Chambers, Evan: "Programme Note for 'Concerto for Irish Fiddle, Violin, and Orchestra'." *Evan Chambers' Official Web site.* 1998. http://www.evanchambers.net/index.cfm?pagename=works (accessed June 15, 2010).

This seems to be the only work of the twentieth century to present a major role for an Irish fiddler within the context of a contemporary classical orchestral style.

[43] Chambers, Evan: "Programme Note for 'Concerto for Irish Fiddle, Violin, and Orchestra'." *Evan Chambers' Official Web site.* 1998. http://www.evanchambers.net/index.cfm?pagename=works (accessed June 15, 2010).

Prior to commencing this research I composed one major work featuring an Irish fiddler. *Music for the Departed* (2006) was composed for Martin Hayes, Dennis Cahill and Ioana Petcu-Colan. I did not ask Hayes to use any techniques that were particularly outside the boundaries of what he was used to, however the very fact that the piece was structured as one large suite of music with defined points of entry proved challenging and ultimately rewarding for him.

> What was a big chunk for me was to bite off these inbuilt variations of the melodic idea and to get them all in was a lot of memorising that I wasn't accustomed to, cos I was used to working on a simpler principle and I was used to a lot of freedom to go all the time.
>
> So that was a big learning exercise and it took a lot of memorising and it made me nervous but I liked the piece a lot and there were twists in it and turns that I probably wouldn't normally have encountered here and there and I learned that I could do it which was important for me. It felt good musically; I was able to get an emotional feel from it which was also important. I know you structured it in a way that was not unlike how I would have structured my own medleys of music so it made a lot of that sense to me as well and it was great having the third musician as part of our trio. That beefed it out in a way that wasn't that common either. So it was a good experience.
>
> (Hayes interview).

Since Hayes is not used to working from a musical score, I created a recording of the piece, substituting mandolins for violin and fiddle, since I couldn't play fiddle at the time. He was then able to learn his part from this recording.

I have added ornamentation markings and occasional dynamic markings for the fiddle in the score. These were only placed there for general reference, in reality I gave Hayes freedom to ornament and vary the melody and I ask any violinist who plays the piece with him to listen closely to try to match his phrasing and ornamentation. This is something which proved challenging but rewarding for Ioana Petcu-Colan.

> Imitating Martin's style was tricky as it's unfamiliar to me. It's a very specialised style and has been developed and honed through generations, not to mention he has his own particular sound and style himself – it would have been insulting if I could just pick up the fiddle and play it back at him! However it was fantastic to have him there to watch and learn from and he had some great tips on how to achieve certain rhythms and swing. We really only had time to scratch the surface but it would be interesting to see how it would develop over a longer period of time.
>
> (Interview with Ioana Petcu-Colan, August 22, 2010).

One final aspect of this piece which is outside the usual boundaries of traditional fiddle playing occurs at the very end of the work. At bar 620 the fiddler must move out of first position to play a high pitched melody in canon with the violinist.

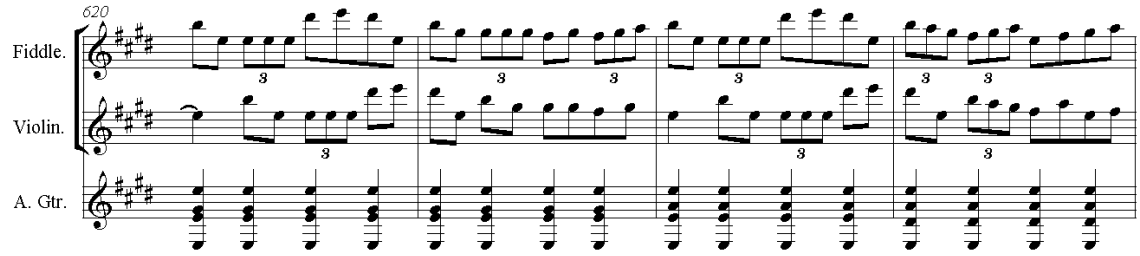


Figure 3.49 Flynn, *Music for the Departed,* 620-624.

I know of no traditional Irish tunes which require a fiddler to remain in a higher position for longer than a few notes. So it is particularly challenging for a fiddler with no classical training to play this section, which remains in this high position for twenty four consecutive bars until the end of the piece. Canons are not a feature of traditional music, so it is also a challenge for the fiddler to perform this melody without being distracted by the violinist playing the tune in canon.

The success of this piece gave me the belief to go forward with further collaborations with traditional musicians and it could be seen as the starting point for this dissertation, as it was only months after the premiere of *Music for the Departed* that I commenced the research. I have subsequently composed four pieces which feature the fiddle. I submit three of them with this dissertation: the fiddle *concerto Aontacht;* the ensemble work *Le Chéile is in Aonar;* and *The Valley of the Lunatics*. These works are discussed in detail in Chapter 4.

The other work I composed featuring the Irish fiddle is *Taibhreamh Ó Riada* (2007). I have not submitted it with this dissertation as it was composed too early within the research period to be influenced by my findings.

3.1.4.3 Irish flute

The *Contemporary Music Centre* lists only eight works by contemporary Irish composers other than me which feature a part for a traditional Irish flute player. Of these works only John Gibson's (b.1951) *Sliabh Luachra* (1996-1997), for Irish flute and piano trio; Rachel Holstead's *The Tune Ship: Longphort: Tuneskipet* (2004), for *Seán-Nós* voice, Irish flute, button accordion, fiddle, 3 violins, viola, cello and double bass; and Mícheál Ó Súilleabháin's *Oileán/Island* (1988), for Irish flute and strings, contain significant parts for the flautist. In my research I discovered an additional seven works not housed in the CMC which feature the Irish flute. These works are by Charlie Lennon, Neil Martin, Peadar Ó Riada and Michael Holohan. Adding my own works gives a total of eighteen pieces.

Ó Súilleabháin's *Oileán/Island* appears to be the first work to bring a traditional Irish flute soloist together with a classical string orchestra. Lennon's *Island Wedding* (1986) does feature a part for an Irish flautist, however in *Oileán/Island* the flautist is given the role of a soloist throughout.[44]

Oileán/Island juxtaposes an idiomatic Irish flute part with contemporary string writing. The piece has a fast/slow/fast structure. In the slow section, the flautist plays in a call and response manner with the strings, whereby it states short melodic phrases which the strings then respond to. This is not at all typical of traditional music and so it provides an obvious challenge for a traditional musician. It is a challenge that the original soloist, Matt Molloy, was more than capable of rising to. He was helped by the fact that the material given to him is very idiomatic for the Irish flute, indeed the material in the first and third movements are standard traditional tunes.[45] Molloy's skills

[44] *Oileán/Island* is a reworking of Ó Súilleabháin's *Concerto for Traditional Musician and String Orchestra* (1979), which was also premiered by Matt Molloy.
[45] Ó Súilleabháin's use of traditional tunes in *Oileán/Island* is discussed in Chapter 3.2.6.1.

have more recently been exploited by Neil Martin in his work *The Guiding Moon* (2006) for Irish flute and string quartet.[46]

Gibson's *Sliabh Luachra* is one of the few contemporary classical works which directly reference the *Sliabh Luachra* musical tradition of Cork and Kerry. The traditional flautist is joined by a classical piano trio (violin, cello and piano), this is a unique combination in the repertoire.

For most of the piece, the flautist plays traditional tunes in a traditional style. The context in which they play the tunes is quite different to what traditional musicians would be used to. The flautist must learn specific entry points within a larger structure where they play the three traditional tunes which the piece is built on. Perhaps the most unusual aspect of the piece from the perspective of a traditional musician is the opening section where the flautist must play rhythmic material on one note.

[46] The West Ocean String Quartet with Matt Molloy: *The Guiding Moon.* West Ocean Records, WORCD 101, 2006. Compact disc.

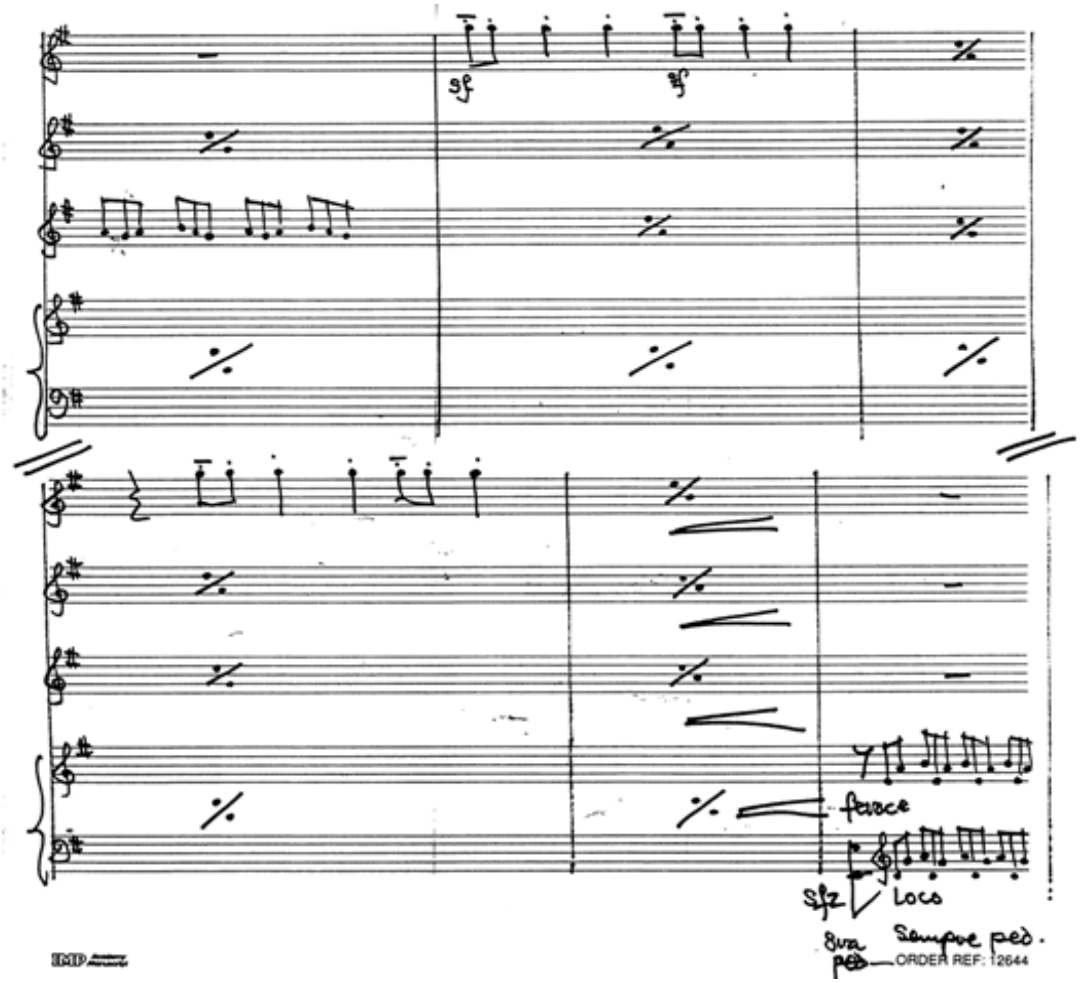


Figure 3.50 Gibson, *Sliabh Luachra*, 4-9.

The flute part is on the top stave. A flautist with good music reading skills should have no problem playing this section. This part would provide a slight challenge for a flautist who cannot read music very well. They would need to refer to the recording of the work in order to figure out the rhythm of the part and the entry points. Aside from this, *Sliabh Luachra* provides few challenges for a traditional flautist.

Of the other works featuring Irish flute, I would like to briefly mention Peadar Ó Riada's *Laoi na Carraige Báinne* (2009), scored for Irish flute, *Sean-nós* voice and string quartet. In this piece the flautist is required to continually stop and start, so they rarely get into the motoric flow typical of traditional music. Perhaps the most notable aspect from a technical point of view is that the flautist is required to flutter tongue. This is the only instance I have found of a composer asking a traditional flautist to use this technique. It is a technique I have used in some of my own works which feature

classical flautists, including *Aontacht*, but I have never heard it used by a traditional flautist.

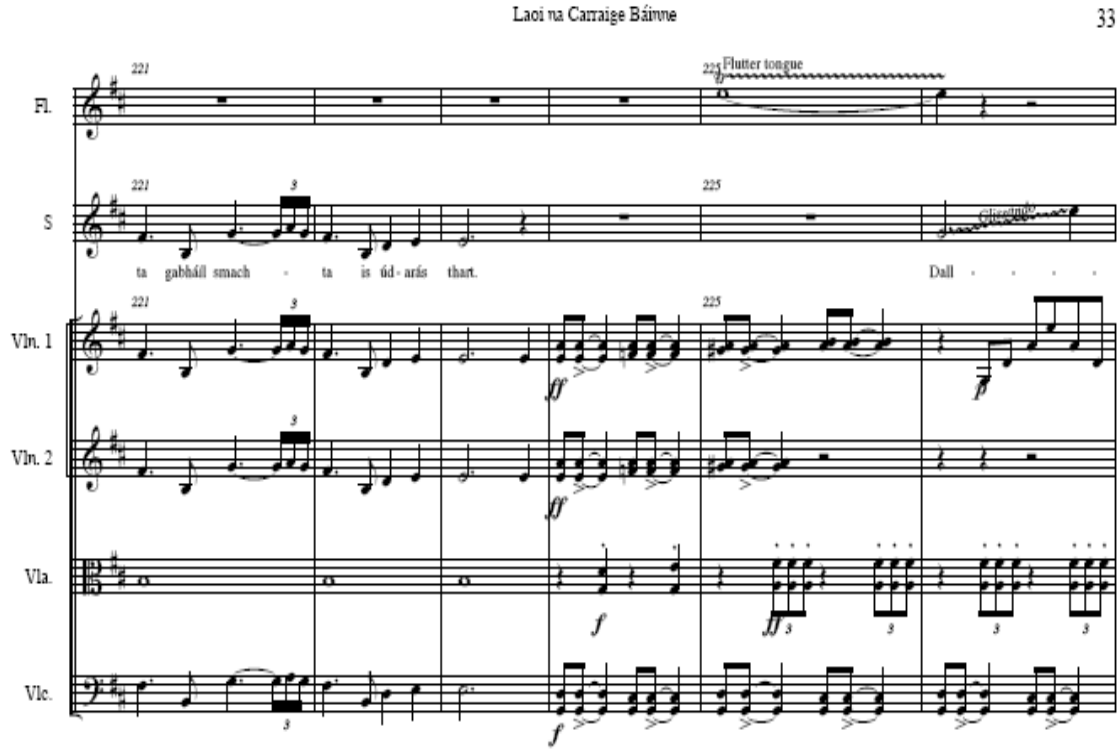


Figure 3.51 Peadar Ó Riada, *Laoi na Carraige Báinne*, 221-226.

3.1.4.4 Tin whistle

The tin whistle is a much neglected instrument in the realms of contemporary concert music. I have found just ten works including my own to feature the instrument.

Roger Doyle's *Ceol Sidhe* has a part for the whistle which the late Jolyon Jackson (1948-1985) originally performed. Whilst the part is technically very simple, it is unconventional in traditional music terms because in some parts of the piece the performer must stop and start after every three bars.

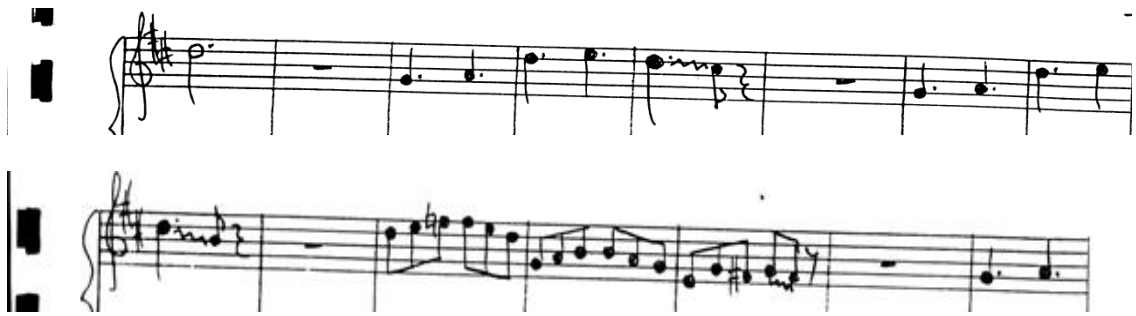


Figure 3.52 Doyle, *Ceol Sidhe*, tin whistle part excerpt, no bar numbers in the score.

Doyle notates downwards *glissandi* in this part. This is a rare example of the use of this characteristic whistle effect in a piece of contemporary concert music.

Derek Ball's (b.1946) *Passing Places* (2007) is a work of nine minutes duration scored for tin whistle, bagpipe, *bodhrán*, Irish harp, fiddle and orchestra. It is quite a challenging piece for the whistle player. The following example shows that the whistle player must play in constantly changing odd metres. In theory this is something only a whistle player with excellent music reading skills could perform, unless there was a recording from which they could learn it. However, it would appear the composer is not too concerned with absolute accuracy in this section.

> The whistle part from bar 32 is quite difficult rhythmically, but fortunately it can be regarded as an "effect" where precise synchronisation is only optional. If the player simply imagines playing alternate bars of 9/16 and 12/16, ignoring everything else that's happening and then stops at about the right time, that's all that's necessary.
>
> (Ball, Derek: *Passing Places performance note.* Unpublished score housed at the CMC. 2007).

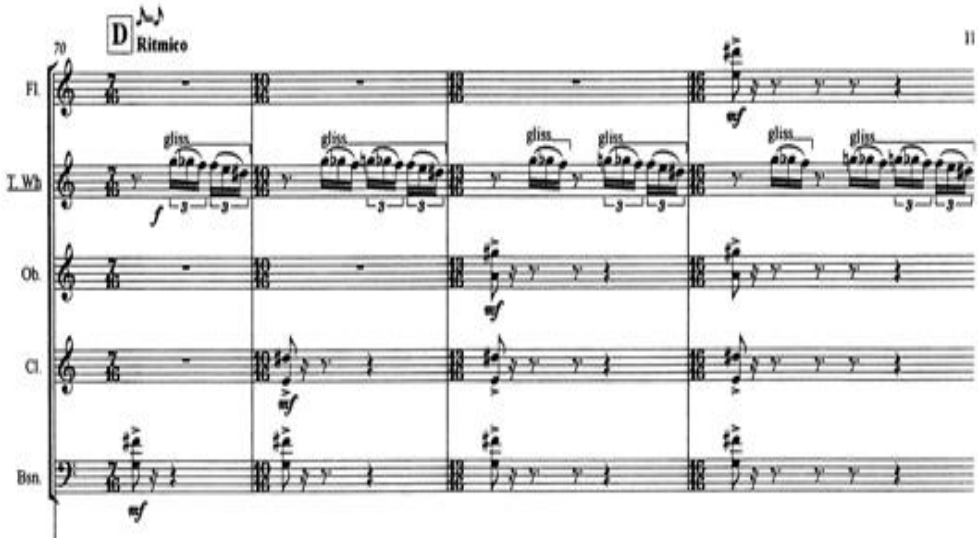


Figure 3.53 Ball, *Passing Places*, 70-73.

In addition to these works the tin whistle is used in Ciarán Farrell's *Macalla* (1994) and *Lament* (1995), Philip Martin's *Thalassa* (1990), John Kinsella's *The Splendid Years* (1990) and Bill Whelan's works *Dún Briste* (1992) and *The Spirit of Mayo* (1993). In all cases the instrument is used in a manner in keeping with traditional music practices.

I discuss my use of the tin whistle in *Taibhreamh Ó Riada* (2007) and *Le Chéile is in Aonar* (2009) in Chapter 4.

3.1.4.5 Summary

This research unveiled a wide range of works with parts composed for traditional musicians and instruments. I focused on works featuring *uilleann* pipes, fiddle, Irish flute and tin whistle. These instruments have, for the most part, been used in a relatively idiomatic manner. Some composers, most notably Roger Doyle, have sought to utilise the tonal characteristics and ornamental effects of traditional music within an experimental context. These more experimental works are in great contrast to the more melodic and tonal works of composers such as Shaun Davey and Bill Whelan. Some composers, including Mícheál Ó Súilleabháin, Peadar Ó Riada and Rachel Holstead, have found a middle ground by placing traditional musicians in the context of works which draw equally on traditional music and contemporary classical music practices.

3.2 Rhythm

> When you look at the note it's difficult because it might be slightly shorter or slightly longer, so any written note's an approximation and it's not 4/4 or 6/8 or whatever. It's like in quantum mechanics, the probability is that it'll be in there but at any given time it won't.
>
> Charlie Lennon[47]

With this remark, Charlie Lennon was referring to the elusive nature of the rhythm of traditional music. Whilst *reels*, *jigs* and other tune forms are often notated in simple time signatures and with regular rhythmic patterns, any good performer of traditional music will subtly change rhythmic patterns every time they perform a tune. There are always subtle variations going on as Lennon points out.

> Rhythm to me is an essential and quite substantial element to the overall music. There's variations of it going on all the time and it's not fixed and there's alternative nuances going on which make up the overall sound.
>
> (Lennon interview).

In this section I examine some of these rhythmic intricacies.

[47] Lennon interview.

3.2.1 It Don't Mean a Thing if it Ain't Got That Swing – The Differences Between Traditional Irish and Classical Approaches to Rhythm

> Swing -A quality attributed to jazz performance. Though basic to the perception and performance of jazz, swing has resisted concise definition or description. Most attempts at such refer to it as primarily a rhythmic phenomenon, resulting from the conflict between a fixed pulse and the wide variety of accent and rubato that a jazz performer plays against it. However, such a conflict alone does not necessarily produce swing, and a rhythm section may even play a simple fixed pulse with varied amounts or types of swing. Clearly other properties are also involved, of which one is probably the forward propulsion imparted to each note by a jazz player through manipulation of timbre, attack, vibrato, intonation or other means; this combines with the proper rhythmic placement of each note to produce swing in a great variety of ways. [48]
>
> J. Bradford Robinson

> I can always hear swing but can't always find the way to recreate it, either on paper or through the violin. It's very difficult to let go of all taught principles and find a new way to do things. It's a little like speaking a foreign language, no matter how well you know the language you know you have an accent and sound like a foreigner to the locals but there's not much you can do about it! [49]
>
> Ioana Petcu-Colan

I have often encountered a difficulty amongst classically trained musicians to understand the concept of the rhythmic swing of traditional music. The above quotations illustrate possible reasons for this difficulty. The usual solution in notational terms is to notate 'swung' rhythms in tuplets. However, in reality the tuplet does not necessarily define rhythmic swing. Just as in jazz, swing in traditional music is determined as much by articulation as rhythmic factors. I have noticed that many classically trained musicians play the following rhythms quite differently to how traditional or jazz musicians do.

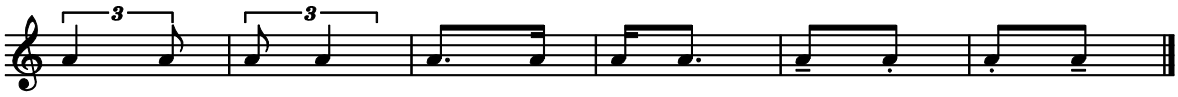


Figure 3.54 Rhythms and articulations related to swing rhythm.

The first example is the most commonly associated form of 'swing' in duple metre music and it is often mistakenly assumed that this is the general rhythm used when traditional musicians perform *reels*. It is often much more varied than this and all of the rhythmic values above could conceivably be used in one performance of a *reel*. The last

[48] Robinson, J. Bradford: "Swing." *Grove Music Online. Oxford Music Online.* http://0-www.oxfordmusiconline.com.ditlib.dit.ie/subscriber/article/grove/music/27219 (accessed June 4, 2010).
[49] Petcu-Colan interview.

two examples are particularly important as it is the articulation rather than actual quaver displacement which gives some players their 'swing'.

There is a tendency for classical string players to place a short gap in between each note they play, unless they are specifically asked to play using smooth *legato* phrasing. In the first of the previous examples, the crotchet within the tuplet may have more of a value of a dotted quaver with a semiquaver rest before the second note. I have noticed when classical musicians perform tuplet rhythms like these, the sound produced is rarely as smooth and free-flowing as in traditional music. This is often caused by string players lifting the bow before they articulate the next note. This bowing technique is not suited to traditional Irish music as it interrupts the flow of the rhythm. Even if the classical musicians constantly bow on the string, as traditional fiddlers tend to, their technique may still cause a short rest between notes which makes the rhythm quite different. This is due to the fact that many classical string players stop the bow before changing between up and down bows. This is something Martin Hayes encountered when he gave a master-class to Italian classical musicians.

> Something I wouldn't have paid any attention to myself and I didn't understand what they were talking about at all, but the guy said, 'Your bow never stops'. I couldn't figure out what on earth he was talking about until maybe two days at the end of it I was teaching a tune and the bowing was all stiff and I was going, 'No, you've got to loosen that up'. So I started trying to see it and they stopped the bow at the end of the bow to make a clear distinction and I would never have done that.
>
> (Hayes interview).

The combination of this habit, along with habits relating to lifting the bow, use of *rubato* and a constant *vibrato*, means that classical string players tend to find it extremely difficult to try to recreate the general bowing techniques and thus the motoric swing rhythm traditional fiddlers have. This also applies to other instruments, for wind players it is usually a case that *rubato* coupled with different breathing and tonguing techniques causes the difficulties.

Classical technique is generally so different to traditional Irish technique that considerable work and explanation beyond the score is necessary to help classically trained musicians to approximate the swing of traditional music. I do think it is possible for classical musicians to develop this rhythmic swing. It is my experience that some classically trained musicians respond better than others to the challenge and the best results normally occur when they are performing with traditional musicians. When Ioana Petcu-Colan performed *Music for the Departed* (2006) with Martin Hayes and Dennis Cahill, the fact that she learnt the music by heart and did not use the score meant she was better able to hear and fit in with the rhythm Hayes and Cahill produced. On the other hand, it has been much more difficult for musicians playing my *String Quartet No.2-The Cranning* (2005) to generate swing, because they do not have a traditional musician to refer to. It is in these situations that I have faced my biggest dilemma in translating the language of traditional music into a language that classical musicians might understand. I have come to the conclusion that in most situations it will not be possible for such musicians to perform music influenced by traditional Irish rhythms with the necessary rhythmic swing, due to the differences in performance practices and the small amount of rehearsal time usually allocated to contemporary concert music.

This may seem a rather pessimistic conclusion, however I have noticed that it is only those with a good knowledge of traditional music that have really noticed the rhythmical difficulties I hear. Classical musicians, critics and audiences do not seem to hear the differences too much.

3.2.2 Traditional Irish Rhythmic Structures

> A colleague told me that he didn't use Irish idioms in his own music because he was interested in rhythm and he didn't want to spend the rest of his life writing in 6/8.
>
> Fergus Johnston [50]

There is a common misconception that traditional music is rhythmically simple music with *reels* in 4/4, *jigs* in 6/8 and so on. It is understandable why someone not well attuned to the music would think this. In Irish tune collections the vast majority of tunes are notated in straight quaver or crotchet movement in 4/4 and 6/8 with some tunes in 2/4, 3/4, 12/8 and 9/8. Deeper aural examination of the music reveals a much richer level of detail than this.

The most obvious example of a deeper level of rhythmic complexity comes in the many examples of commonly played tunes which contain occasional metrical changes when notated. I have particularly noted this in Donegal traditional music. Recordings by John Doherty (1895-1980) contain a number of examples of such odd beats within an overall regular metrical structure which might, for example, cause a 4/4 *reel* to have an occasional extra bar in 2/4. I discuss tunes such as this in the following section.

Something which is less obvious to the casual listener is the phrasing different players give to the music. In a pub session or large ensemble these rhythmic nuances are almost inaudible so that in *reels*, for example, a regular 4/4 pattern seems to occur with a strong backbeat.[51] Isolation of accomplished individual players reveals a constantly changing approach to phrasing within the overall structure, which makes the 4/4 time signature almost irrelevant. Martin Hayes and Charlie Lennon both acknowledged to me

[50] Johnston, Fergus: "Letters: Looking for the Irish Bartók." *The Journal of Music in Ireland.* Edited by Toner Quinn. September/October 2005. http://journalofmusic.com/article/337 (accessed October 28, 2010).
[51] A backbeat occurs when an accent is placed on the second and fourth beats of every bar in 4/4.

that tunes really are not in set time signatures but are more akin to varying melodic streams.

> I put phrases in what are logically singable kinds of things. So everything I do with the bow is intended to make that internal sense of the song that I have, like the tune is a song. So I'll bow right over anything, I wouldn't stop at the end of the bar or anything like that, I *might*, I might not.
>
> (Hayes interview).
>
> It depends on where in the tune you are when you cross the bar and the run of the bow but oftentimes it will hop over the bar, usually just the one note. I liken it to *Sean-nós* singing in a way that the singers follow through to the next note before they take a breath sometimes. I'd notice if I was trying to write out bowing, one would think in terms of if you're not going single bows then you'd think you'd just go 2 and 2 or 4 and 4 and so on but you actually don't do that, you do a lot of 3's and 2's and 1's and then occasionally 4's or even more. Then occasionally you'll get a lot on the one bow so that there is not any pattern really.
>
> (Lennon interview).

David Lyth's book *Bowing styles in Irish fiddle playing, Vol. 2*[52] really emphasises these points by showing how bowing patterns regularly go over bar-lines and when the music stays within a bar-line, certain passages are phrased in uneven patterns such as 3,3,2 or 5,3,2 etc. The bowing markings Ed Reavy (1897-1988) recommended for his composition *Leddy from Cavan* give a visual sense of this cross-bar phrasing.

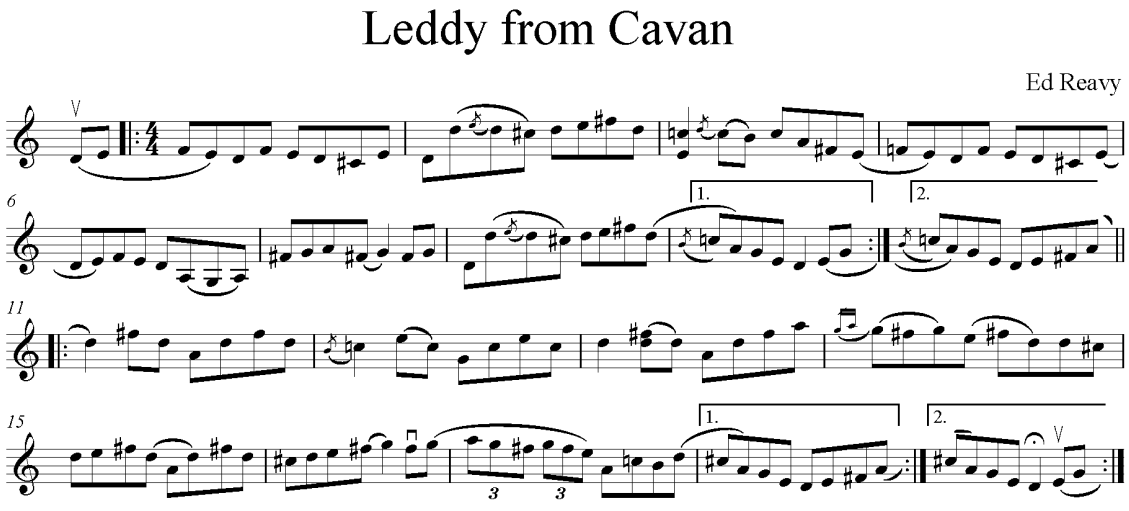


Figure 3.55 Reavy, 'Leddy from Cavan,' (Reavy, n.d., 6).

[52] Lyth, David: *Bowing Styles in Irish Fiddle Playing Volume 2.* Dublin: Comhaltas Ceoltóirí Éireann. N.d.

Here there are seven occasions where the bow crosses a bar-line and three occasions where the bow crosses the middle of the bar. This is only one notated version of possible bowing that Reavy recommended.

It is crucial to understand that traditional musicians really do not think in terms of bars and bar-lines when they are playing, Hayes and Lennon only referred to bars in these interviews because I was speaking in those terms with them. It is more to do with a melodic flow. The tunes are only notated in simple metres for convenience sake and it is up to the individual player to add rhythmic variety to ensure it does not stay in a rigid pattern. Once the music is seen and heard in this light the potential for rhythmic variety is endless and complex.

Now that I have explained the fundamental problems of notating these tunes in any set metre, I will discuss the various tune types and how they differ in practice from the very basic rhythmic characteristics found in skeleton notations. There are many different tune forms used in traditional Irish music which I have split into three categories for this study:

- Tunes commonly notated in duple metre.
- Tunes commonly notated in triple metre.
- Slow airs and Pieces.

There are numerous resources, including Ó Canainn (1978), Carson (1985) and Vallely (1999), which describe these tune forms for students of traditional music to understand. To avoid duplicating these resources I explain what I find interesting about the tune types as compositional structures.

3.2.2.1 Tunes commonly notated in duple metre

In this category I place the following tune types:

- *Reels*
- *Hornpipes*
- *Highlands*, *Strathspey*s and *Flings*
- *Barndances*, *Germans* and *Schottisches*
- *Polkas*

Whilst I have already demonstrated how these tunes do not always fall into 4/4 or 2/4 phrase structures, if one were to add up all the phrases in 4's, 3's, 2's etc., they would generally add up to make a structure where the phrases create an overall metre divisible by two. Thus they can be notated in 4/4, 2/4, 2/2, 8/8 and so on.

3.2.2.1.1 Reels

There are two main types of *reel*; *single reels* and *double reels*. *Double reels* are the most common and are usually just referred to as *reels*. *Reels* are generally notated in 4/4 as streams of constant quavers, with occasional crotchets and notes of other lengths. *Double reels* usually have two or more sixteen bar parts where each part is made up of the same eight bar phrase repeated twice. Within this eight bar phrase there can be much repetition of phrases so that the first four bars are similar to the second four. The standard tune *The Concertina Reel* is an example of a very simple *reel* with this structure.

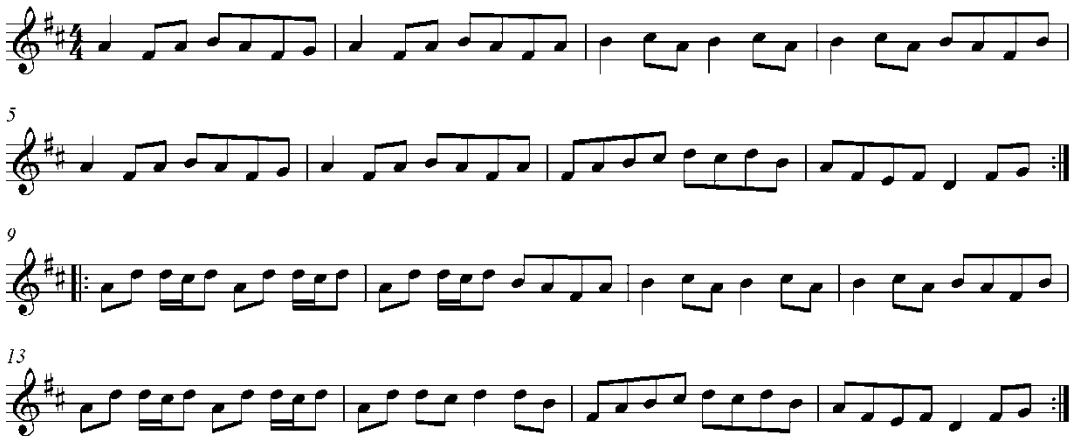


Figure 3.56 'The Concertina Reel.'

There are more complex *reels* where the melody flows without much repetition through each part. Ed Reavy's *The Wild Swans at Coole* consists of two sweeping melodic phrases.

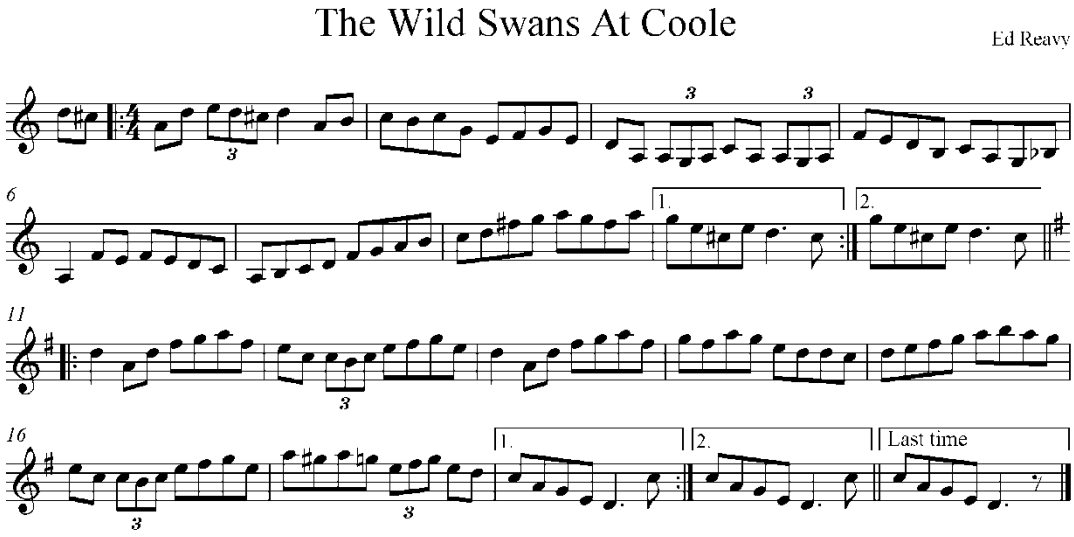


Figure 3.57 Reavy, 'The Wild Swans of Coole.' (Reavy, n.d., 31).

Single reels tend to have just two eight bar parts which run into each other without repetition, i.e. The A part does not repeat before the B part starts.[53] The Michael Gorman (1895-1970) composition, *The Mountain Road* is usually played as a *single reel*.

[53] In traditional music most tunes have two parts; each part is usually eight bars repeated twice. The first part is called the A part, the second the B part. There are many tunes with more than two parts, so they have C, D, E parts and so on. Some tunes have an uneven number of bars.

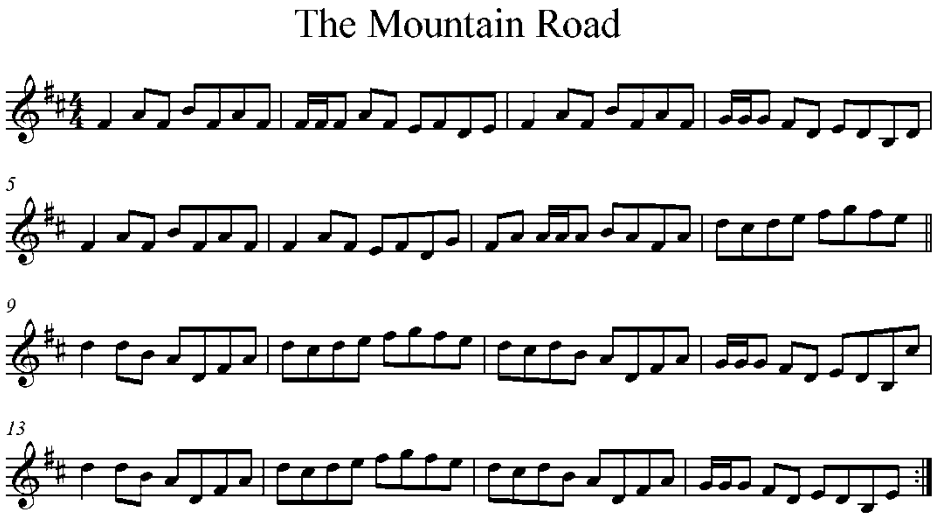
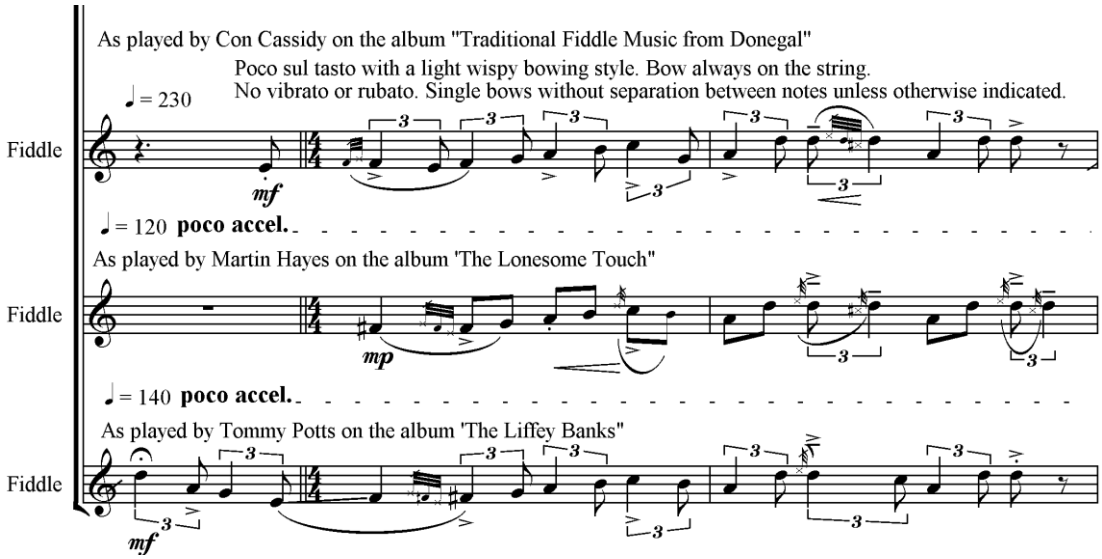


Figure 3.58 Gorman, 'The Mountain Road.'

All these *reels* mostly consist of quavers in these skeleton notations. The way they actually sound rhythmically is quite different, depending on the musicians playing them. This is mainly down to the concept of 'swing' discussed in Chapter 3.2.1.

The variation in approach to *reel* rhythms can be seen in my transcriptions of Con Cassidy, Martin Hayes and Tommy Potts' versions of 'My Love is in America'. In the opening bars they each use different rhythmic values and articulations.



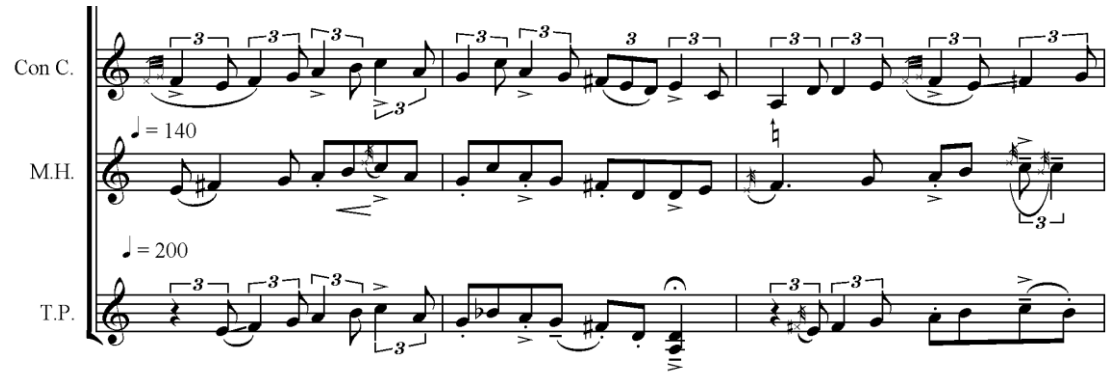


Figure 3.59 Bars 1-6 of 'My Love is in America' transcriptions.

Some musicians give more emphasis to certain beats in the bar, particularly beats two and four in the case of musicians with a strong background in playing for set dancers. Another approach is to emphasise every main beat, but more often a good musician will constantly vary the beats they emphasise, as the previous examples demonstrate. Some common patterns that *reels* can be phrased in follow, using the opening four bars of the popular tune 'The Boys of Malin.'

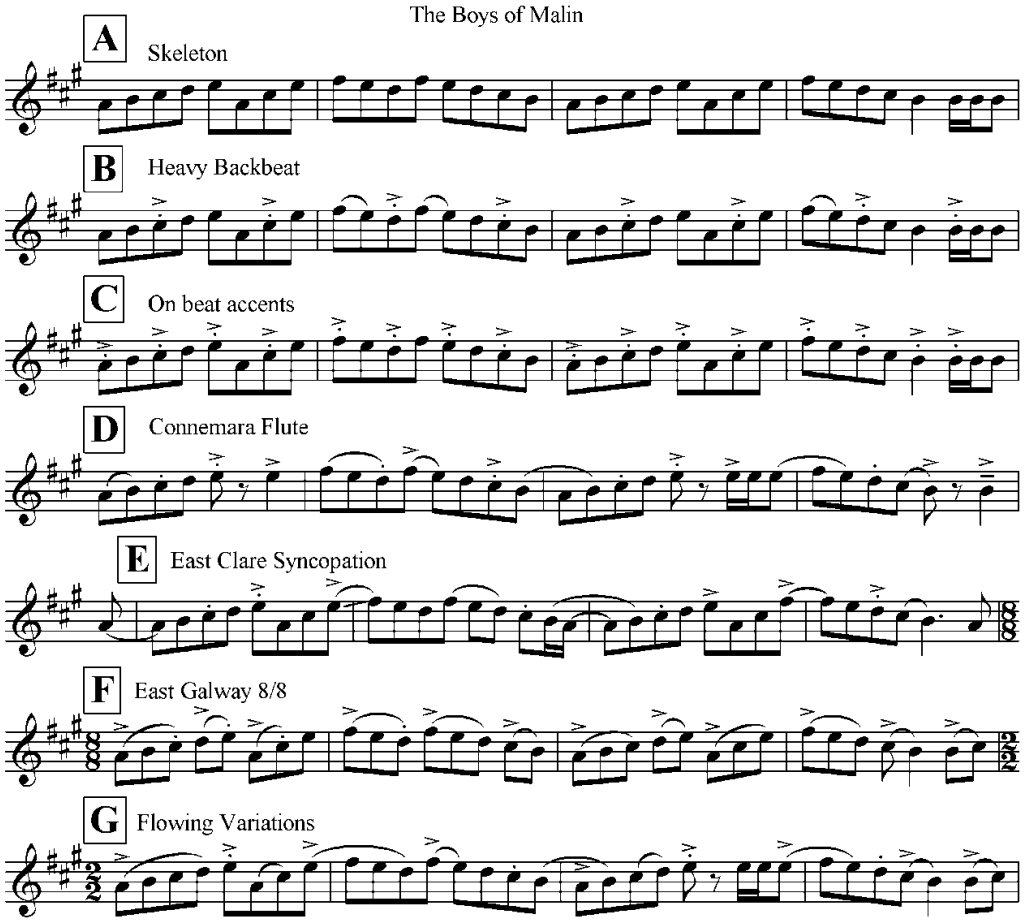


Figure 3.60 Reel phrasing.

Example A is the skeleton notation as would be seen in a tune book. Examples B and C are rather exaggerated examples of two heavily accented styles of playing. It would be very unusual for any musician to keep these patterns throughout the playing of a *reel*, but they could form the basis of their interpretation. Example B is the common pub session and *Céilí Band* backbeat style. Example C is particularly found in Northern flute playing. It is also found in *Sliabh Luachra* music. Example D is a basic version of a style of flute playing particularly found in Connemara where the third and fourth beats are accented, it is related to *Sean-nós* dancing. Marcus Hernon (b.1959) would be a major living exponent of this style. The melodeon player Johnny Connolly also sometimes phrases *reels* in this way. Example E is a basic version of the syncopated style common to East Clare and most particularly the *Tulla Céilí Band*. It is related to the set dancing of the area. Example F is a basic version of the East Galway style of phrasing which is less related to dancing and more about flowing melodic phrasing using 3+3+2 and 3+2+3 divisions, hence the 8/8 time signature. Paddy Fahey and Paddy Carty played in a style similar to this. Example G demonstrates how a skilled fiddler might choose to play the tune with a flowing bow style. This style relates to Charlie Lennon's comment that phrasing can constantly vary and cross bar-lines. This later example is closest to the phrasing most accomplished musicians would use.

These examples demonstrate how the skeleton notation really does no justice to the multiple ways *reels* can be phrased. Paradoxically, this skeleton notation is absolutely necessary when composing music for traditional musicians with the intention that they maintain their individual styles in performance. It would be completely alien for most traditional musicians to follow notated bowings and phrasings. The clearest example of my differing approaches to notating these elements for traditional and classical musicians can be found in my commentary about the pieces *The Longest Reel* and *Tar Éis an Caoineadh* in Chapter 4.2.

3.2.2.1.2 Hornpipes

Hornpipes are the second most commonly played form of duple time tunes in traditional music. They are generally played at a stately pace and have a swung rhythm, usually in dotted quaver to semiquaver movement or crotchet to quaver movement in the space of a triplet. They are characterised by the endings of the parts which usually have three crotchets, as in the old standard tune 'The Plains of Boyle'.

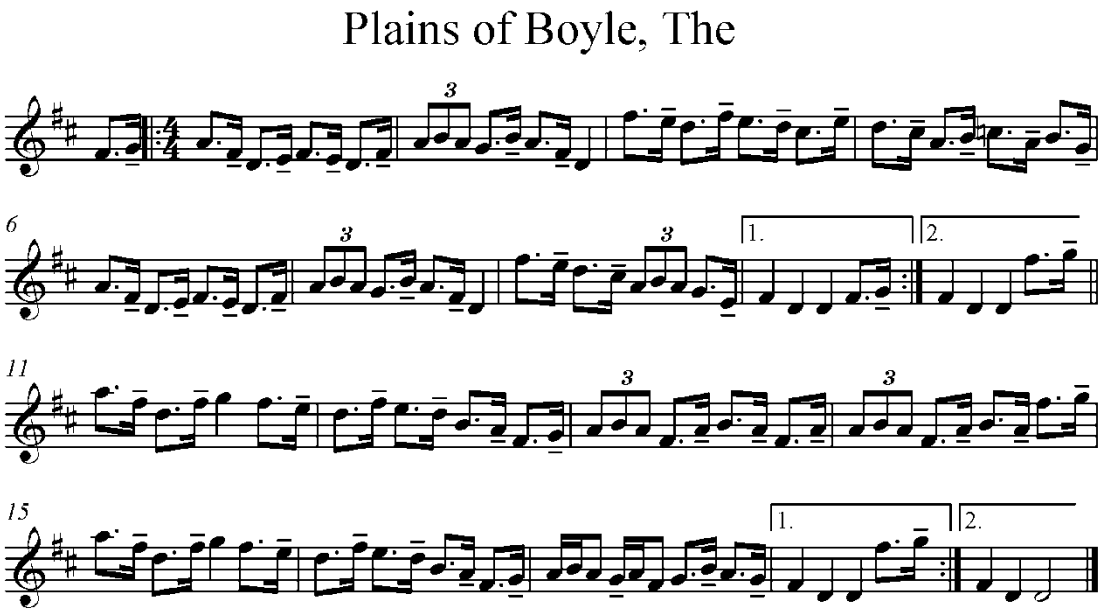


Figure 3.61 'The Plains of Boyle.'

The following excerpt shows the one example of a newly composed *hornpipe* in the music I have submitted with this dissertation. It is a short section in the *Uilleann Pipes Étude No. 5*, which I notated using tuplet movement rather than dotted quaver to semiquaver movement.

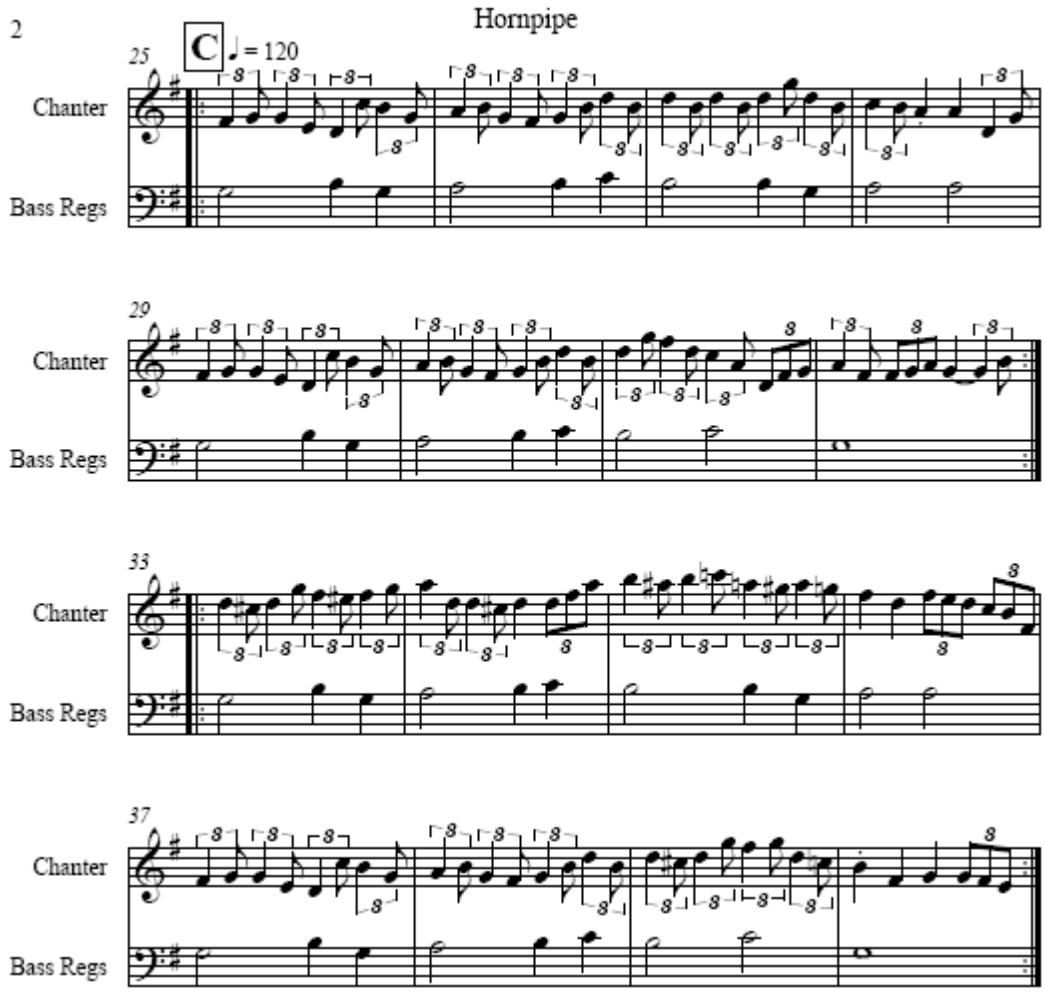


Figure 3.62 Hornpipe in Flynn, *Uilleann Pipes Étude No. 5*.

3.2.2.1.3 Highlands, Strathspeys and Flings

These tune types share similar characteristics. *Highlands* and *flings* are basically the same type of tune, indeed they are often referred to as *highland flings*. They tend to be called *highlands* in Donegal and other northern counties and *flings* in Clare and other southern counties. The different name is apt because Donegal *highlands* tend to be played with a slightly different rhythm to Clare *flings*. The main difference is the use of the 'Scotch snap' rhythm in Donegal *highlands*. These tunes are characterised by their moderate, swung tempo. They are generally played slower than *reels*, although a Donegal *highland* can go at a similar pace to an East Clare *reel*. They often open with a strongly emphasised crotchet and dotted quaver (or a crotchet in the space of a triplet)

on the same note and they contain hypnotic melodic repetition. The opening phrase is often repeated four times in the A part and then another phrase can be similarly repeated in the B part, as in 'The Low Highland', a tune associated with Con Cassidy.

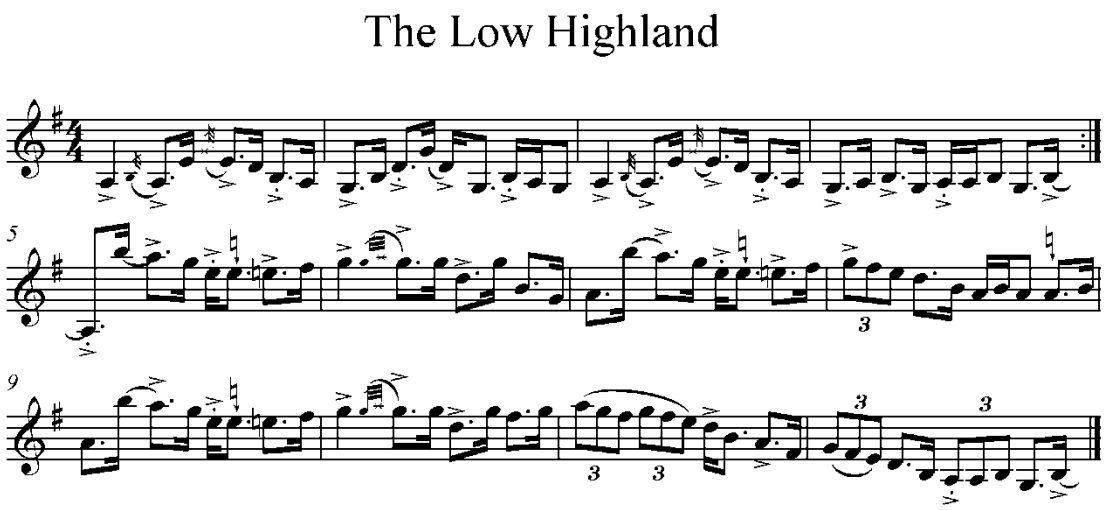


Figure 3.63 'The Low Highland.'

The general rhythmic approach of a *highland* can vary between dotted quaver to semiquaver movement or tuplet movement. The following example is a Clare style *fling* which Willie Clancy played with tuplet movement. This tune has more rhythmical space in it through the use of crotchets. In practice, these crotchets can be ornamented or left as they are.

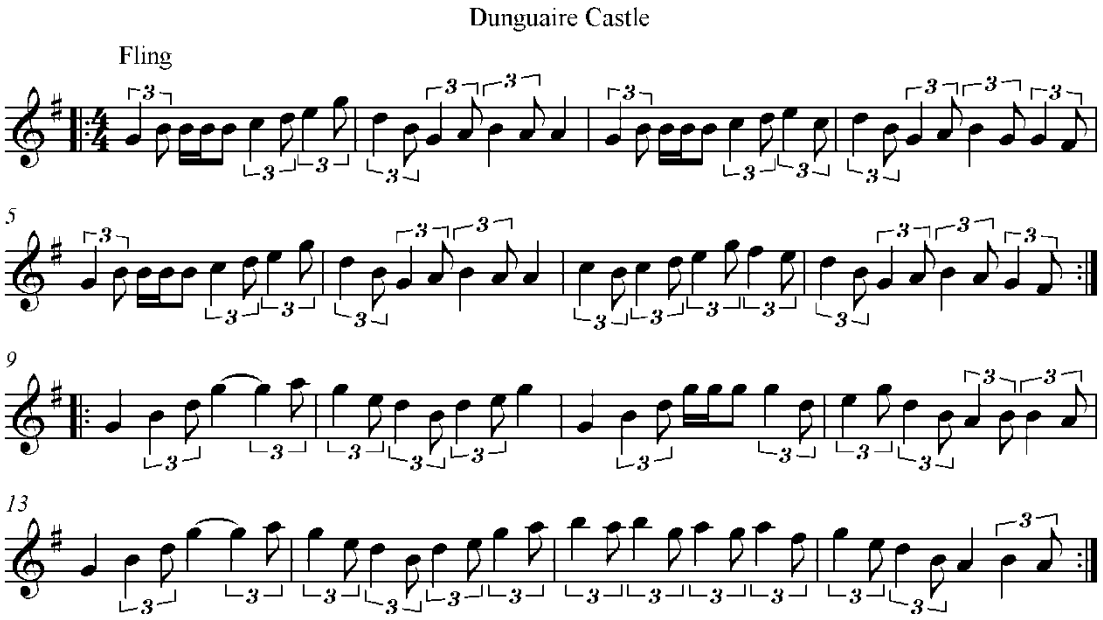


Figure 3.64 'Dunguaire Castle.'

I used the *highland* rhythm in *String Quartet No.2-The Cranning*. Movement III is called 'The Bamako Highland' and it is based on the *highland* rhythm. In the works I have submitted there are references to *highland* rhythms in *Uilleann Pipes Étude No. 5*, *The Longest Reel* and *Tar Éis an Caoineadh,* which I discuss in Chapter 4.

*Strathspey*s are tunes of Scottish origin. Some tunes are sometimes labelled as either a *highland* or a *strathspey*. As I see it, the main differentiating factor between a *highland* and a *strathspey* is that tunes more readily identified as *strathspey*s tend to have streams of triplets at the end of the tune. In 2007 I composed a piece for three guitars called *Errigal Suite*. It begins with a *strathspey* which was influenced by 'The Low Highland'. The main rhythmic difference is the triplet movement at the end of each part.

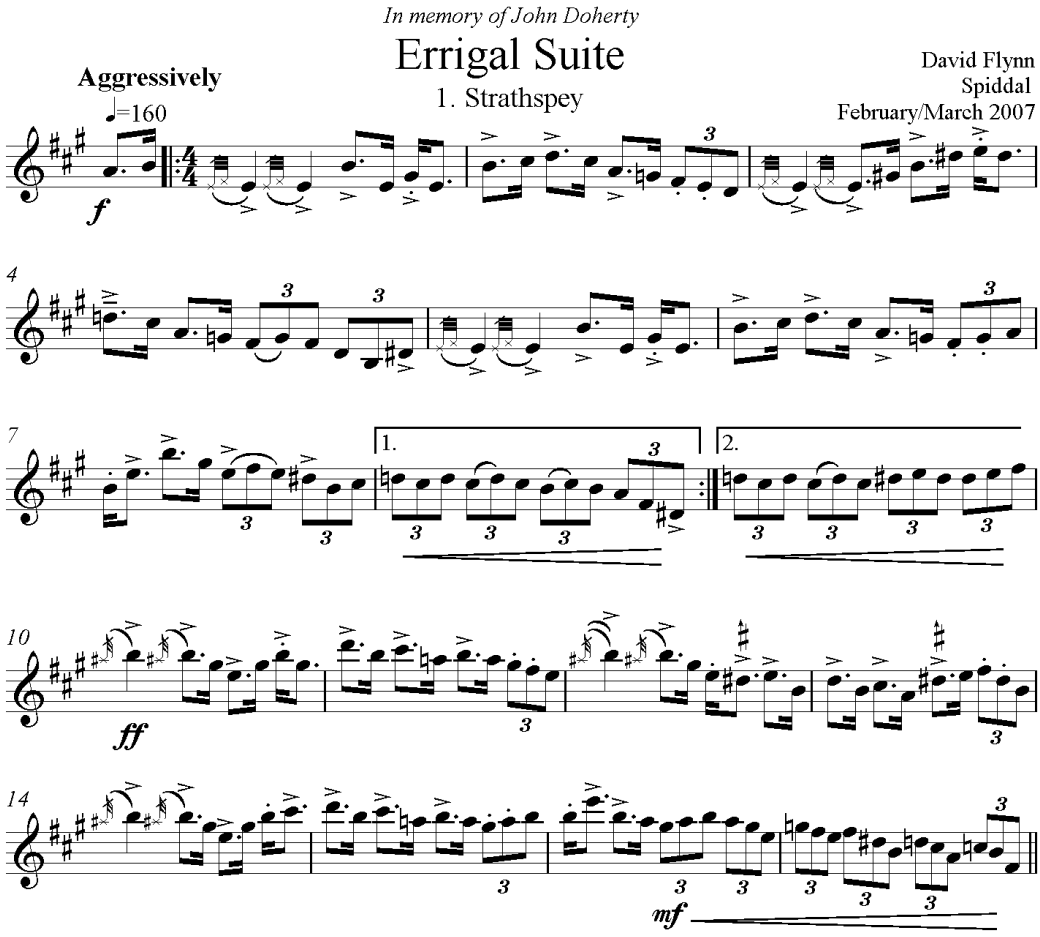


Figure 3.65 Flynn, *Errigal Suite*, 1-17.

This is the only example of a *strathspey* in any of my compositions.

3.2.2.1.4 Barndances, Germans and Schottisches

These tune types can be categorised together because they are basically the same form of tune in the context of traditional Irish music. *Barndances* are common throughout Ireland. Tunes known as a *Germans* are particular to Donegal and surrounding areas. There are only a few commonly played *Germans* in existence. *Schottisches* are even rarer in the Irish tradition; they are much more common in Central European folk music traditions, particularly in Germany.

Barndances tend to have a similar rhythm and tempo to *hornpipes*, yet they are distinguishable because they have more crotchet movement, as in the following example where crotchets can be seen in bars 3, 4, 7, 10, 11, 15 and 18.

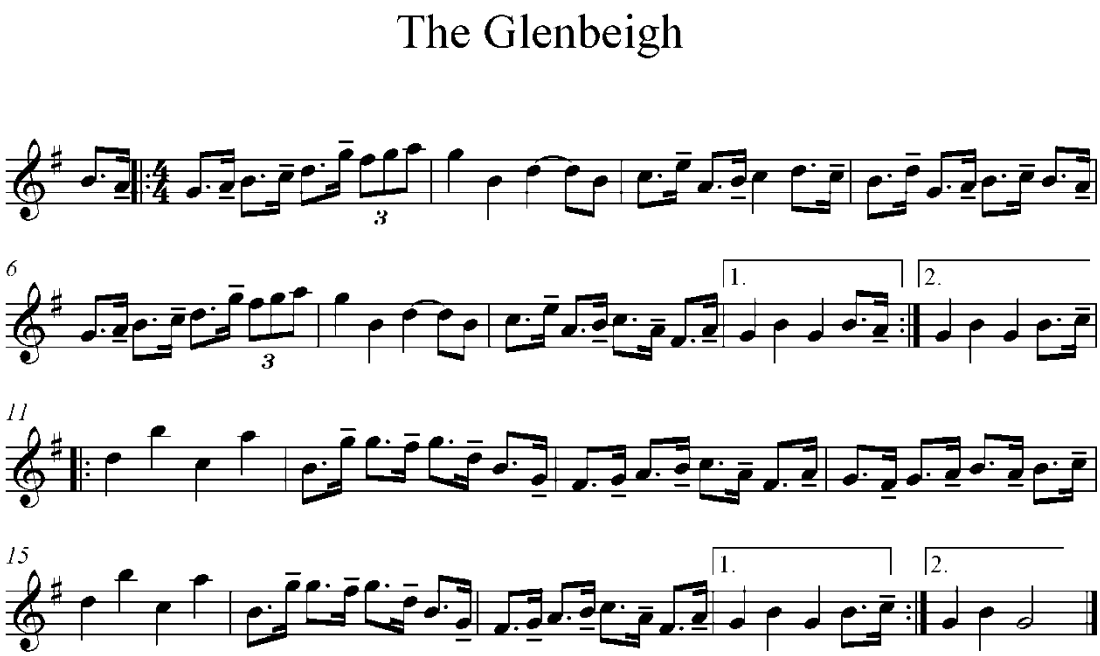


Figure 3.66 'The Glenbeigh Barndance.'

I previously used the *barndance* style in my violin and piano piece *Between the Jigs and the Reels* (2004).

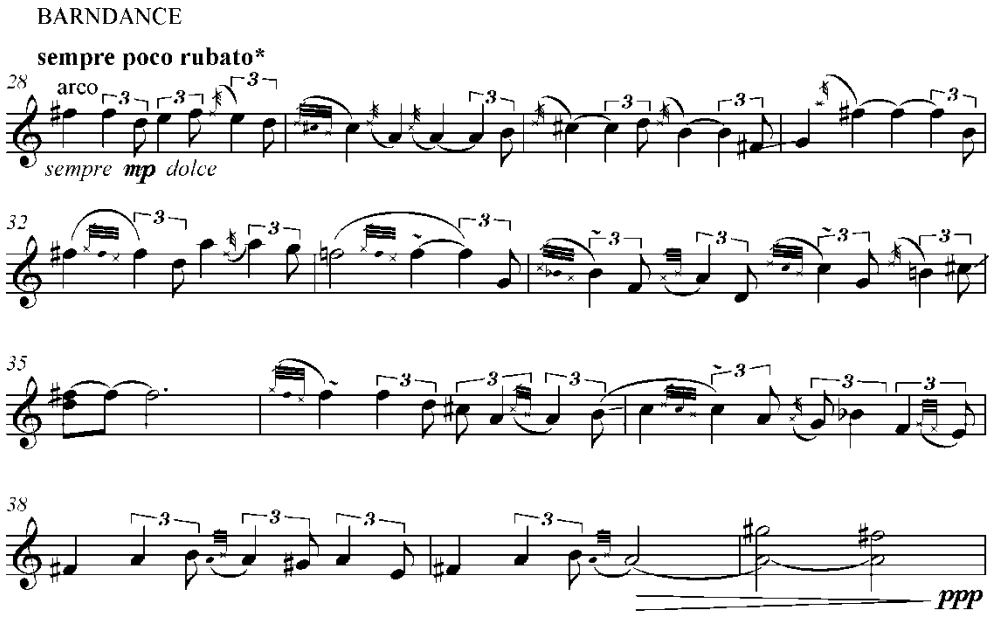


Figure 3.67 Flynn, *Between the Jigs and the Reels,* 28-40, violin part.

I have used the *barndance* rhythm in just one work since, *Uilleann Pipes Étude No.5*.

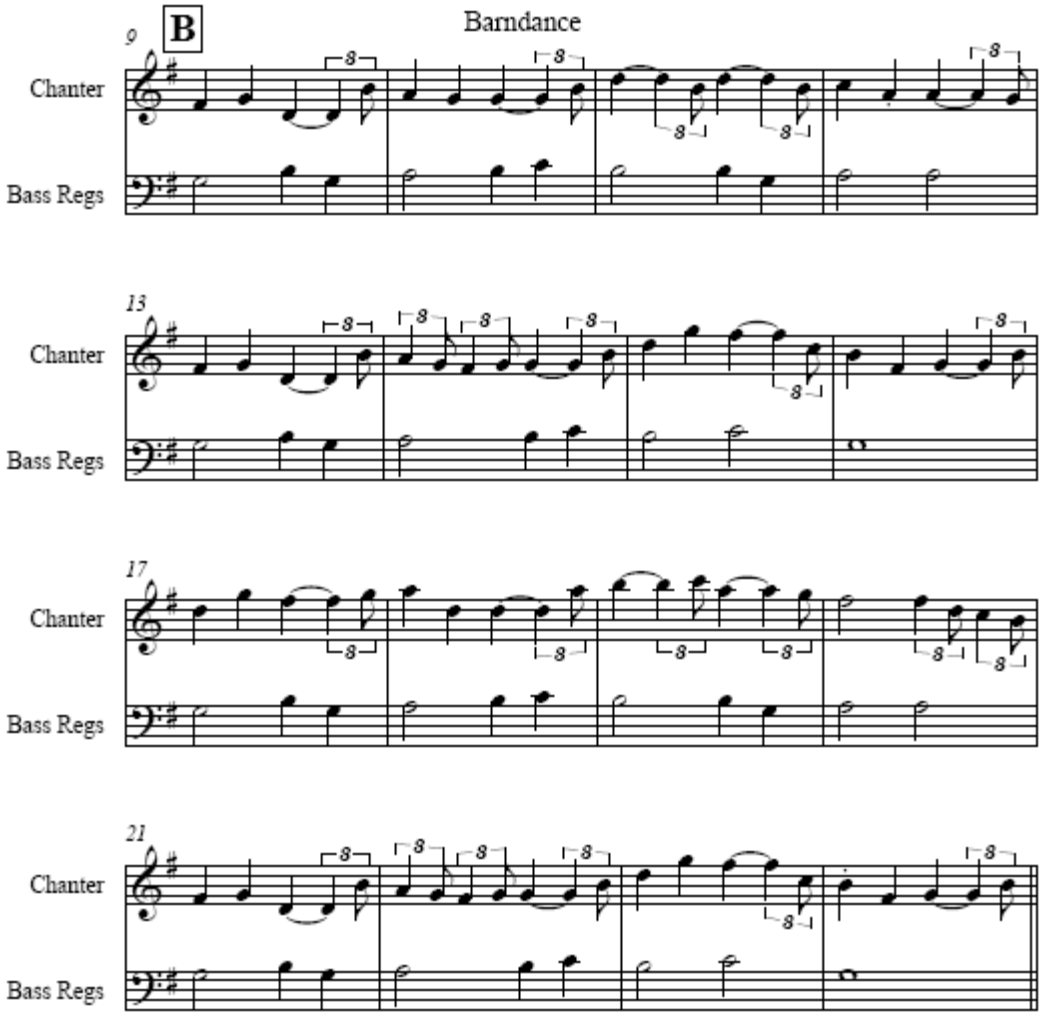


Figure 3.68 Flynn, *Uilleann Pipes Étude No.5*, 9-24.

There is a lot more crotchet movement in this *barndance* than 'The Glenbeigh'; this is perhaps a reflection of the influence of Martin Hayes' *barndance* playing. He often plays *barndances* in this spacious manner.

There is little to distinguish the tune style known as a *German* from a *barndance*. *Germans* are also very similar to *Schottisches*, which are ironically of German origin! It is highly likely that the *Germans* played in Donegal are derived from *Schottisches* played by travelling German musicians. James Byrne once related to me how some tunes entered the Donegal tradition in this manner. The following tune is known as 'The Long German'.

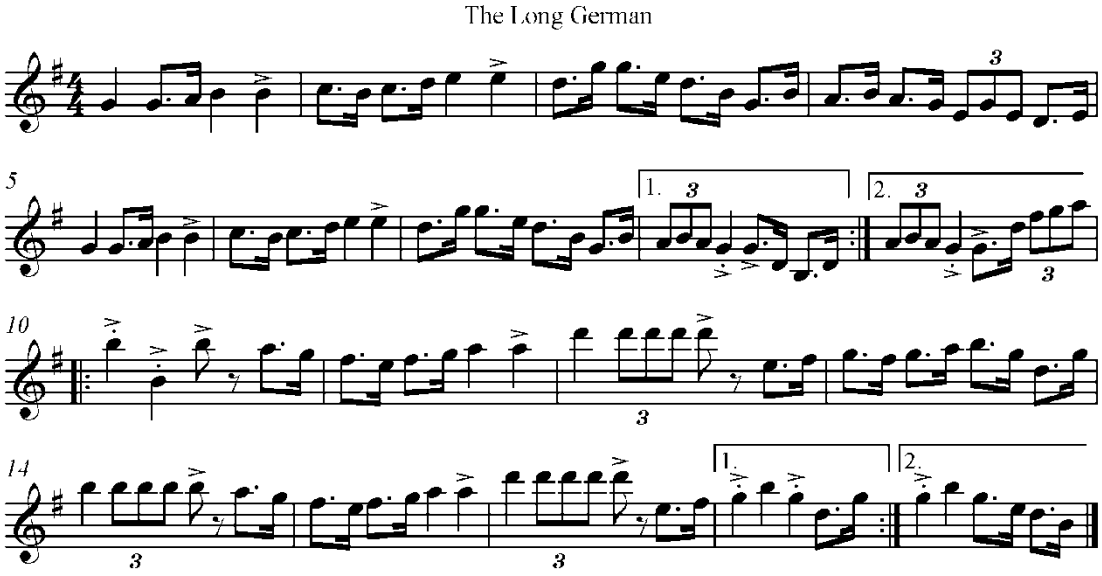


Figure 3.69 'The Long German.'

One distinguishing feature of *Germans* evident in the notation is the use of two crotchets of the same note, the latter of which is accented. These can be found at the end of bars 1, 2, 5, 6, 11 and 15.

3.2.2.1.5 Polkas

Polkas are perhaps the most deceptive tune styles in traditional Irish music. They come in two main forms, Northern *polkas* and Southern *polkas*. In skeleton notation they tend to look like extremely simple tunes in 2/4. Indeed *polkas* are often taught to beginners due to their apparent simplicity. It is easy to play most *polkas* as they are written on the page. It is not easy to play *polkas* as they are played by master musicians. Notation cannot articulate the intricacies of *polka* playing, particularly the *polka* playing of Sliabh Luachra and West Kerry.

Caoimhín Ó Raghallaigh is one of the principal contemporary exponents of Southern *polkas*. The following extract from my interview with him demonstrates how he defines the elusive sense of rhythm in *polkas*.

> The only way that I can satisfactorily play with them is to relinquish any idea of where anything should happen. One of the things I don't do in *slides* and *polkas* is tap my foot. Because it defines it and it collapses, it ceases to be interesting if you tap your foot and playing with somebody, if you tap your foot or if they're tapping their foot it completely sterilises the *slide* and *polka*. So a way of moving that suits me better is to move at the knees because it's less precise. And the rhythm extracts and expands with that as well and it's very much based on the physical movement of dancers, so whether they're rotating or whether they're going in and out it has an effect.
>
> (Ó Raghallaigh interview).

Deep listening to Kerry musicians playing *polkas* gives a sense of how the music they are playing is different from the rather bland look of a *polka* in its skeleton notation. The skeleton notation for 'The Top of Maol' does not take into account the undulating dynamics and articulations usually found in Kerry *polkas*, which I have notated in the second of the following examples. (These undulating dynamics are audible on Audio CD Track 7).

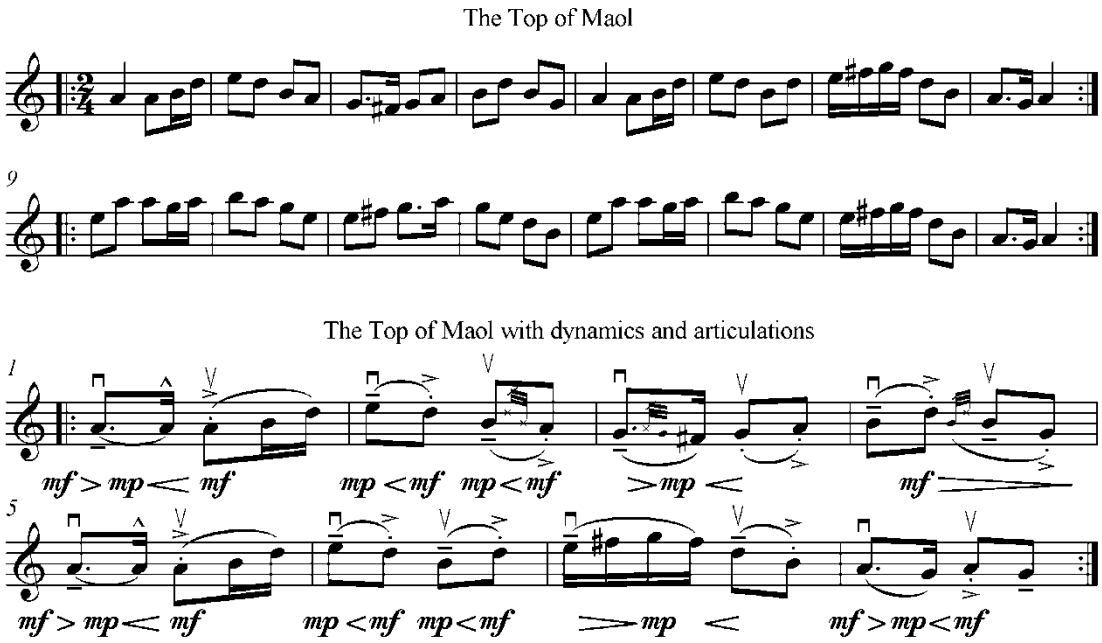


Figure 3.70 'The Top of Maol.'

There is a rhythmic push and pull in *polkas* which notation cannot convey. The dynamics and articulations bring this out somewhat, but one really must listen to Kerry musicians playing *polkas* to get a real sense of the subtle *rubato* which gives the music its rhythmic ambiguity. In the notation, I have used *tenuto, staccato, marcato* and *accent* markings to give a sense of where and how this push and pull occurs. The push comes on the notes marked with *tenuto* signs; the pull comes with the accented *staccato* signs. There is a general approach to bowing Southern *polkas* where there are two quavers to every bow change; this is indicated in the notation also. Most good musicians would vary this bowing pattern to some extent. Fiddle and accordion are the main instruments used for playing Southern *polkas* and so bow or bellows speed and pressure tend to determine these rhythmic intricacies.

Northern *polkas* are usually more urgent and do not contain the same push and pull and undulations found in southern *polkas*. This is reflective of the fact that some of them have their origins in marching band music. They also tend to have more notes in

them with quick semiquaver movement, as in the following example which I learnt from the playing of Harry Bradley.[54]

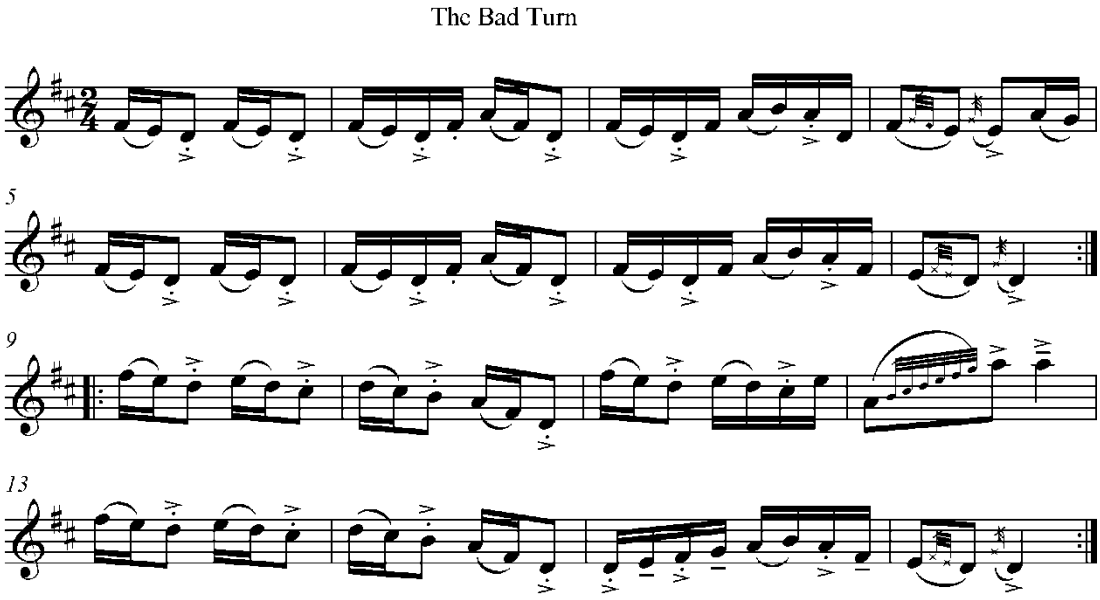


Figure 3.71 'The Bad Turn Polka.'

There is at least one similarity in the articulation of Southern and Northern *polkas* and that is the tendency to accent and shorten the second and fourth quavers in the bar. Bradley, perhaps more than any other recent flute player, is known for playing these types of tunes, which he links to *marches*.

> The *polkas* and *marches* basically they're very close depending on the type. There's a few different types of *march* but you can belt them out, there's relatively few notes and you can concentrate on the tone and the rhythm in them. There's only so many *jigs* and *reels* you can take, they're like a tonic. I just always appreciate them in those sort of terms.
>
> (Bradley interview).

In the works I have submitted with this dissertation there are three examples of *polka* rhythms, all are in the Southern style. A large section of *Tar Éis an Caoineadh* is in a *polka* rhythm. The final section of *The Valley of the Lunatics* is also based on *polka* rhythms. In *Stories from the Old World*, the second movement, 'Más le gigeóg a mhallais Í,' is built entirely on *polka* rhythms.

[54] Bradley, Harry: *Bad Turns and Horse-Shoe Bends*. Outlet Records, PTICD 9000, 1999. Compact Disc.

3.2.2.2 Tunes in triple metre

- *Double Jigs*
- *Slides* and *Single Jigs*
- *Slip jigs*
- *Hop jigs*
- *Mazurkas* and *Waltzes*

In triple metre tunes all the phrases in 4's, 3's, 2's etc., generally add up to make a structure with an overall metre divisible by 3. Thus they can easily be notated in 3/4, 6/8, 3/2, 9/8 and so on.

3.2.2.2.1 Jigs and *Slides*

Jigs come in three main forms. *Double jigs* are the most commonly played. They are usually notated in 6/8 as patterns of constant quavers grouped in three's, with occasional crotchets.

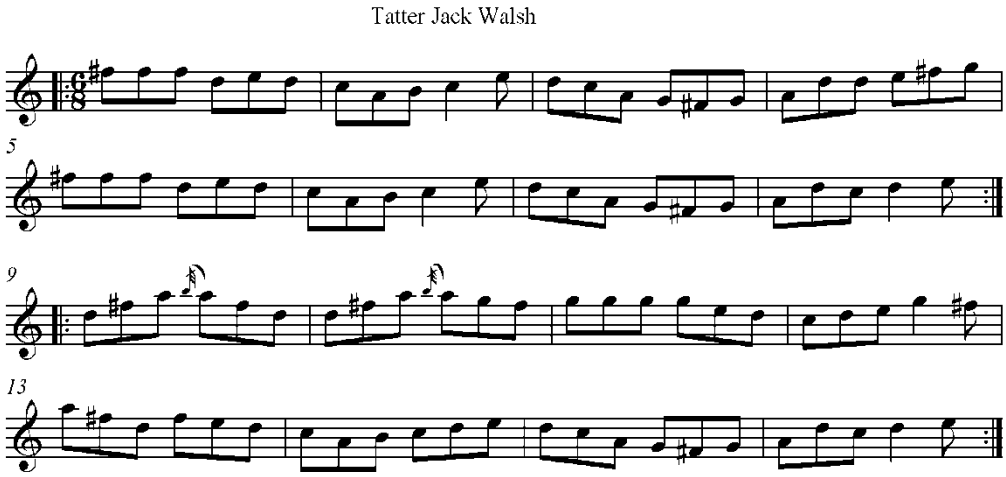


Figure 3.72 'Tatter Jack Walsh.'

Slides and *single jigs* are usually notated in 12/8. *Slides* are mostly found in Kerry and Sliabh Luachra music. They are characterised by rapid speed and variation between crotchet to quaver and three quaver movement.

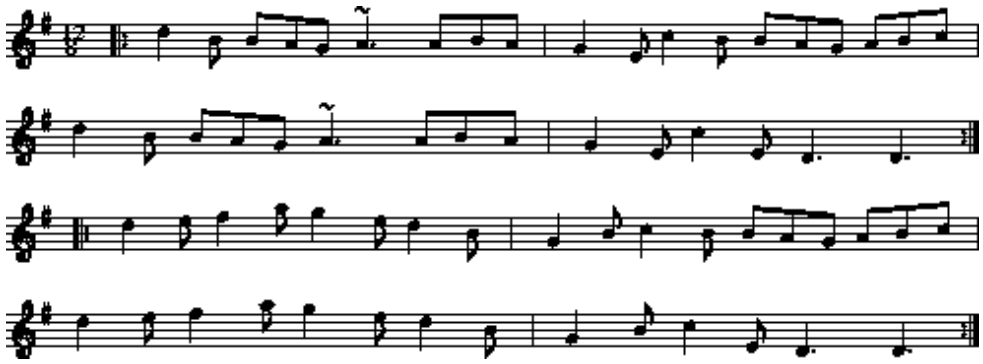


Figure 3.73 'The Star Above the Garter.' [55]

Single jigs are like the Northern form of *slide* and are commonly found in Donegal. They are usually played slower than *slides*. The main way to distinguish them from *double jigs* is that there is more crotchet to quaver movement in *single jigs* which makes them seem similar to *slides* when they are notated. The tune 'Off She Goes' is sometimes notated in 6/8 like a *double jig*. The preponderance of crotchet to quaver movement in the A part of the tune and the flow of the melody means it is more suited to being notated in 12/8.

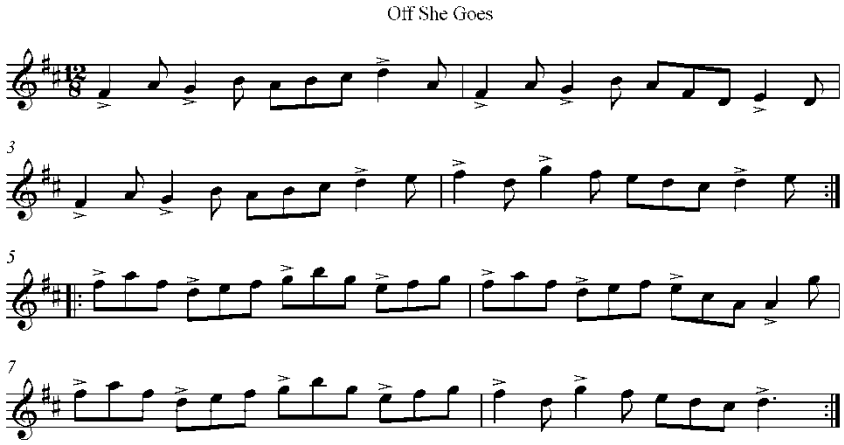


Figure 3.74 'Off She Goes.'

Slip jigs and *hop jigs* are usually notated in 9/8. In dancing terms, there is a defined difference between the steps used for a *slip jig* and a *hop jig*. In musical terms, some people do not differentiate between the *slip jig* and the *hop jig*, however I feel there is a difference between them which is similar to the difference between *double jigs* and

[55] "The Star Above the Garter Skeleton Notation." *The Session.* http://www.thesession.org/tunes/display/1398 (accessed August 28, 2010).

single jigs. I define *slip jigs* as tunes which generally have regular quaver movement such as 'Dever the Dancer'. They tend to be played quite fast and vigorously.

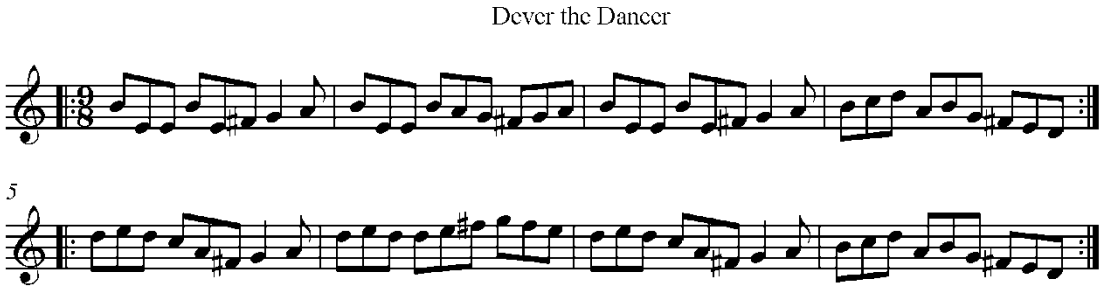


Figure 3.75 'Dever the Dancer.'

There is a crotchet on the third beat of the first, third, fifth and seventh bars. This is quite characteristic of most *slip jigs*. *Hop jigs* contain more regular crotchet to quaver movement which gives them a 'hopping' rhythmic quality. They tend to be played slower than *slip jigs.*

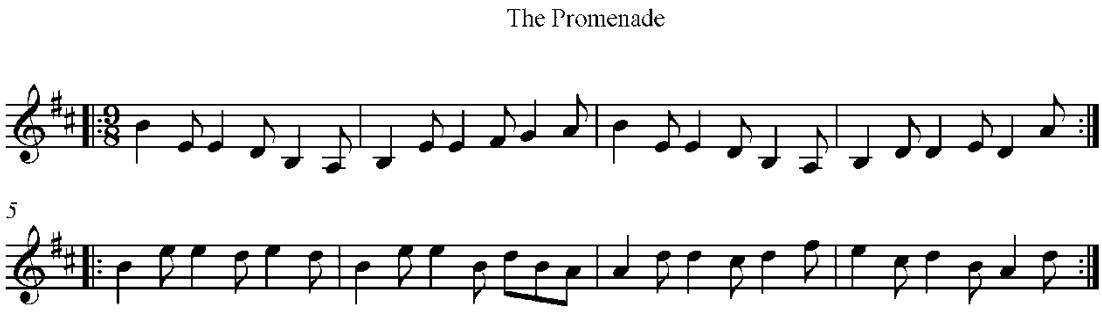


Figure 3.76 'The Promenade.'

In all forms of *jigs* there are similar principles of articulation and rhythmic nuance as there are in *reels*, which mean a good musician will constantly vary the rhythm. This can result in the rhythmic values such as the following.

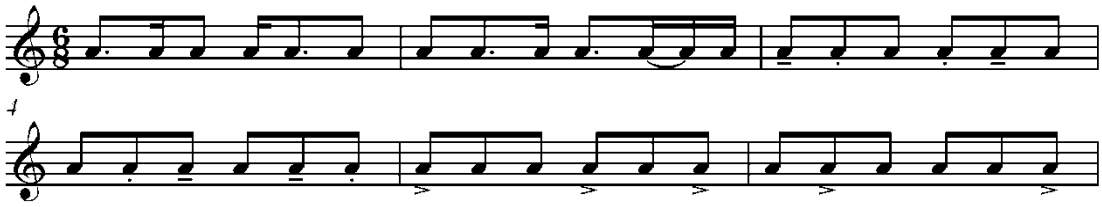


Figure 3.77 Jig rhythm variations.

3.2.2.2.2 Mazurkas and Waltzes

Both of these tune types were imported from European traditions. They are usually notated in 3/4. These forms have been adapted to traditional music to create distinctly Irish types of *mazurkas* and *waltzes*. The main difference between them lies in the emphasis of the beat. *Waltzes* normally have a pattern where the first crotchet of the bar is accented and the next crotchet is shortened. In the Irish *mazurka*, the first crotchet is accented and shortened and the second crotchet is accented.

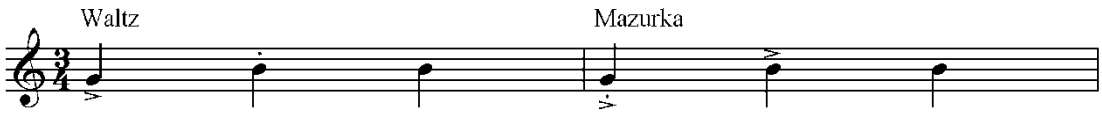


Figure 3.78 Waltz and mazurka basic beat divisions.

Irish *waltzes* are generally medium-paced, nostalgic sounding tunes. This belies the fact that many *waltzes* are derived from old popular Irish songs. These songs would have been popular at dances and they naturally became part of the tradition as musicians were asked to play the airs of these songs as instrumentals. The rhythm of a *waltz* varies between crotchets and swung rhythms for shorter note values. There are no *waltzes* in any of the works I have composed so far; however I did record the traditional tune 'Louis' Waltz' on my album *Draíocht* (2006).[56]

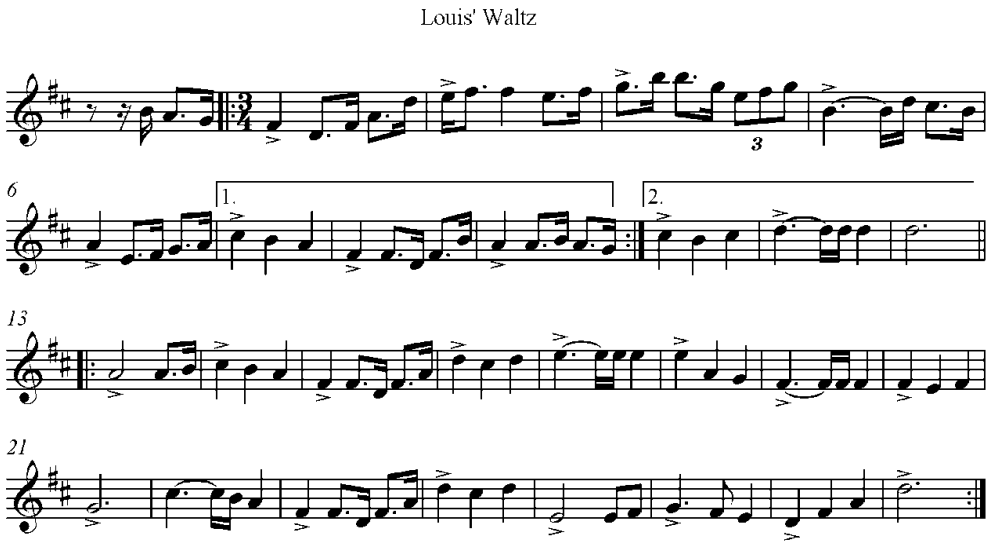


Figure 3.79 'Louis' Waltz.'

[56] Flynn, Dave: *Draíocht*. Frisbee Records, FRCD001, 2006. Compact Disc.

Mazurkas are almost exclusively found in the Donegal tradition; however a few *mazurkas*, such as 'Shoe the Donkey' are more widely played.

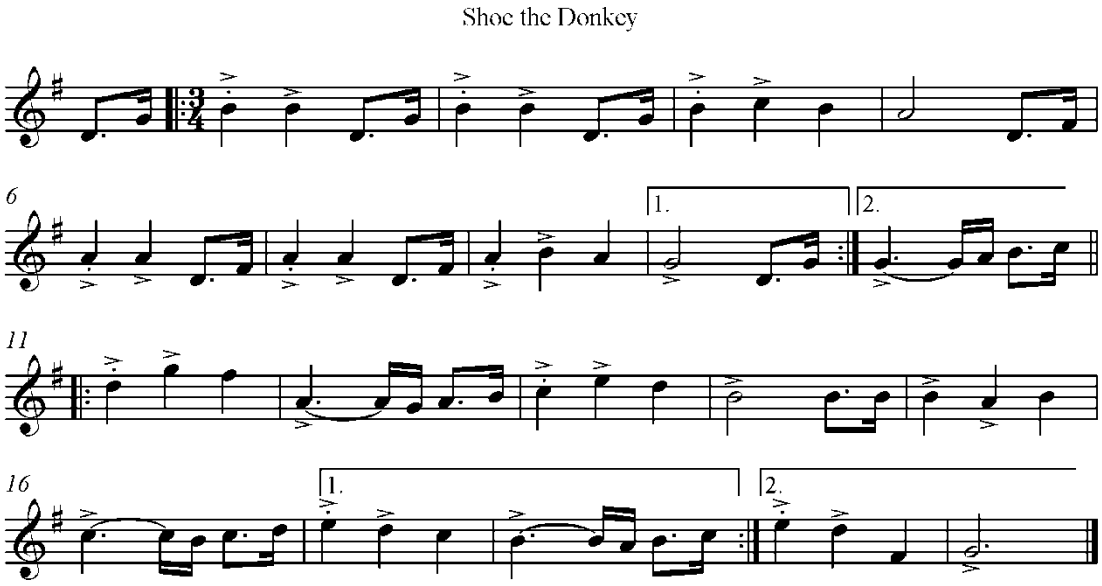


Figure 3.80 'Shoe the Donkey.'

I have not used the *mazurka* rhythm in any of the pieces I submitted with this dissertation. I did compose an oddly metred *mazurka* in 2007 as part of my *Errigal Suite*.

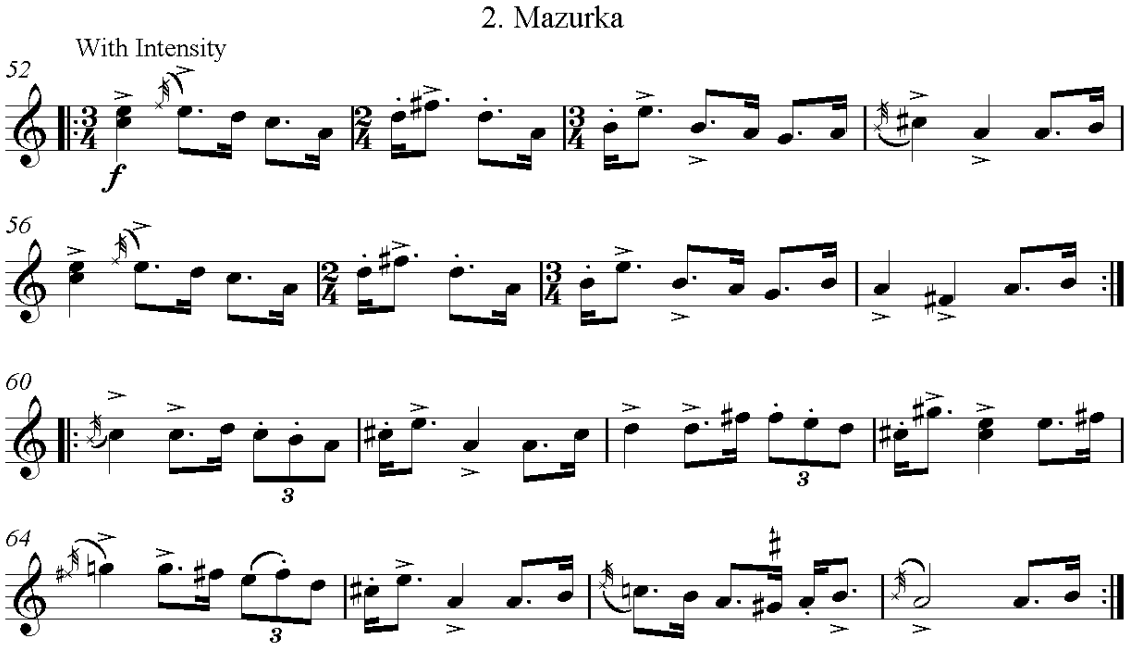


Figure 3.81 Flynn, *Errigal Suite*, 52-6.

3.2.2.3 Miscellaneous tunes

I explained the free rhythmic nature of *slow air*s in Chapter 2.5, so to avoid duplication I refer the reader to that chapter in relation to this subject.

There are three main examples in the tradition of old extended compositions which traditional musicians call *pieces*. These *pieces* amalgamate different tune types with special instrumental effects for descriptive purposes. These pieces are *The Foxhunt* (*The Fox-chase*), *The Battle of Aughrim* and *Mairseáil Alasdruim*, within which the air 'Gol mban san ár' is sometimes featured. These pieces were originally showcases for professional master-pipers.

> Alasdrom's March is one of three or four descriptive pieces formerly held in great esteem but now lost traditionally with the death of the last of the professional pipers around the beginning of the present (20th) century. It commemorated the death of Alasdar Mac Colla Ciotaigh (known among the English as Colkitto) at the battle of Cnoc na nDos (Knocknanuss) in 1647. In the piece are portrayed the march to the battlefield, the trumpet calls, the assembly, the conflict, the death of Alasdrum, and the laments of the women as well as the concluding dance.
>
> (Breathnach, Breandán: "Máirseáil Alasdruim." *Ceol, A Journal of Music* Volume 3 1969:42).

These pieces are of great interest to me because they demonstrate an historical precedent for concert style compositions within the tradition and a use of dance music forms in a listening music context.

Set-dances, *lancers* and *marches* can occur in duple and triple metre forms. None of the works I have composed to date contain these forms and so I have omitted descriptions of them. There are also a number of tune types and dances such as *Caledonians*, *Quadrilles* and *Cotillions* which are rarely heard these days. The recently discovered *James Tourish Collection*, consisting of tunes played around East Donegal at the turn of the twentieth century, contains many forms such as these.[57] Due to their present obscurity within the overall tradition I am also leaving these tunes out of this study.

[57] see Tourish, Martin: *The James Tourish Collection: Its stylistic significance within its cultural context.* (BMus Thesis). Dublin: Dublin Institute of Technology, 2008.

3.2.2.4 Summary

There are a large number of different tune types within the Irish tradition. I have used many of these as rhythmic structures in my works. The rhythmic variation within each tune type has rarely, if ever, been fully described in terms of written notation. I have endeavoured to do this in order for musicians who usually learn from sheet-music to be able to perform my works which draw on these elements and for non-traditional musicians in general to gain a better understanding of the rhythmic intricacies of traditional music.

3.2.3 Changing Metrical Structures

A little mentioned aspect of traditional music is the phenomenon of tunes in dance music forms which stray from a pattern that can be easily notated in one metre. I must emphasise that I am not referring to my previously mentioned theory about how certain musicians' phrasing takes the tunes out of an easily definable duple or triple metre.

There are examples of *reels* which temporarily break out of the dominant 4/4 metre, *jigs* which break out of the regular 6/8 metre and the same goes for various other tune types. Perhaps the most interesting aspect of this is that the metrical change is most commonly just for one or two beats before returning to the main metre. I have discovered that these odd beats occur in five ways.

- Extra beat insertion
- Beat subtraction
- Metrical metamorphosis
- Tune metamorphosis
- Idiosyncratic Tunes

3.2.3.1 Extra beat insertion

The most common type of metrical change occurs when one or more extra beats are inserted into the usual metrical structure one would expect from a tune. 'John Doherty's Reel' is one such tune. McLaughlin (1991) describes how this tune 'has an extremely unusual rhythmic structure in terms of traditional Irish music. The first part of the reel contains 9 beats instead of 8, the normal quota for reels.'[58]

There is no way of notating it fully in 4/4 without completely losing the sense of the rhythm of the tune. It is mathematically possible to notate the A part as nine bars of 4/4, as it is notated on the website www.thesession.org.[59]

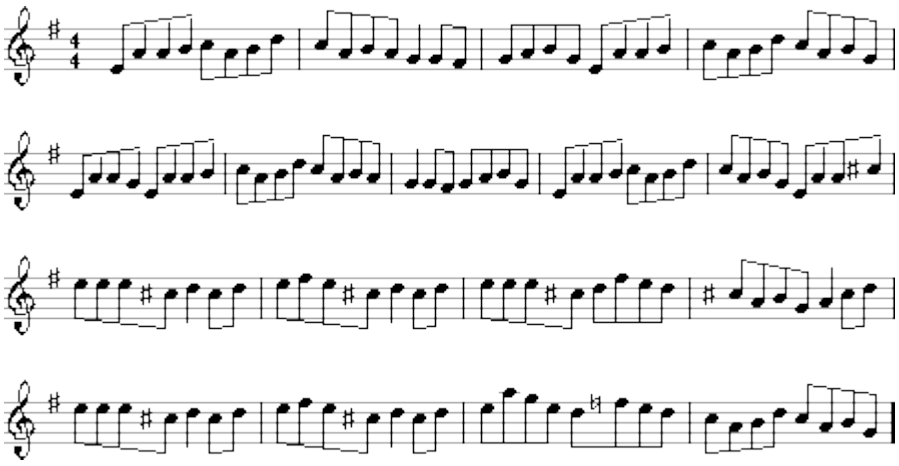


Figure 3.82 'John Doherty's Reel' notated completely in 4/4.

This notation makes no logical sense when one hears the tune played. (Audio CD Track 8). This is due to the sections of the melody I have notated as 2/4 bars in the A part.

[58] McLaughlin, Dermot: "Liner notes to Glackin, Paddy: Rabharta Ceoil/In Full Spate CD CEFCD153." Dublin: Gael Linn, 1991.
[59] "John Doherty's Reel Skeleton Notation." *The Session.* http://www.thesession.org/tunes/display/2120 (Accessed May 9, 2010).

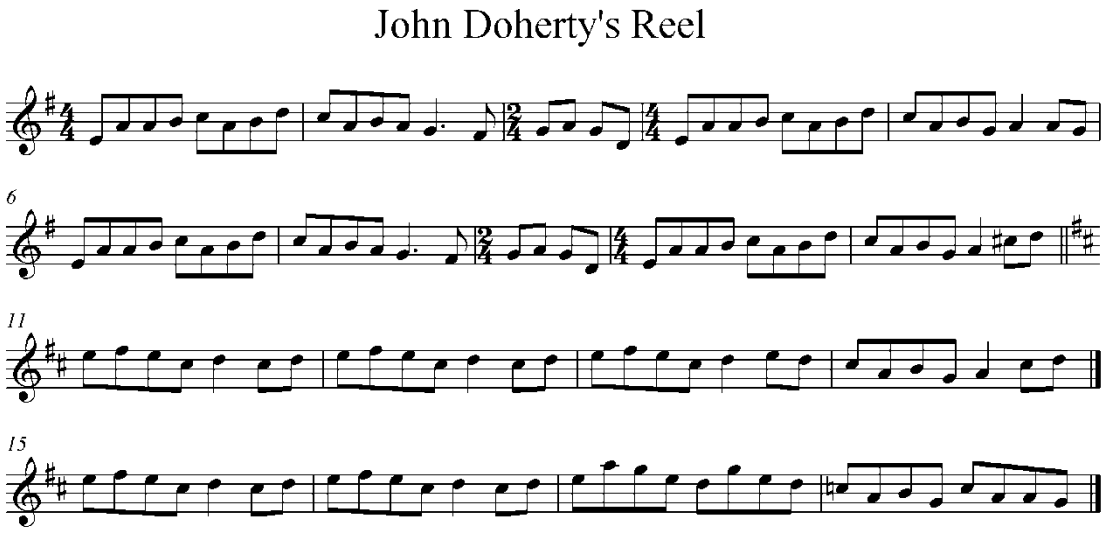


Figure 3.83 'John Doherty's Reel.'

Re-notating the music in this way ensures the repetition of the opening phrase (bar 1) is placed at the start of a bar (bar 4) rather than in the middle of the bar, as it is in the previous example.

Con Cassidy's recording of 'My Love is in America' has a similar extra beat insertion.

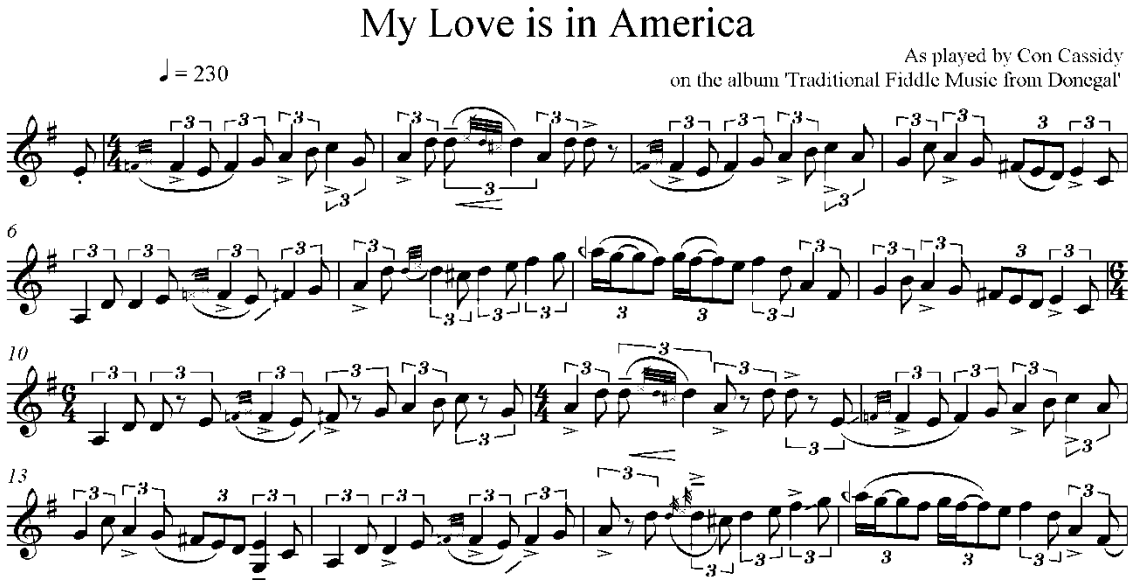


Figure 3.84 Extra beat insertion in 'My Love is in America.'

The extra beat insertion occurs at bar 10. I decided to notate the extra beats within a 6/4 bar rather than a separate 2/4 bar, as this fits Cassidy's phrasing.

Tommy Potts also had a fondness for extra beat insertion, as discussed by Ó Súilleabháin (1987). Potts' approach has been influential, particularly his setting of the *hop jig* 'Top it off'.[60] (Audio CD Track 9).

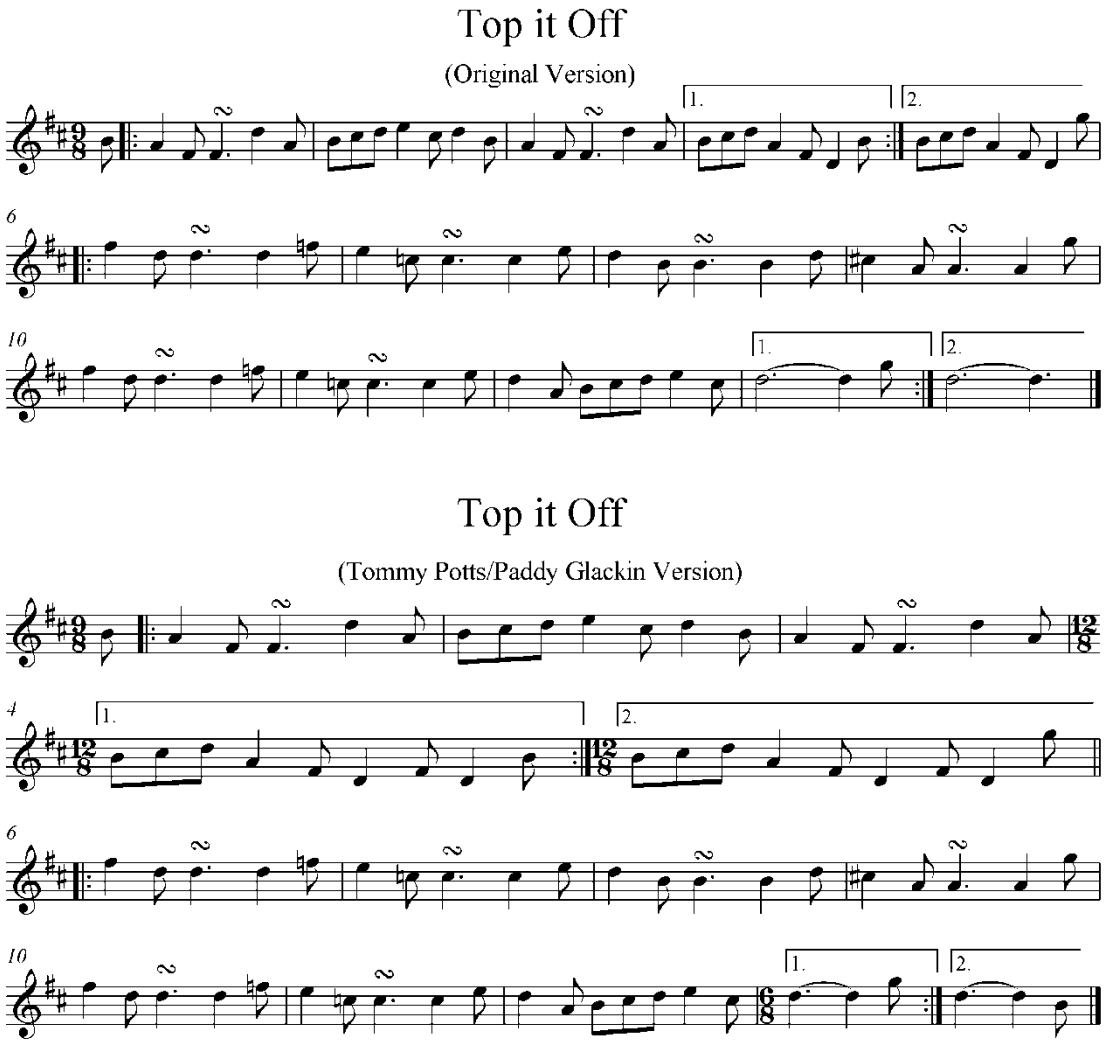


Figure 3.85 Two versions of 'Top if Off.'

This tune appears in Breathnach (1999:29) in a regular 9/8 metre. Potts' version and a Potts-inspired version recorded by Paddy Glackin (1977) take the tune out of the regular 9/8 metre. This is created by the repetition of the short *F-sharp* quaver to *D* crotchet phrase in bar 4. This changing metre version has now become the most commonly played version of the tune.

[60] (T. Potts 1972).

In all the tunes above there are more beats in the A part than one would usually expect. An aspect of the B part of the Potts/Glackin version of 'Top if Off' is 'beat subtraction'.

3.2.3.2 Beat subtraction

Beat subtraction occurs when a tune generally flows in a regular metre but at some point a beat goes missing from the regular metrical pattern. In the previous example of 'Top it off,' the last bar is a 6/8 rather than 9/8 bar, so the end of the B part is shorter than one might expect.

Another tune in which this happens is 'The Guns of the Magnificent Seven'; a tune composed in the 1970's by Fintan MacManus and recorded by Altan (1993). (Audio CD Track 10).

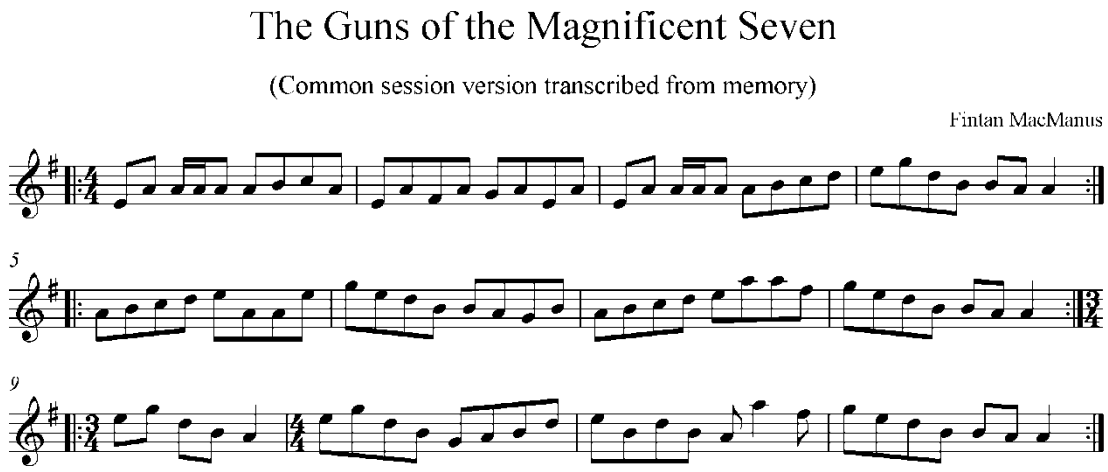


Figure 3.86 MacManus, 'The Guns of the Magnificent Seven.'

The tune perhaps gets its name from the fact that, in the midst of the regular 4/4 rhythm, there is a 3/4 bar at the beginning of the C part of the tune. Thus the first half of this part has a 'magnificent' seven beats as opposed to the usual eight!

3.2.3.3 Metrical metamorphosis

'Metrical Metamorphosis' is a phrase I have coined to describe tunes which seem to fit into the usual metrical structures, but aurally deviate from a constant metre. Larry

Redican's 'Galway Reel' (Audio CD Track 11)[61] is a commonly played such tune. It is usually notated as follows, since it can in theory fit into the normal 4/4 notated reel structure.

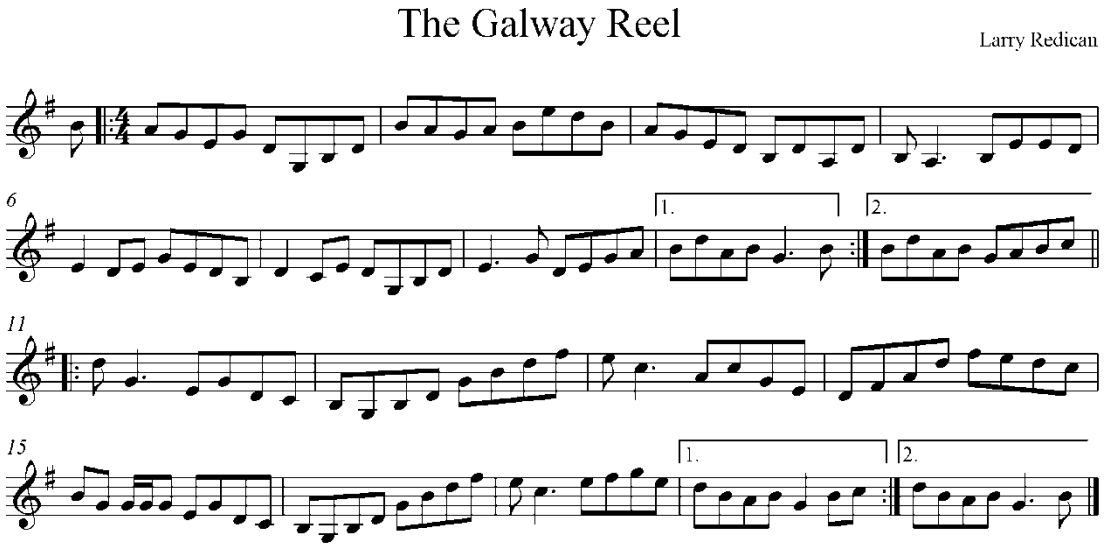


Figure 3.87 Usual notation for Redican, 'The Galway Reel.'

My transcription of the tune which follows features two 6/4 bars in the A part (bars 1-9). This is a more logical notation for the tune because this is the way the naturally strong beats usually fall when it is played.

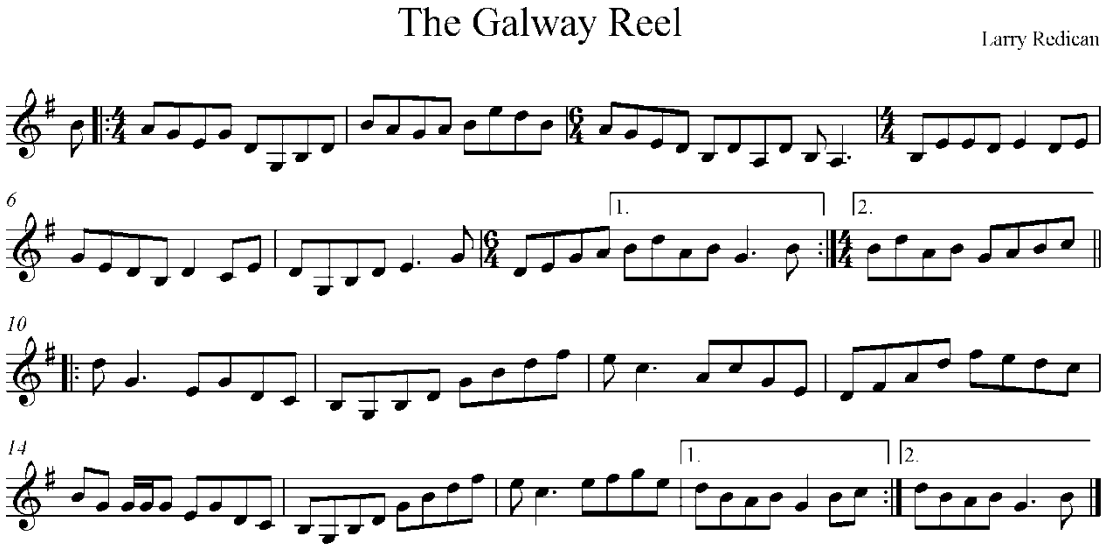


Figure 3.88 Redican, 'The Galway Reel' re-barred.

[61] The recording of this tune, (taken from Flynn, Dave. *Contemporary Traditional Irish Guitar.* FRCD002. 2009. Compact Disc.), is a fourth higher than notated due to my use of a capo.

Another tune featuring metrical metamorphosis is one of Paddy Fahey's *reels*. Maria Holohan's transcription of Fahey's playing of the tune and my own reinterpretation of this transcription, including the metrical metamorphosis into 6/4 bars, follow.

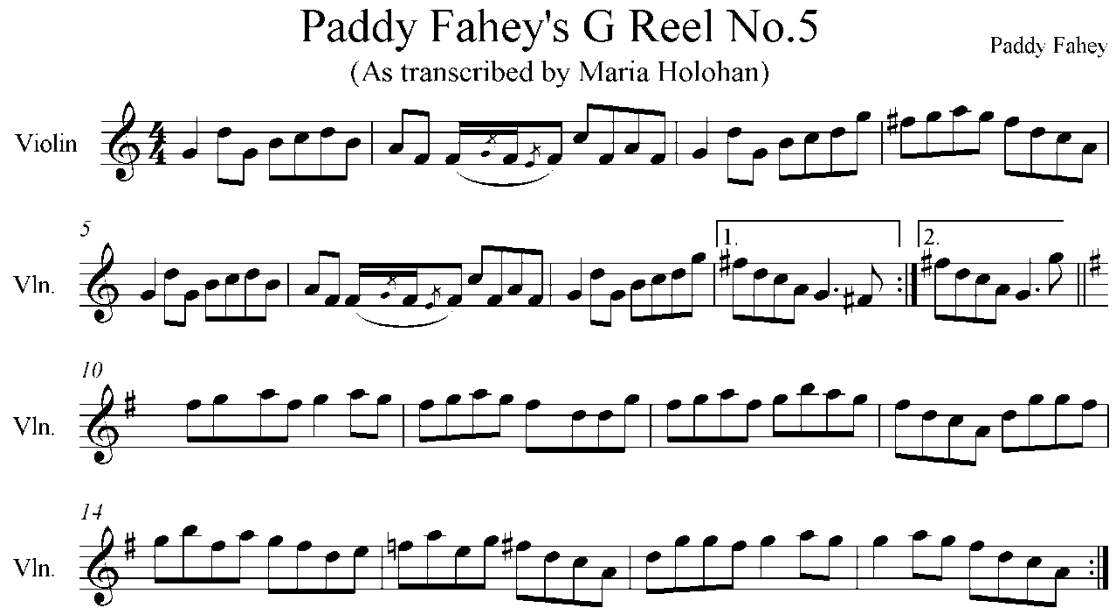


Figure 3.89 'Paddy Fahey's Reel' in 4/4. (Holohan, 1995).

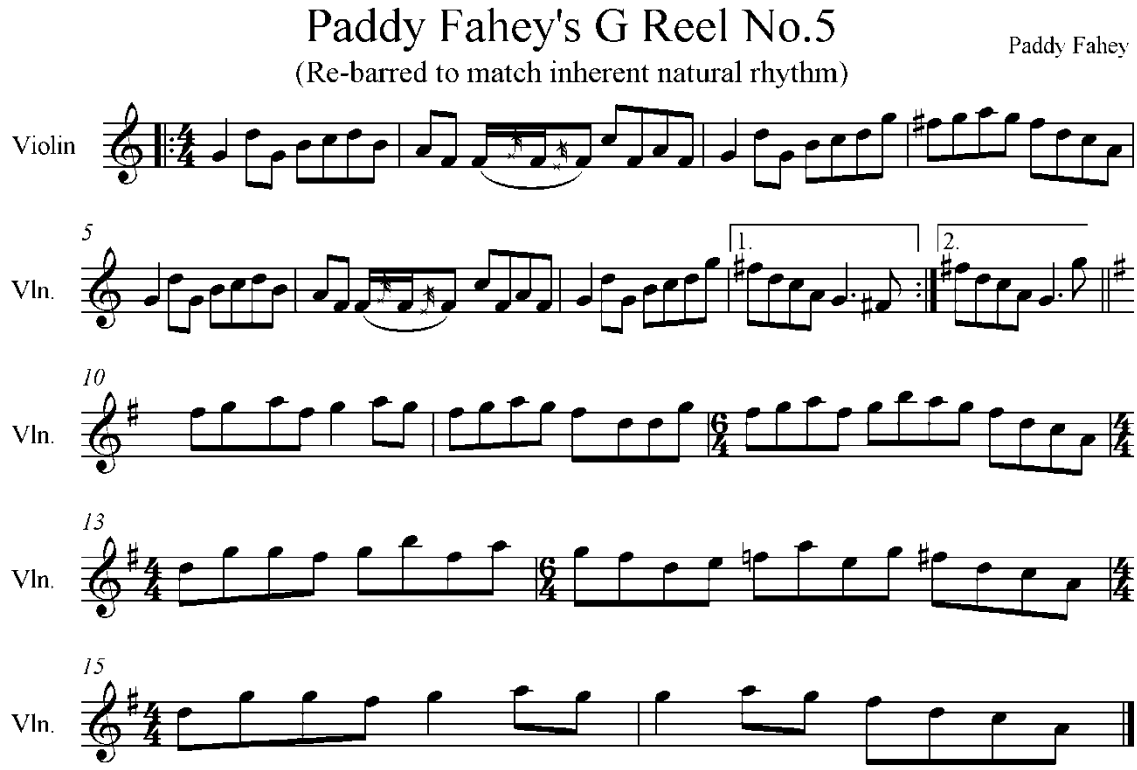


Figure 3.90 'Paddy Fahey's Reel' re-barred.

This re-barring displays the logical repetition of beginning and ending phrases in the B part. The same phrase occurs at the end of bars 12, 14 and 16 and the same phrase

beginnings occur at bar 13 and bar 15. In regular 4/4 notation this inherent natural rhythmic phrasing of the tune is lost on the eyes, but it is evident when the tune is heard. (Audio CD Track 12).[62]

3.2.3.4 Tune metamorphosis

Traditional musicians sometimes metamorphose a tune into another type of tune. There are *jig* and *reel* versions of a number of tunes such as 'The Colliers'. There is a commonly played *set-dance* called 'Seán O'Duibhir an Ghleanna' which I have also heard as a song and a *slow air*.

When a tune such as this is literally taken in the rhythm it is sung and put into a regular beat, changing metrical structures can occur. The air 'An Chúilfhionn' was recorded as a *march* by Harry Bradley and Paul O'Shaughnessy (2005). (Audio CD Track 13). This tune metamorphosis creates a number of metrical changes in the notation.

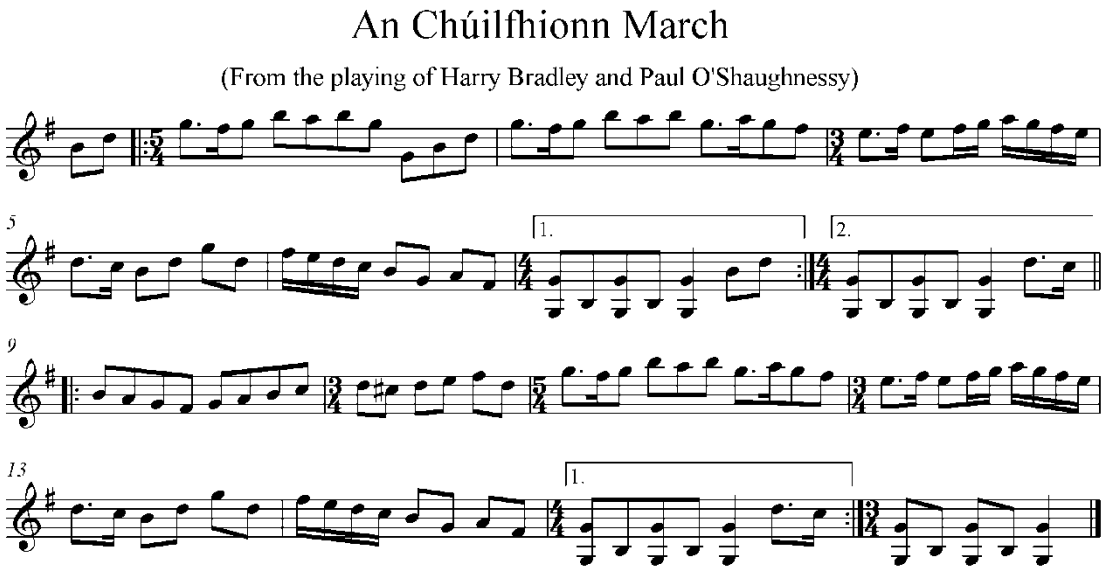


Figure 3.91 'An Chúilfhionn March.'

[62] This recording, again from my CD *Contemporary Traditional Irish Guitar,* is also a fourth higher than notated.

3.2.3.5 Idiosyncratic tunes

Some tunes are idiosyncratic because they contain changing metrical structures which are not determined by any of the methods explained above. They defy any logical explanation, other than the possibility that whoever composed them just wanted the rhythm of the tunes to be the way they are or perhaps, as Paddy Glackin suggested to me, 'they were just trying to make fools of dancers!' (Glackin interview).

One of the most interesting examples is 'John Doherty's Mazurka' (Audio CD Track 14). Mac Aoidh (2008:25) says of the tune, 'Its change of timing and the number of bars in the third part of the tune is uncharacteristic of Donegal *mazurkas* and may reflect an influence from outside the Irish tradition.'

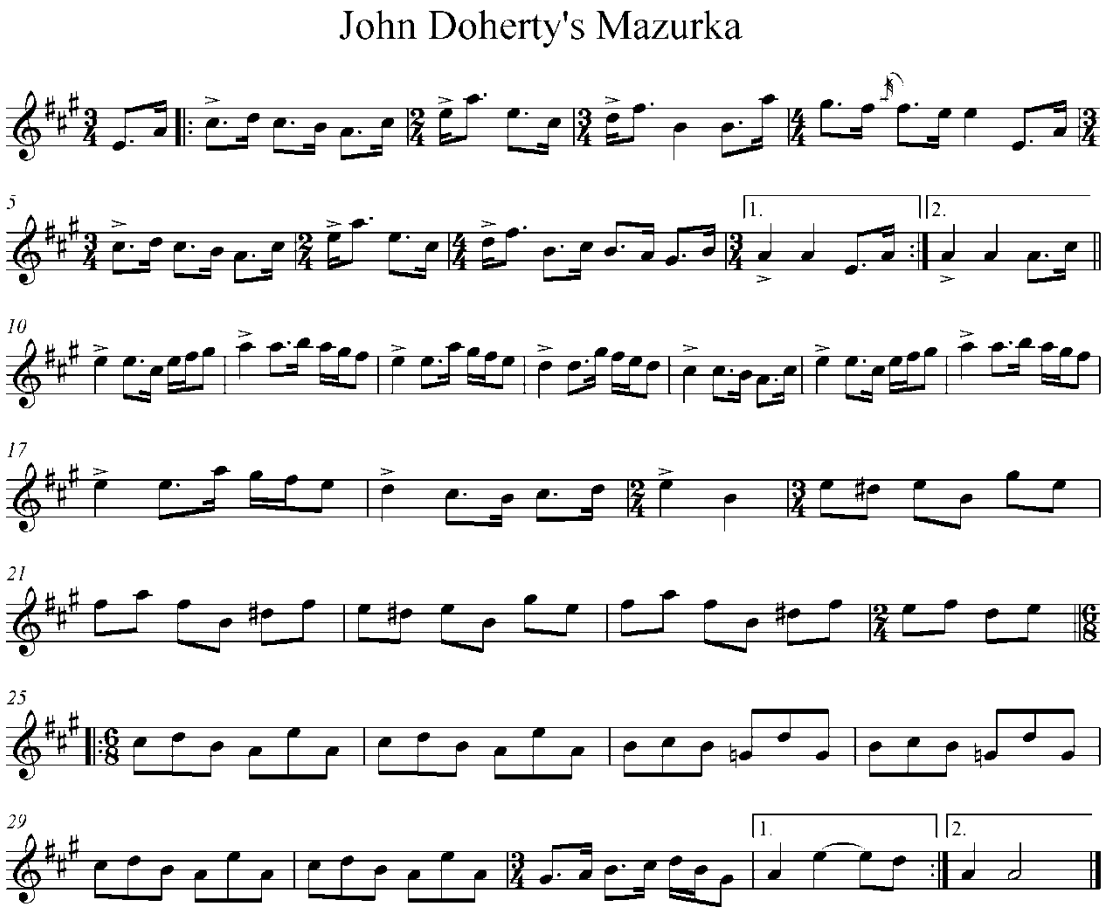


Figure 3.92 'John Doherty's Mazurka.'[63]

[63] Transcribed from Doherty, John: *Bundle and Go.* Green Linnet GLCD 3077, 1993. Compact Disc.

This tune is not normally notated as I have done. I have barred it to reflect where the strongest beats fall. This brings particularly unusual metrical changes in the first part, but it is reflective of the way the 'Scotch snap' rhythms at the starts of bars 2, 3, 6 and 7 are clearly accented and emphasised as important rhythmic changes in the tune. Whichever way one wishes to transcribe this *mazurka*, it is a very interesting and unusual tune in the way it is very much part of the tradition yet it does not conform to any standard rhythmic structure.

Another such tune is the 'The Silver Slipper' (Audio CD Track 15). The tune is often referred to as a *hop* or a *slip jig*.

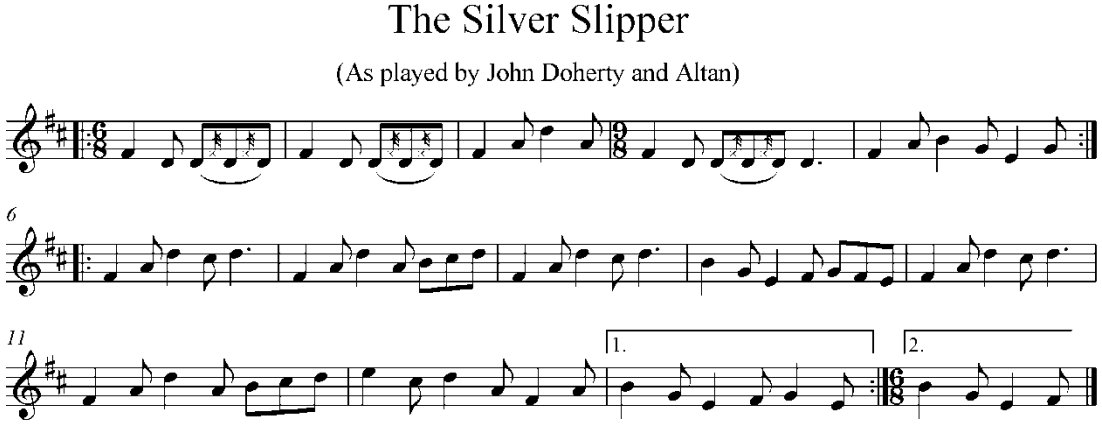


Figure 3.93 'The Silver Slipper.'[64]

The change from a clear 6/8 rhythm to a 9/8 rhythm makes this tune idiosyncratic as it does not conform to either a *single*, *double*, *hop* or *slip jig* rhythm. I have seen it notated entirely in 9/8 but this hides the clear 6/8 feel of the opening three bars. Another interesting aspect of the tune is the beat subtraction at the end where, on the second repeat of the B part, there is a 6/8 rather than a 9/8 bar. Due to this, the final phrases in both the A and B parts anticipate the change of metre at the beginning of each part.

[64] This is a composite transcription of versions recorded by Altan and John Doherty. Altan: *Local Ground*. Narada 19196, 2005. Compact disc. Doherty, John: *The Floating Bow*. Claddagh CCF31CD, 1996. Compact disc.

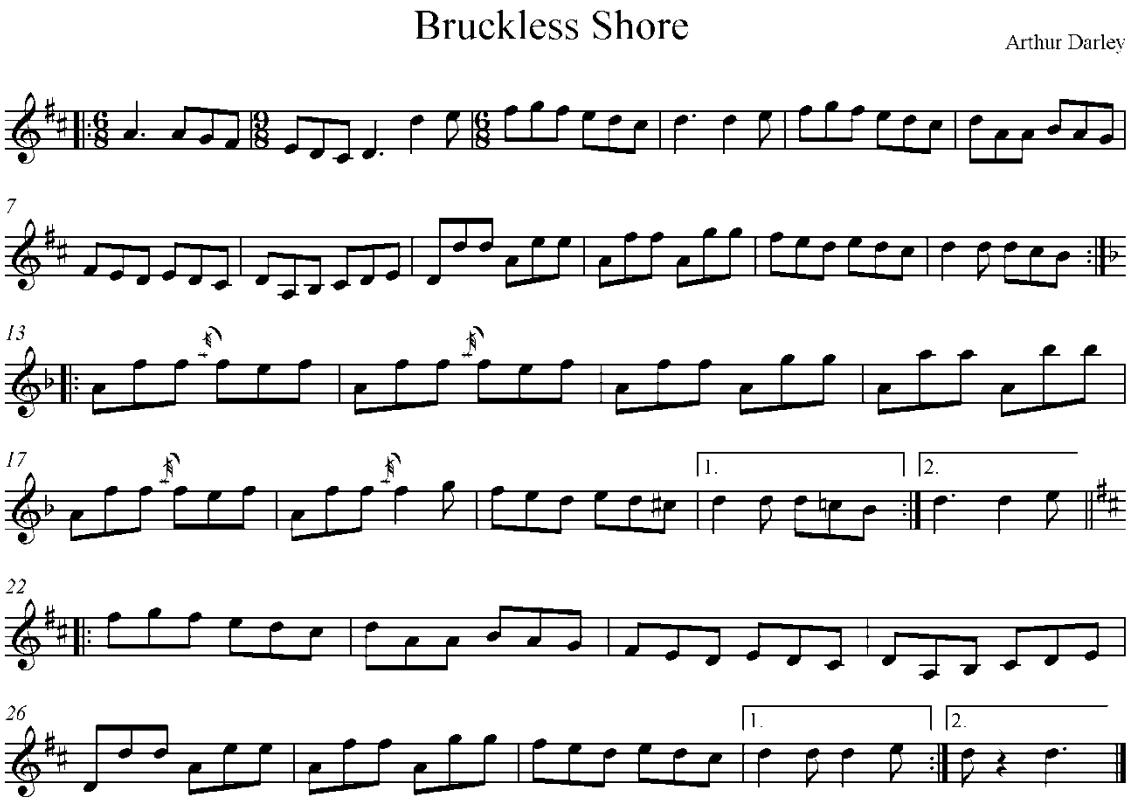


Figure 3.94 Darley, 'Bruckless Shore.'[65]

'Bruckless Shore' (Audio CD Track 16) was composed in the early twentieth century by Arthur Darley (1872-1929). It is also known as 'The Swedish Jig', perhaps a reflection that, to those who heard it first, it sounded more foreign than Irish. It has since become part of the tradition and can be heard regularly in sessions, recordings and performances.

At first glance this tune appears to be just a case of an extra beat insertion in the second bar. However the first part has twelve bars rather than the usual eight. This makes the tune idiosyncratic. The combination of the beat insertion at bar two and the twelve bars in the first part means it cannot be easily classified as any particular type of *jig*.

[65] Transcribed from Glackin, 1977.

3.2.3.6 Summary

Traditional Irish dance music is often perceived as rhythmically simple music which is confined to common metres such as 4/4 and 6/8; however there is strong evidence to contradict this assertion, most obviously in the many common tunes which do not fit easily within one metrical system. This use of changing metrical structures is most prevalent in the Donegal repertoire, but it is also found throughout the tradition and even in songs, where the natural need for breath causes singers to add an extra beat into songs in dance rhythms. When songs and airs are turned into instrumental pieces, musicians often retain the air's rhythmic structures. This results in changing metrical structures. This has perhaps had an influence on performers who reinterpret traditional tunes with such changing metres and composers who have created original dance tunes with changing metrical structures.

There are changing metrical structures within traditional tune forms in a number of the works submitted with this dissertation, particularly *Aontacht* and *The Longest Reel*. My use of these structures is discussed in Chapter 4.

3.2.4 Metamusic

> For a while in the '70's it seemed that Steve Reich's chief preoccupation was the unintended acoustic details that arose (or were perceived) as a side effect of strictly carried-out processes. These included soft melodies created by the overtones of played notes, which Reich referred to as "metamusic".
>
> Kyle Gann[66]

There is an 'unintended acoustic detail' that occurs in traditional music which I like to refer to as 'metamusic'. This Irish metamusic differs from the 'soft melodies created by the overtones of played notes' that Reich noticed in 'process music,' It is generated from the way various musicians accent certain notes and also due to certain instrumental qualities such as open strings on the fiddle and the low *D* on the pipes and flute.

Whilst a casual listener will just hear a repeating single line with slight variations, I have noticed separate rhythms and melodies created by performers within the basic melodic lines. This seems to be an unintended acoustic detail that happens because of a performer's articulation and phrasing, however some performers do consciously work at creating this 'metamusic', often right after they hear themselves naturally creating it.

> At first you can be unconscious but then, Kevin Burke uses that very effectively. He does it very deliberately. I'd say I never gave a lot of thought to that but I use it once in a while and it's an interesting thing, because it's unnoticed at first, but when the pattern becomes clear, then you realise that there's another counterpoint pattern going on, on maybe just an open string or something like that….and then you want to continue it so you can always just hit a little bit of the pattern first, it may even happen accidentally but the question is "Can you make it continue in some way?" So that becomes almost like a mathematical challenge.
>
> (Hayes interview).

I first noticed this 'metamusic' in a recording of the tune 'Sporting Paddy' made by Paddy Glackin[67] (Audio CD Track 17). In this interpretation of the tune, a looping ostinato rhythm inherent in the first half of tune is emphasised both in Glackin's fiddle playing and Dónal Lunny's accompaniment.[68]

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[66] Gann, Kyle: "Thankless Attempts at a Definition of Minimalism." In *Audio Culture – Readings in Modern Music*, edited by Christoph Cox and Daniel Warner, 299-303. New York: Continuum International Publishing Group, 2004, 302.
[67] Glackin, Paddy: Rabharta Ceoil/In Full Spate CD CEFCD153. Gael Linn, 1991. Compact Disc.
[68] On the recording everything sounds a semi-tone higher than notated due to the fiddle being tuned up a semi-tone.

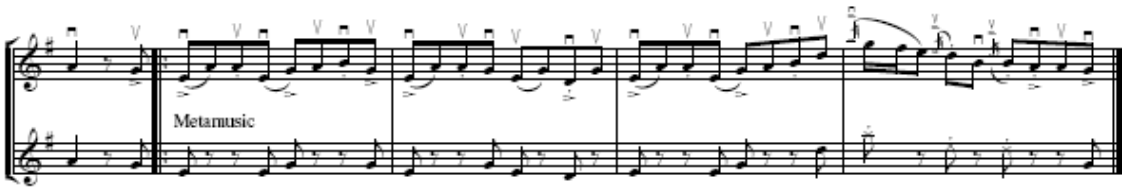


Figure 3.95 Metamusic in 'Sporting Paddy.'

Since I have discovered this phenomenon for myself, I have heard it in countless recordings and live performances by traditional musicians. It is most noticeable on the open strings of the fiddle and the low *D* of the *uilleann* pipes, but it can also occur on any regularly repeated note within a tune, no matter what instrument is used. It often depends on the articulation style of the musician. For example, in some recordings of the late Clare concertina player Elizabeth Crotty (1885-1960),[69] I have noticed syncopated ostinati occurring because of the emphasis she places on such repeating notes. I discussed this matter with Claire Keville:

> That's coming from an older style where they would have been playing for dancers and it might have come from the dance as well, where the dancers would have been tapping out a series of notes. You see, on the concertina of old, you couldn't do a huge amount of melodic variations, so you tended to stick to rhythmic variations because the instrument is more conducive to rhythmic variations.
>
> (Keville interview).

I have made use of this metamusic in some of my own compositions, most particularly in *Aontacht*.

[69] Crotty, Elizabeth: *Elizabeth Crotty - Concertina Music from West Clare.* RTE 225 CD. 1999. Compact Disc.

3.2.5 Tempo

The subject of tempo in traditional Irish music is vital to understanding the nature of individual interpretation. With the exception of *slow air*s, which tend to be in free tempo, traditional Irish tunes tend to be played in one set tempo from beginning to end with little room for the *rubato* that characterises so much classical music.[70] The reason for this is that these tunes have their origins as music for dancing. Most musicians tend to maintain the sense of motoric rhythm in traditional dance tunes even when they are playing solo. As Ó Súilleabháin (1987) observed, Tommy Potts is a notable exception to this rule as he often placed short pauses between phrases, which temporarily took the music out of a motoric rhythm.

In relation to the tempi of different tune styles, Foley (2009:2) noted that, 'we find in the introduction to the second reprint of *Ceol Rince na hÉireann* (1974) by Brendan (sic) Breathnach a list of tempos for a variety of dance forms.'

Double Jig ♩. = 127 Single Jig ♩. = 137 Slip Jig ♩. = 144 Hornpipe ♩ = 180 Reel ♩ = 224

Foley (*Ibid.*:3) then notes how Breathnach 'follows this table with more of an observation than the type of diatribe shown in the previous extracts:

> To play the music at a quicker tempo detracts from the melody; to play it slower can do no harm. It was customary for many of the older musicians when playing for themselves to adopt a slower pace than that demanded by dancers.
>
> (Breathnach, Breandán: *Ceol Rince na hÉireann.* 3rd Edition. Dublin: Mercier Press:ix).'

These are guideline tempi, yet Breathnach warns against the use of quicker tempi. Not everyone agrees with Breathnach. Foley (2009:8) presented a table which demonstrates how Michael Coleman averaged a *reel* tempo of around 240 beats per minute and occasionally played at over 250 beats per minute on the recordings he made in the

[70] There can be slight *accellerandi* and *ritardandi* at the beginning and end of a tune and very subtle *rubato* effects contribute to rhythmic swing.

1920's. This is considerably faster than the recommended *reel* tempo of Breathnach from 1974.

The examples in Chapter 2.5 demonstrate that the same tune can be performed in vastly differing tempi and it is really up to the individual musician to choose which tempo to use. This is one of the main differences between traditional music and classical music. In classical music, composers tend to give specific tempo markings, either metronomically or through worded directions; *Allegro, Andante,* Fast, Slow etc. There can also be numerous tempo changes within one classical work. This is not characteristic of traditional music, except in cases where musicians put sets of different tune styles together; i.e. a *slow air* followed by a *jig,* followed by a *reel* etc.

The speed of a symphonic movement marked *Allegro* can be open to interpretation and there are significant differences between interpretations of works by different orchestras in this regard. However it is highly unlikely that any orchestra will play a movement marked *Allegro* at a slow pace. In traditional music, one tune will often lend itself to being interpreted very quickly, moderately paced or quite slowly. The example of Con Cassidy playing 'My Love Is In America' at 230 beats per minute with Martin Hayes playing it at 140 beats per minute and Tommy Potts at 200 beats per minute perfectly demonstrates this point.

The *reel* 'Drowsy Maggie' has been performed at even more extreme tempi. *Altan* play it at 254 beats per minute on their recording *Harvest Storm* (1991), (Audio CD Track 18). Matt Molloy performs it at a moderate 158 beats per minute on his recording *The Heathery Breeze* (1993), (Audio CD Track 19). On my recording *Draíocht* (2006), I accompany Ciarán Swift performing the tune at 96 beats per minute, (Audio CD Track 20). Each tempo choice brings a different character to the tune and reveals how flexible traditional music is to interpretation in relation to tempo.

The tempi traditional musicians choose are generally down to personal preference. This changes when they are playing for dancers. Different dancing styles require varied tempi, so the musician is really at the command of the dancer in these respects. Some musicians I know do not like playing for dancers because the dancers often call on them to perform faster than they would like to. Most of the musicians in which I am interested have a great respect for the dance music origins of the music, yet they play more often for listening purposes. There can be quite a difference between playing for a group of set-dancers and playing for a solo *Sean-nós* dancer like Joe Naughton. Harry Bradley spoke to me about this difference.

> Joe Naughton's great because you don't have to think about it. He's happy to dance. He wants to dance to what you want to play. So he's somebody that prefers to dance to the music, he's a musician himself……Most set-dancers that I've played for didn't know music. They'd probably be better off if they had a tape or people just setting down really strong rhythms for the dancing.
>
> (Bradley interview).

The change in emphasis of traditional music as music for listening rather than for dancing has had a considerable effect on the approach to tempo and this is perhaps reflected in the difference in Con Cassidy and Martin Hayes' tempi. Cassidy was rooted in the tradition of playing for dancers. Hayes also has strong links to dancers through his association with the *Tulla Céilí Band*, yet when he plays solo he does it more for listening purposes than dancing purposes. Indeed, Hayes' approach is not to the taste of everyone for the very fact that it strays from a typical dance tempo.

> Thady Casey, Sonny McSweeney, Mrs. Galvin etc., their music is all about dancing, nothing else and it's important and the reason is because they played for dancers. I remember Dennis Murphy's widow Julia Mary, I used to ring her a lot and I remember one time she was saying about Martin Hayes, 'You could never dance to that, you'd have to be drunk to dance to that' that's the way she would view it, she would view Tommy Potts as not the thing either.
>
> (Browne interview).

Another aspect that influences the tempo musicians choose is the interpretations of others. Paddy Glackin discussed this aspect with me when speaking of the Donegal version of the tune 'Sporting Paddy.'

> I was always very conscious of the fact that that's a Donegal tune, I was always very conscious that there was a particular sort of tempo to do that particular version of it justice. Now if I were trying to play, say, John Egan's version of it, I would play it ten times slower because I learnt it off a flute player, whereas I learnt this version off John Doherty and it's at that sort of strident tempo, so I would have been conscious of that and that would be the way I'd play it.
>
> (Glackin interview).

Foley came to the following conclusion regarding the tempo of *reels*.

> With tempi ranging from 105 beats per minute to 127 beats per minute in this study I think it is safe to say that, when not required for dancing, there is no set tempo for reels. Perhaps musicians develop an instinctive feel for the right tempo of any given reel.
>
> (Foley, Gerard: *A Short Examination of the Tempo of Recorded Irish Music.* Master's Degree in Traditional Music Performance Assignment, Limerick: University of Limerick, 2008.:14).

Foley's tempo markings are based on the idea that *reels* be counted as two rather than four beats per bar, so his tempi can be revised to between 210 beats per minute to 254 beats per minute in the context of this study. My own brief study has revealed a much wider tempo range for *reels* from 96 beats per minute to 254 beats per minute. The fact that *reels* can be successfully played at such varying tempi indicates the strength of the tunes as melodic entities.

Tempo is a factor in the minds of tune composers also. Charlie Lennon marks his composition 'Paddy Canny's Toast' as a *Slow Reel* in his book *Musical Memories Volume 1*.[71] This is a reflection of the characteristic style of the tune's dedicatee, the late East Clare fiddler Paddy Canny (1919-2008). Lennon described to me how the person he is writing a tune for can influence aspects of the composition.

> If you're talking about creating music, my first question would be 'Ok, what instrument are we talking about? Where on the instrument do you think the action is going to be mainly? **What's the tempo going to be like?** The time signature and what keys would you like it to be written in?'
>
> (Lennon interview).

It is very interesting that Lennon composed this tune with a slow *reel* pace in mind, yet it is likely to be successfully interpreted at a much faster or even slower pace. I recorded 'Paddy Canny's Toast' on my album *Contemporary Traditional Irish Guitar* (2009).

[71] Lennon, Charlie: *Musical Memories Volume 1.* Dublin: Worldmusic Publications, 1993.

My version begins radically slower than even Lennon envisioned it. I treat it almost like a *slow air* at the beginning with considerable use of *rubato*. I then gradually speed it up to a relatively fast motoric tempo. When Lennon heard this version he expressed to me how he enjoyed it and that it brought the tune into a new light for him.

This relates somewhat to the idea of tune metamorphosis that I discussed in Chapter 3.2.2. The same tune can be reinterpreted as an *air, jig, reel, hornpipe* etc. This will naturally lead to varying tempi. Tourish (2008) referred to this as a 'musical catalyst'. By this he means that traditional musicians do not necessarily limit themselves to thinking of a tune as being a *reel* or a *jig* at a certain tempo. There are parameters relating to pitching and rhythm which they use as a basis for turning the musical catalyst into an *air*, a *jig*, a *reel* etc. Tourish (2008) cites John Doherty's recording of 'Welcome Home Gráinne' as a primary example of this. In this recording, Doherty first plays the tune as a *march*, then a *jig* and then a *reel*. Each version has a naturally different tempo and rhythm.[72]

I took a similar approach when composing the fifth of my 'Five Études for Uilleann Pipes'. I composed a basic tune and metamorphosed it through the following tune types: *barndance, hornpipe, highland, reel* and *slide*. In doing this I created a gradual change of tempo from the moderately paced *barndance* (100 beats per minute) to the quickly paced *reel* (200 beats per minute).

The nature of tempo in traditional music has had quite a strong influence on my compositions. I sometimes put rough tempo markings in my scores and say that it is up to the performer to decide the ultimate tempo. This might seem like quite a radical idea to composers who are used to controlling all aspects of their scores, however I have learnt that one can trust good performers to make informed choices about many aspects of a piece. One of the first pieces where I took this approach was in 'Étude No.3 'The

[72] Doherty, John: *The Pedlar's Pack.* Folktrax 074. 1975. Cassette.

Odd Reel' from my *Five Études for Five Fingers* (2005) where I give the player the option of playing it at either 96 beats per minute or 126 beats per minute. This tempo choice reflects both the didactic nature of the piece and the fact that I feel the piece works equally well at either tempo. I would not be too concerned if a musician played it slower or faster than this, so long as it was performed well.

*Slow air*s and songs are the only type of traditional music where it is normal to play in a free tempo with a lot of *rubato*. This freedom of tempo has led to the difficulties in notating *slow air*s, which I discussed in Chapter 2.5.

In conclusion, the motoric aspects of tempo in traditional dance music and the flexibility with which the tempo these tunes can be played at has been an important influencing factor on many of my compositions.

3.2.6 Traditional Irish Rhythms in Contemporary Concert Music

The rhythmic aspect of traditional Irish music has proved very influential to a number of contemporary composers. This rhythmic influence manifests itself most clearly through the following compositional processes.

- The use of pre-existing traditional tunes.
- The use of newly composed material using traditional rhythms.
- The use of motoric rhythms derived from the 'Irish' aesthetic.

In the first two of these processes the rhythmic aspects of *jigs* and *slow air*s have proved the most obviously influential to contemporary composers. The preponderance of *jig* rhythms is of particular note, considering the fact that *reels* are the most commonly played form of traditional Irish tune.

3.2.6.1 The use of pre-existing traditional tunes

If a score contains a traditional tune in skeleton notation it is only likely to be performed in an authentic traditional Irish rhythmic style if the performer is a traditional musician. Classical musicians usually interpret a score according to the notation and written instructions. In the vast majority of works that I have studied which use pre-existing traditional tunes, these tunes are notated in their skeleton form and the pieces are written for classical rather than traditional musicians. There is a valid argument that these pieces do not in fact use traditional Irish rhythms because the rhythm that results from the tunes being performed in their skeleton notation form is devoid of all the rhythmic nuances that a traditional musician will apply to the tune. In this respect works composed exclusively for classical musicians by composers such as Gerald Barry and Eric Sweeney have only been superficially influenced by traditional Irish rhythms whereas works by composers such as John Gibson and Mícheál Ó Súilleabháin are strongly influenced by the rhythmic nuances of the traditional musicians who perform the works.

Sweeney clearly feels the rhythms of traditional music have been influential on his music. In my interview with him, he noted how the 'rhythmic vitality' of traditional music was particularly influential on his own music. So with respect to Sweeney's own views on the matter, an examination of how this rhythmic aspect has influenced his music follows.

String Quartet (1996) provides very clear examples of how he used the skeleton notation of three traditional tunes as the building blocks for a composition. The three tunes he used are two *jigs*, 'The Three Little Drummers' and 'The Banks of Lough Gowna' and the song 'The Blackthorn Stick'. In the case of the *jigs,* Sweeney does not use the source material in its originally notated 6/8 metre. Sweeney instead takes fragments of the melodies and places them in different metres. The second movement of the piece is based upon 'The Three Little Drummers'. At the end of bar 16 Sweeney takes fragments from the tune and places them in 5/8 metre using semiquaver notation instead of quaver notation. In the following examples, I have marked the fragments of the tune Sweeney has taken as A, B and C and I have marked how these fragments are placed into the 5/8 metre in the *String Quartet*.

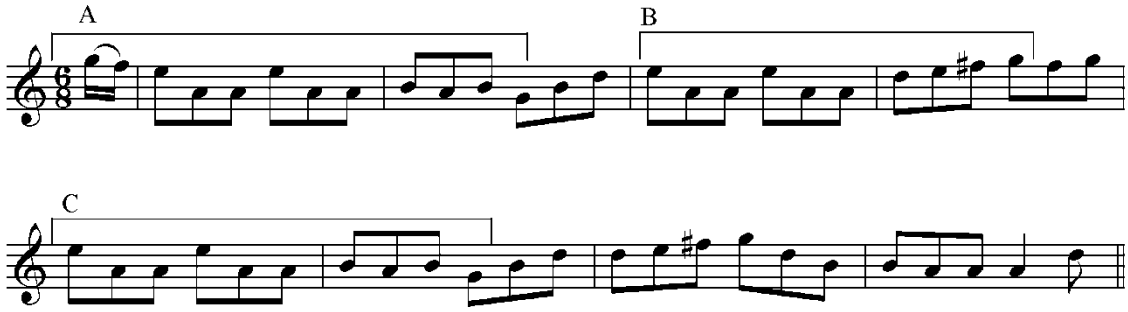


Figure 3.96 'The Three Little Drummers,' 1-8.

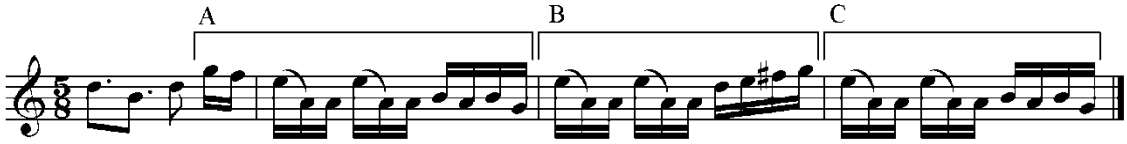


Figure 3.97 Sweeney, *String Quartet,* II, 16-19, second violin part.

Sweeney has removed the last two quavers of each bar of the original tune to create his new version in 5/8. In doing this, and without elaborating on the skeletal nature of the melody, Sweeney has almost completely removed the tune's relation to its original *jig* form. This demonstrates how Sweeney places his source material into a rhythmic context that is not particularly related to traditional music.

Much the same could be said of Gerald Barry's use of traditional tunes. In Chapter 2.3.1 I mentioned how Barry based the opening of his *Piano Quartet No.1* on the air 'Sí Beag Sí Mhór'. Barry inverts 'Sí Beag sí Mhór' and the musicians play this inversion in canon. The music is almost completely written without deviation from straight rhythmic movement, the only instances of anything approach rhythmic swing written into this section are the dotted quavers which appear across the parts from bars 16 to 19.

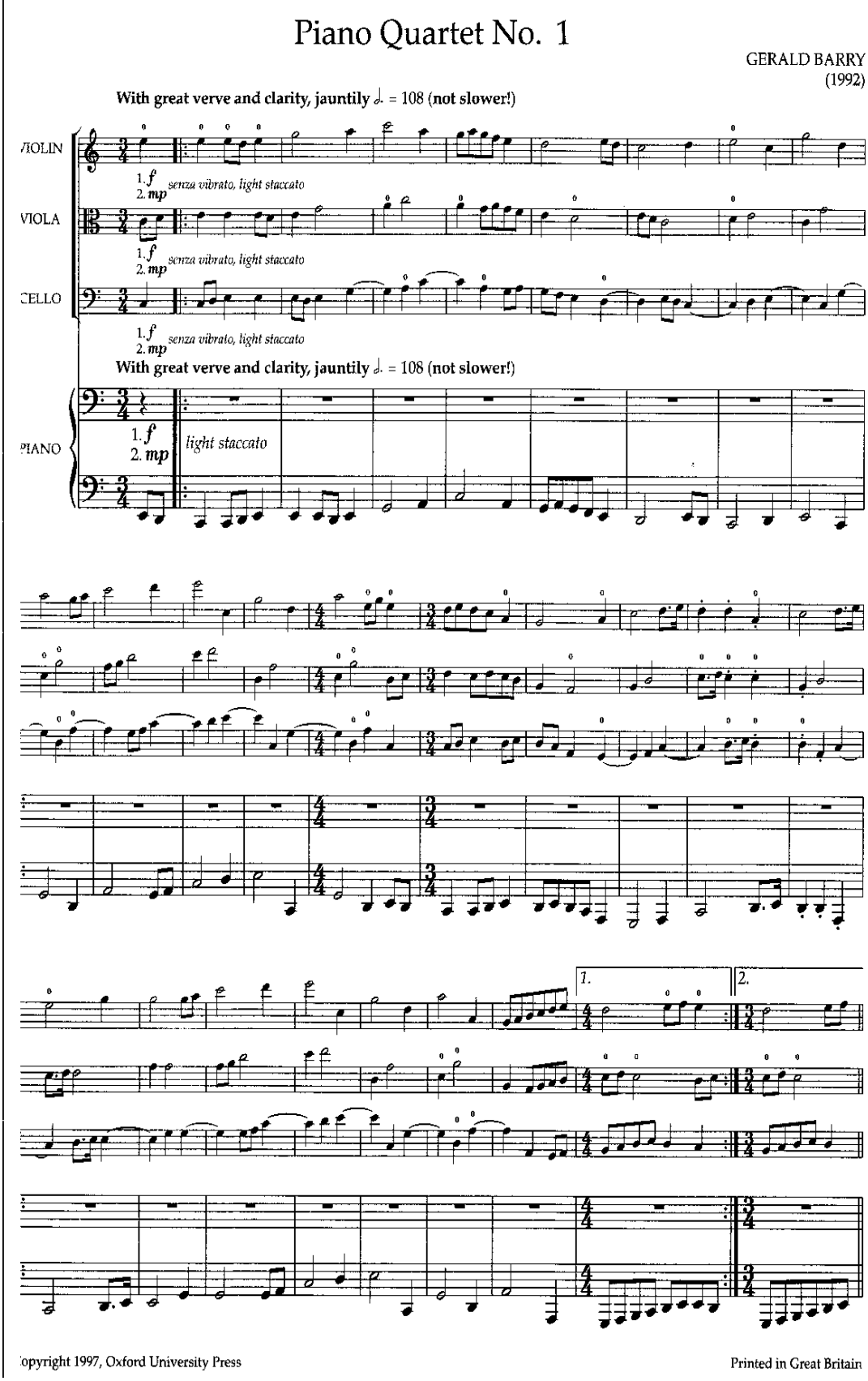


Figure 3.98 Barry, *Piano Quartet No.1*, 1-27.

Barry's indication that all the notes be played with a '*light staccato'* further removes the music from the original rhythmic context in which it would be performed. Constant light *staccato* playing, which requires the lifting of the bow on string instruments, is not a common feature of traditional music.

John Gibson's *Sliabh Luachra* and Mícheál Ó Súilleabháin's *Oileán/Island* both feature solo parts for a traditional flautist. The classical musicians who are also performing in the pieces are much more likely to perform in a rhythm closer to traditional music because they have a traditional musician to refer to. They are likely to follow the rhythmic emphasis of the traditional musician; therefore the notation of the tune in the score does not need to be too detailed. This is clearly illustrated in Gibson's *Sliabh Luachra* where he uses a well known *slide*. He notates the flautist's tune and the harmony and counterpoint parts in the piano trio in a skeletal form whilst giving the instruction 'in irregular rhythm' to the musicians. This is to convey to the piano trio that they are to follow the rhythm of the flautist as closely as possible.

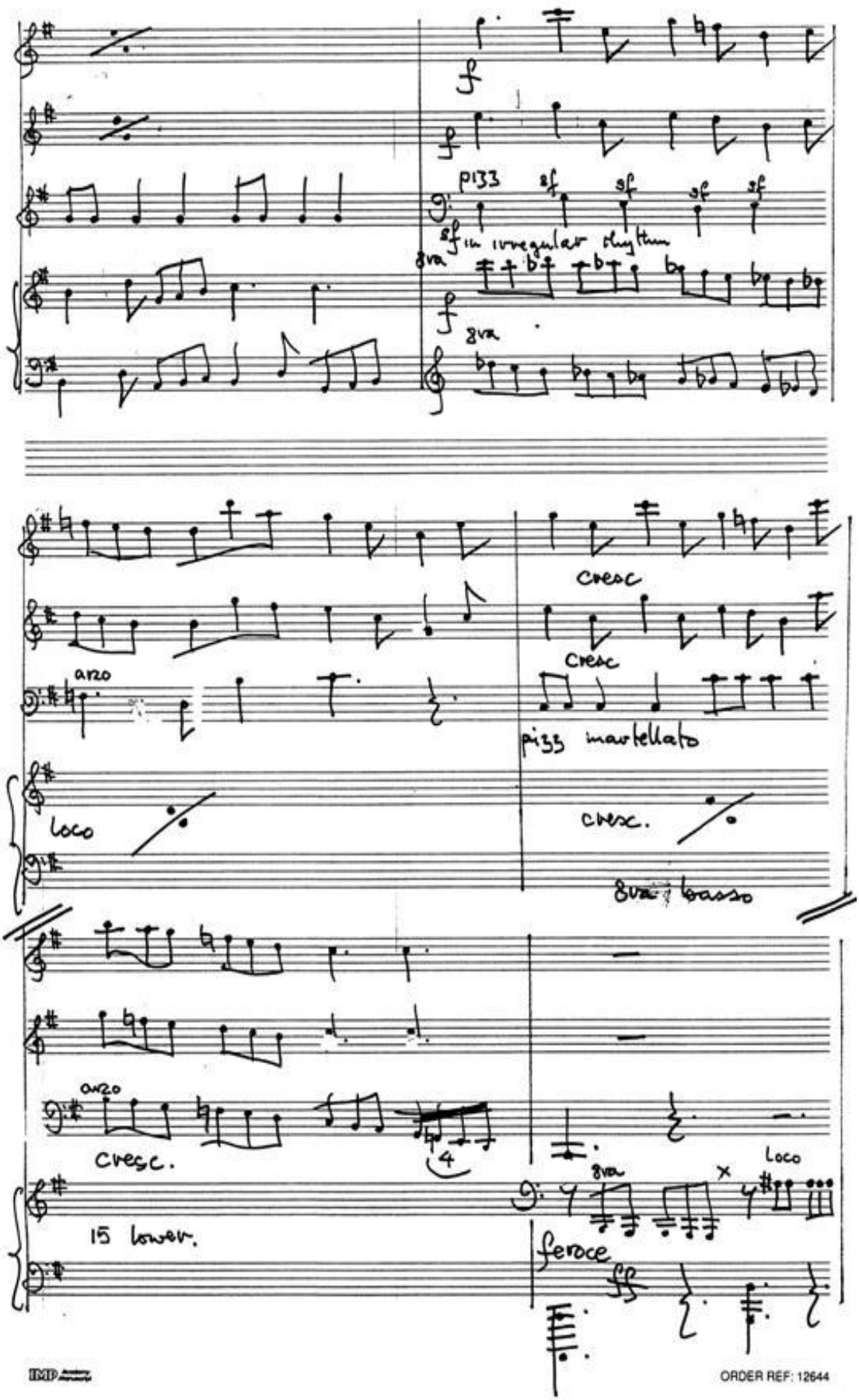


Figure 3.99 Gibson, *Sliabh Luachra*, excerpt, (no bar numbers).

Ó Súilleabháin based the first and third movements of *Oileán/Island* on two traditional tunes, 'The Killavil Jig' and 'The Morning Dew'. In both cases the soloist, Matt Molloy, plays the tunes in his personal style. This ensures the rhythm he gives to the music is very much in keeping with traditional music. The score cannot indicate this and it is only by referring to a recording or live performance of the work that one could really get a sense of Molloy's rhythm. In the following example, the string orchestra provide a spare harmonic accompaniment.

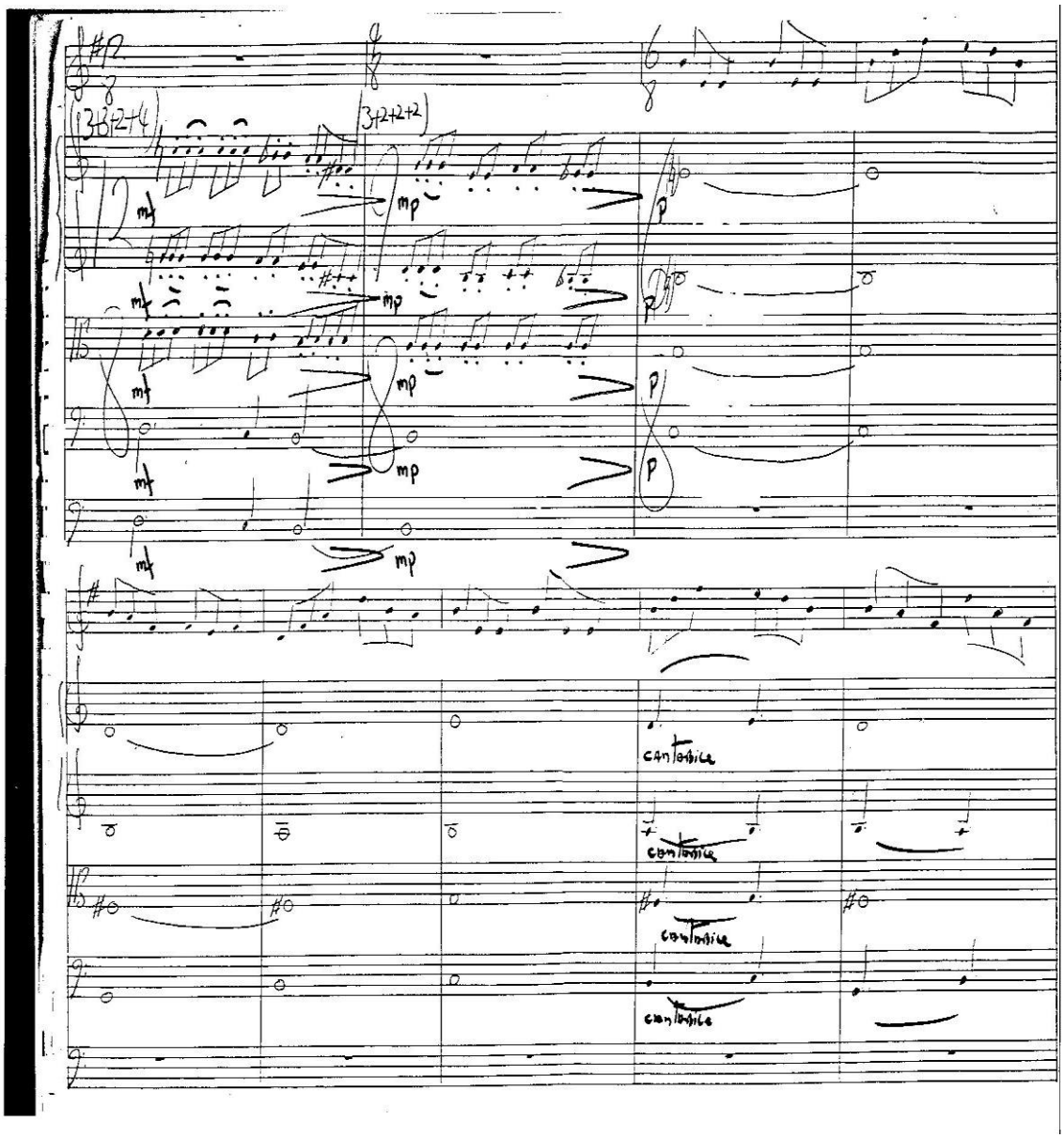


Figure 3.100 Ó Súilleabháin, *Oileán/Island,* excerpt from Movement I.

I generally do not use any music composed by other people in my compositions. I have only once consciously used pre-existent traditional tunes as the basis for a new composition. This occurs in the piece *Le Chéile is in Aonar* which is discussed in Chapter 4.

3.2.6.2 The use of newly composed material using traditional rhythms

A strong knowledge of traditional music is necessary to analyse whether composers have used traditional Irish rhythms when the music they have composed does not contain any pre-existing tunes. For instance, there is a *jig* at the very end of Seán Ó Riada's string orchestra work *Nomos No.1 - Hercules Dux Ferrariae* (1957). The piece was composed before Ó Riada was fully engaged with traditional Irish music; however it might be wrong to dismiss the possibility of an influence of traditional Irish music on the work, as Bodley (1981) does in his analysis of the piece.[73] Ó Riada was exposed to traditional Irish music in his youth and he was even known to play traditional tunes on the violin as a young man. The fact that he only studied it in a significant way later on does not mean it might not have influenced his decision to put a *jig* for solo violin at the end of *Nomos No.1*.

[73] Bodley, Seóirse: "Seán Ó Riada - The Original Compositions: An assessment." In *The Achievement of Ó Riada*, edited by Bernard Harris and Grattan Freyer. Ballina: The Irish Humanities Centre Ltd, 1981.

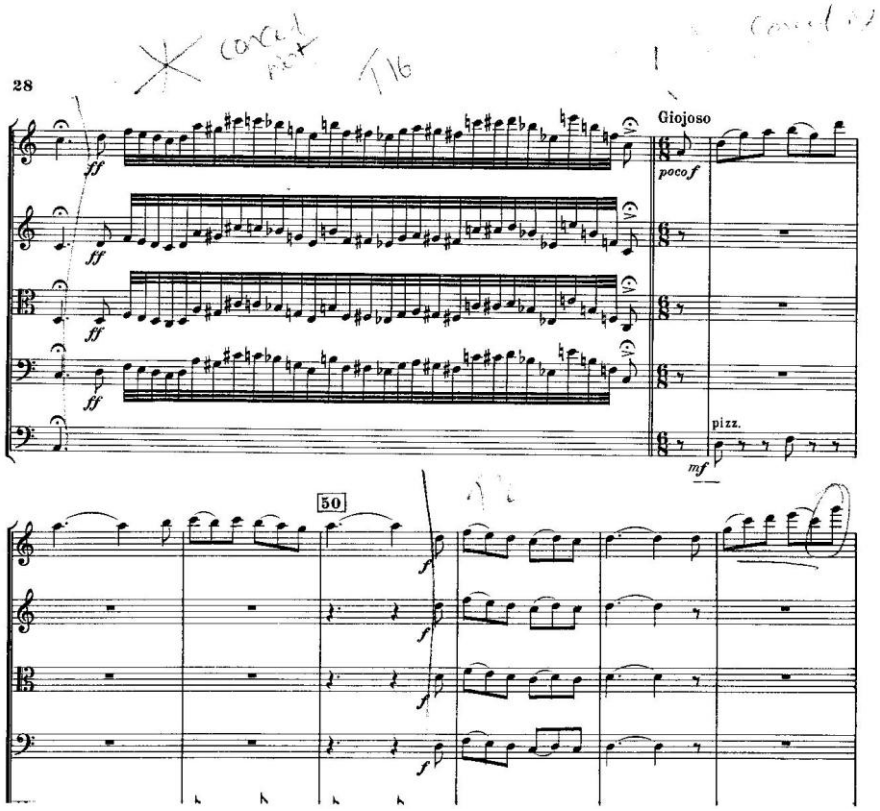


Figure 3.101 Sean Ó Riada, *Nomos No.1 – Hercules Dux Ferrariae*, 46-53.

There is nothing in the notation of this *jig*-like section (bars 47 onwards) that indicates Ó Riada viewed this as a *jig* to be played in a traditional Irish style. It could easily be construed as being influenced by Baroque *gigues*. This demonstrates how it is difficult to say whether any composer's originally composed material is influenced by traditional music. One can only really go on the composer's own words or written instructions in the score.

If a work contains parts for traditional musicians, then it is highly likely that any sections resembling traditional Irish rhythms are indeed influenced by the tradition. In this respect many of the works previously referenced in Chapter 3.1.4 have passages which are strongly based on traditional Irish rhythms.

The following examples from Gerry Murphy's *Dialects* and Roger Doyle's *Ceol Sidhe* contain *jig* rhythms in the *uilleann* pipes' parts.

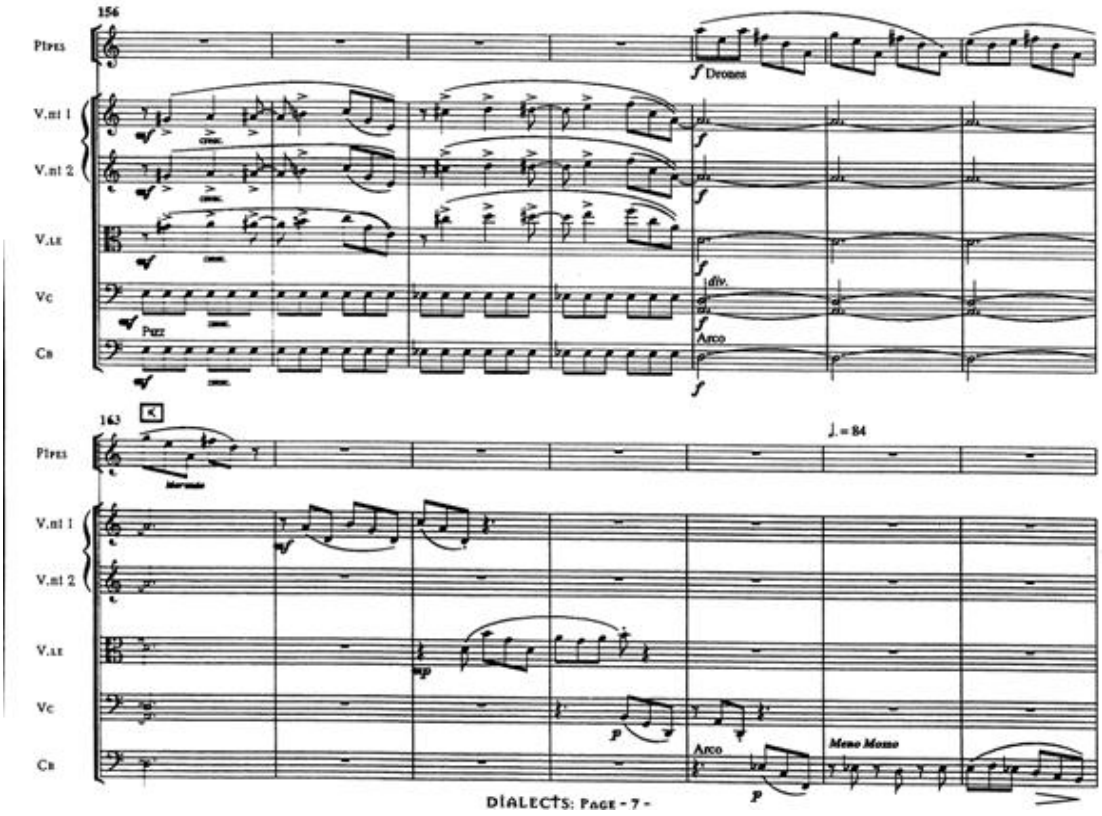


Figure 3.102 Murphy, *Dialects*, 156 – 169.

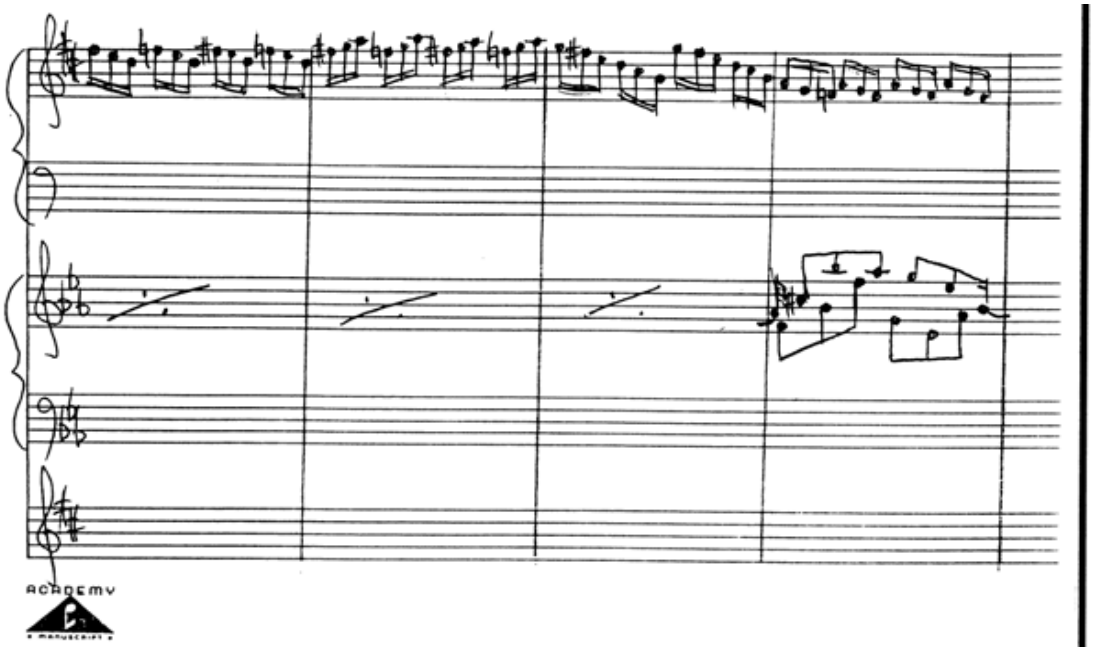


Figure 3.103 Doyle, *Ceol Sidhe*, excerpt, (pipes 'jig' part is the top line).

In *Tradarr*, Doyle implies *jig* rhythms in the wind ensemble writing which accompanies the *uilleann* pipes. The following example demonstrates how the pipes' part is not really characteristic of a *jig* rhythm due to its lack of regular quaver movement, yet the material the soprano saxophone and B-flat clarinet plays is written in a skeleton *jig*

rhythm. This is a noteworthy example of a composer providing a traditional musician with a rhythm that is not particularly characteristic of traditional music, whilst providing classical musicians with one that is.

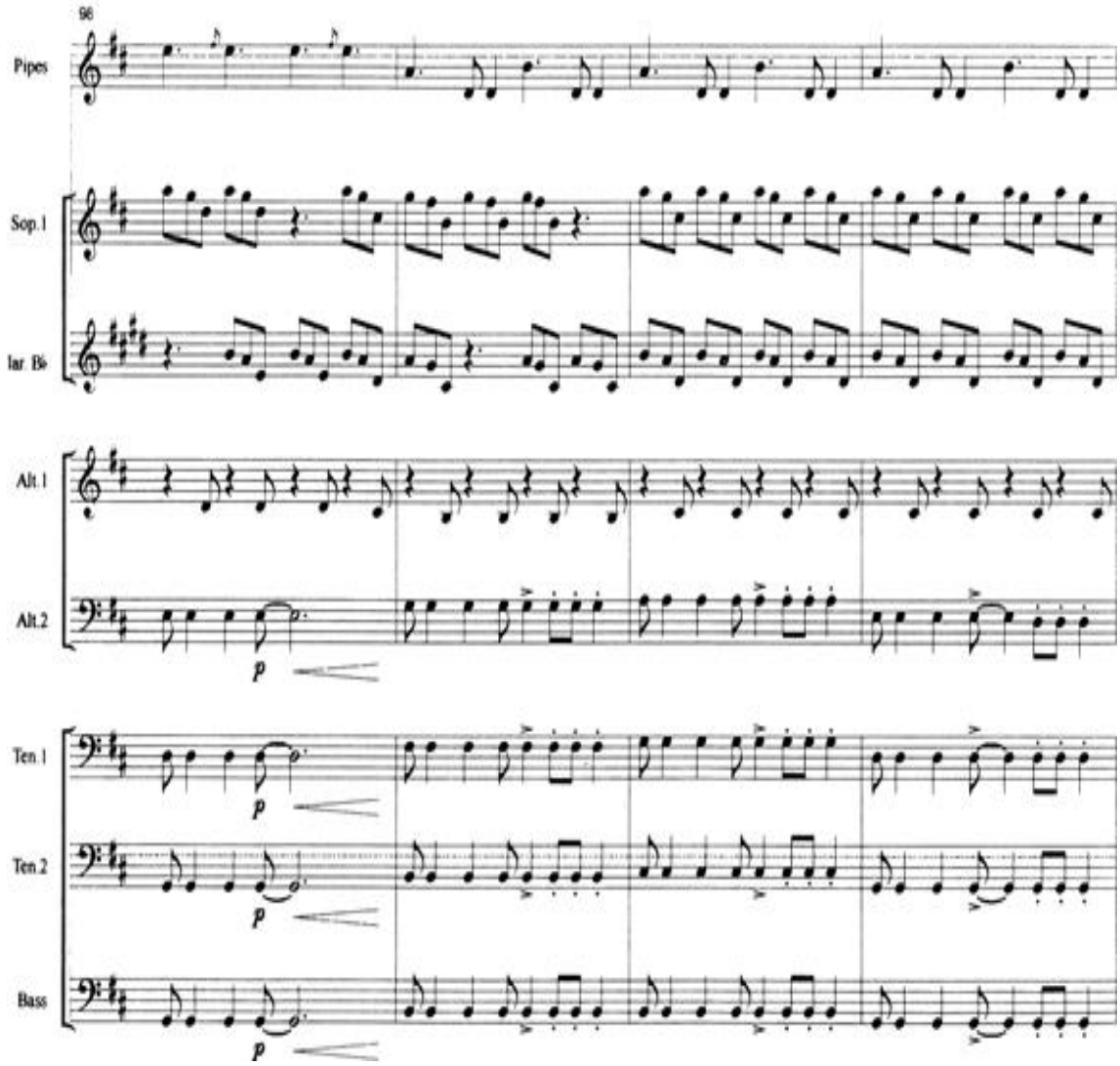


Figure 3.104 Doyle, *Tradarr*, 96-100.

Instances of original melodic writing in other traditional dance music styles are less common in works where contemporary composers feature traditional musicians. In Rachel Holstead's *Ardee Dances*, Movement II is based on a fiddle melody which, on paper at least, is similar to a *reel* rhythm.

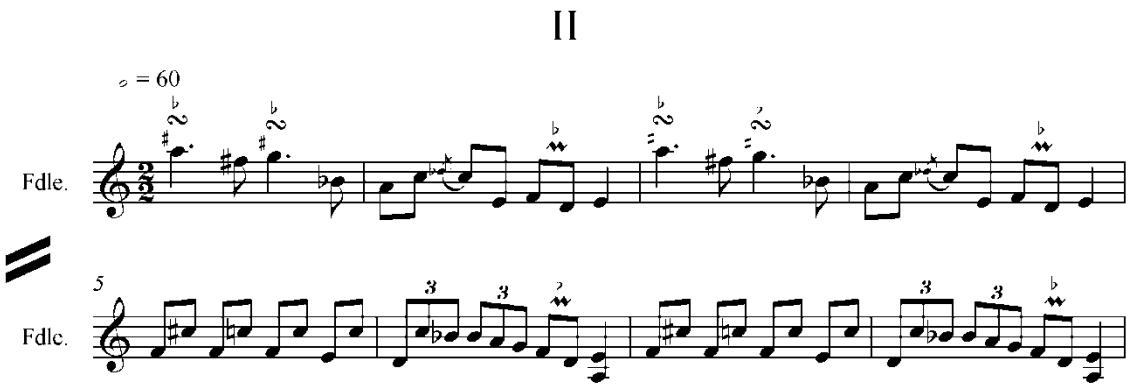


Figure 3.105 Holstead, *Ardee Dances*, II, 1-8.

Gerry O'Connor's interpretation gives the music a swing which makes it sound more like a *slide*. My re-notation of the music in 12/8 gives a sense of this rhythm.

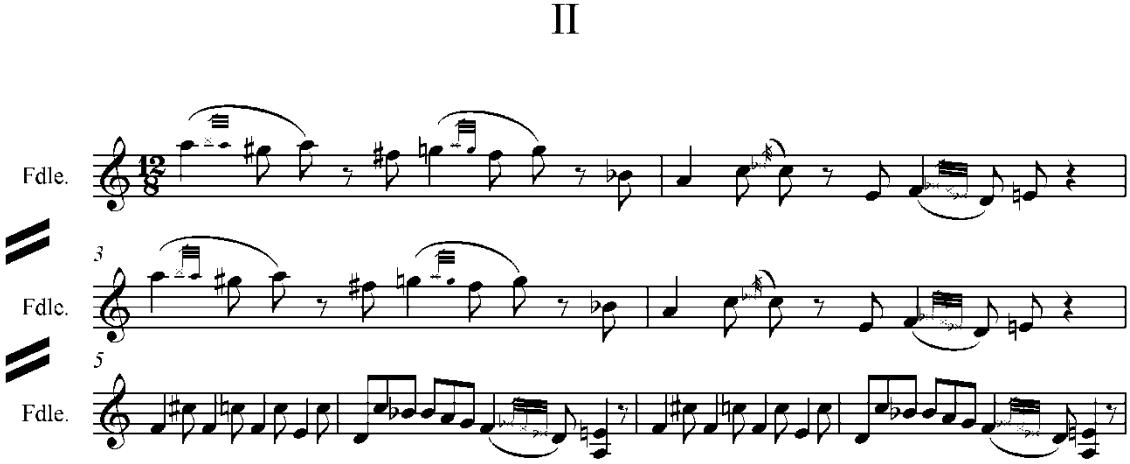


Figure 3.106 Re-notation of Holstead, *Ardee Dances*, II, 1-8.

I asked Holstead about this aspect of the notation:

> I was keen that Gerry had the freedom to make the material his own. This included rhythmic interpretation as well as ornamentation and bowing. I do tend to write *reels* which are closer to *slides* so when writing for traditional musicians, I'll often write things in straight quavers but ask them to swing it. A lot of Gerry's work on the part included us playing through it together so I think I probably suggested that direction to him. Your notation captures the end result perfectly. I think I picked this habit up from some publications of tunes which were notated in quavers but played with a swing whenever I heard them.
>
> (Rachel Holstead email correspondence. September 7, 2010).

Movement III of *Ardee Dances* has sections in 9/8 similar to *slip jig* rhythms.

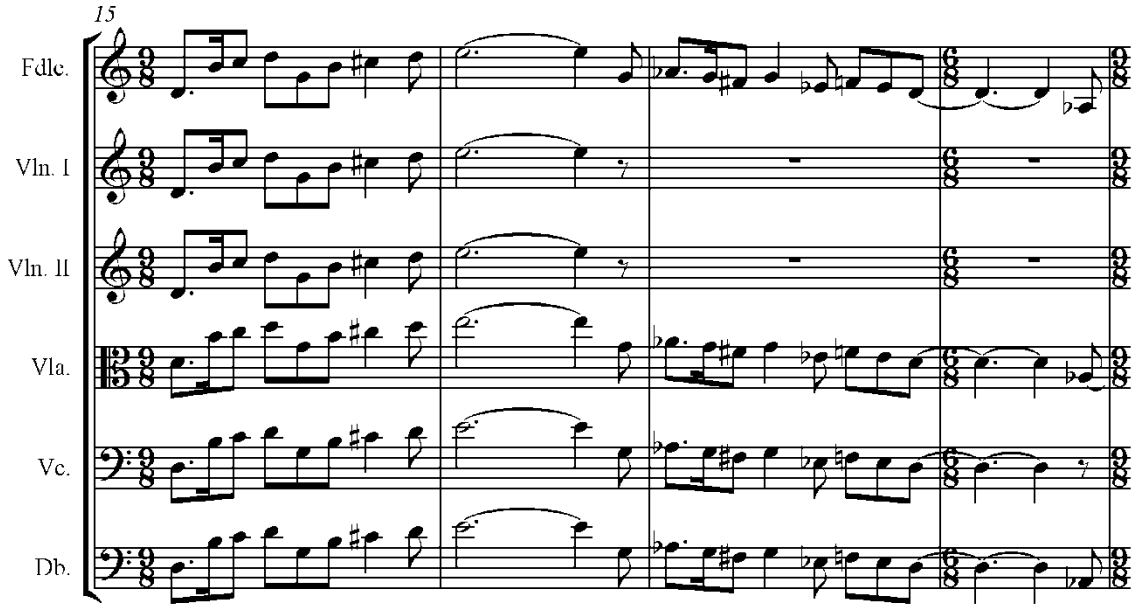


Figure 3.107 Holstead, *Ardee Dances,* III, 15-18.

In my works I utilise traditional Irish rhythmic structures considerably. I like to play to the musician's strengths, so I rarely ask traditional musicians to stray too far from the rhythmic structures they would be used to. Works of mine which feature traditional musicians have often utilised *reel, double jig* and *slow air* structures. These include *Aontacht* (2008), *The Longest Reel* (2009), *The Valley of the Lunatics* (2010), *Five Études for Uilleann Pipes* (2009) and *Stories from the Old World* (2008). I have also utilised *polka, slide, highland, mazurka, slip jig, hornpipe* and *barndance* rhythmic structures in these and other works. Further details regarding my use of these rhythmic structures can be found in Chapter 4.

It is very difficult to conclude with authority whether a section of a work scored without traditional musicians is based on any particular Irish rhythm, unless a composer specifically states that it is. For example, in Barry's *Piano Quartet No.1* there is a passage in 4/4 where the violin part looks quite like the beginning of a *reel*.

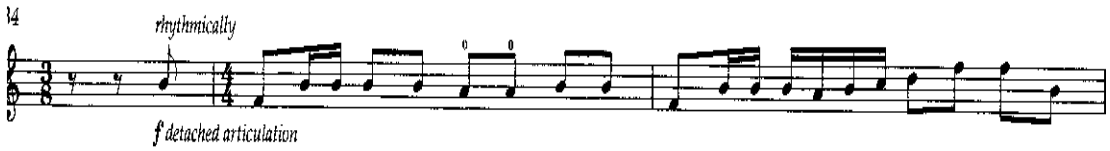


Figure 3.108 Barry, *Piano Quartet No.1,* 334-336.

This is just a deception of the paper. The ‘detached articulation’ which Barry indicates and the lack of swing rhythms means that this section does not sound like a *reel* rhythm or indeed any other type of intrinsic rhythm derived from traditional music.

Instances where composers have indicated that parts of pieces composed for classical musicians should be played with a traditional Irish rhythm are rare in the realms of contemporary concert music. The most notable exception to this is the music of Seóirse Bodley.

In *A Small White Cloud Drifts Over Ireland* Bodley has a number of short sections for solo violin which are intended to be played in a traditional fiddle style, such as the *jig*-like melody in the following example.

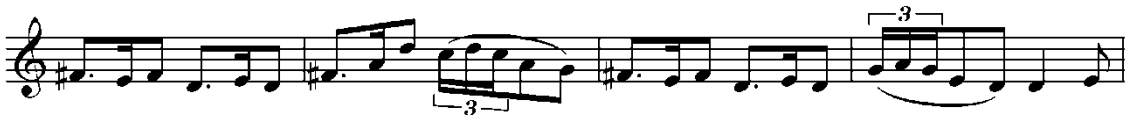


Figure 3.109 Bodley, *A Small White Cloud Drifts Over Ireland*, violin part excerpt.

In *The Narrow Road to the Deep North*, Bodley indicates the opening of the piece should be played in *slow air tempo*. Such indications are quite common in his music.

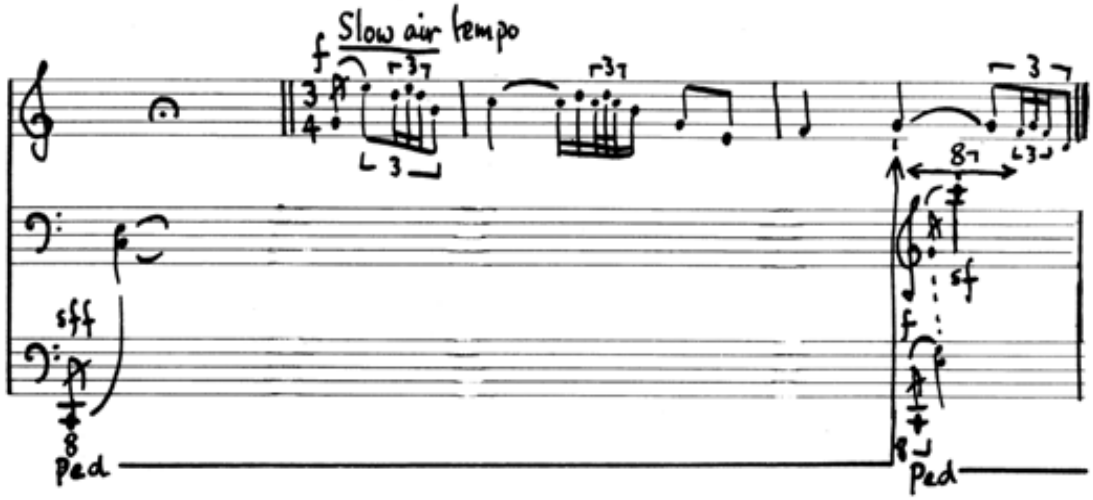


Figure 3.110 Bodley, *The Narrow Road to the Deep North*, 1-4.

3.2.6.3 The use of motoric rhythms derived from the 'Irish' aesthetic

Motoric rhythms are insistent, driving, repetitive rhythms. They are a characteristic of many styles of music, from traditional dance music to the music of J.S. Bach, Maurice Ravel, and Igor Stravinsky (1882-1971) through to contemporary composers such as Philip Glass (b.1937) and Steve Reich. In this respect, it is almost impossible to state definitively where traditional Irish music has influenced the motor rhythm aspects of contemporary concert music. If there are motor rhythms in the work of an Irish composer, is it influenced by traditional music, Minimalism, Jazz, African music, Rock, Baroque music?

One way of knowing is if the composer mentions this influence, as Donnacha Dennehy did when I interviewed him:

> There's certain bits in *Stamp* (2008) with a lot of open string harmonies in it that, for me, were related to *Grá agus Bás*, to that sound of a session, with the rawness of a session in certain motoric parts of the piece.
>
> (Dennehy interview)

This motoric element is evident throughout *Grá agus Bás*. The piece contains a relentless momentum with the ensemble constantly playing various repeated patterns starting with the cello *ostinato* from bar 1.

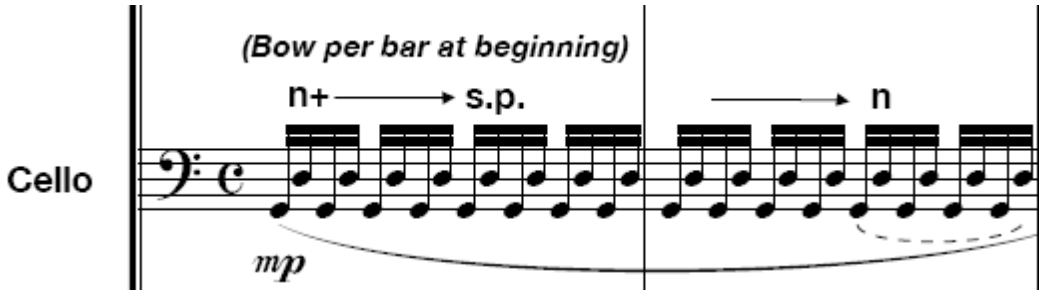


Figure 3.111 Dennehy, *Grá agus Bás*, 1-2, cello part.

By the end of the piece motoric rhythms have enveloped the whole ensemble.

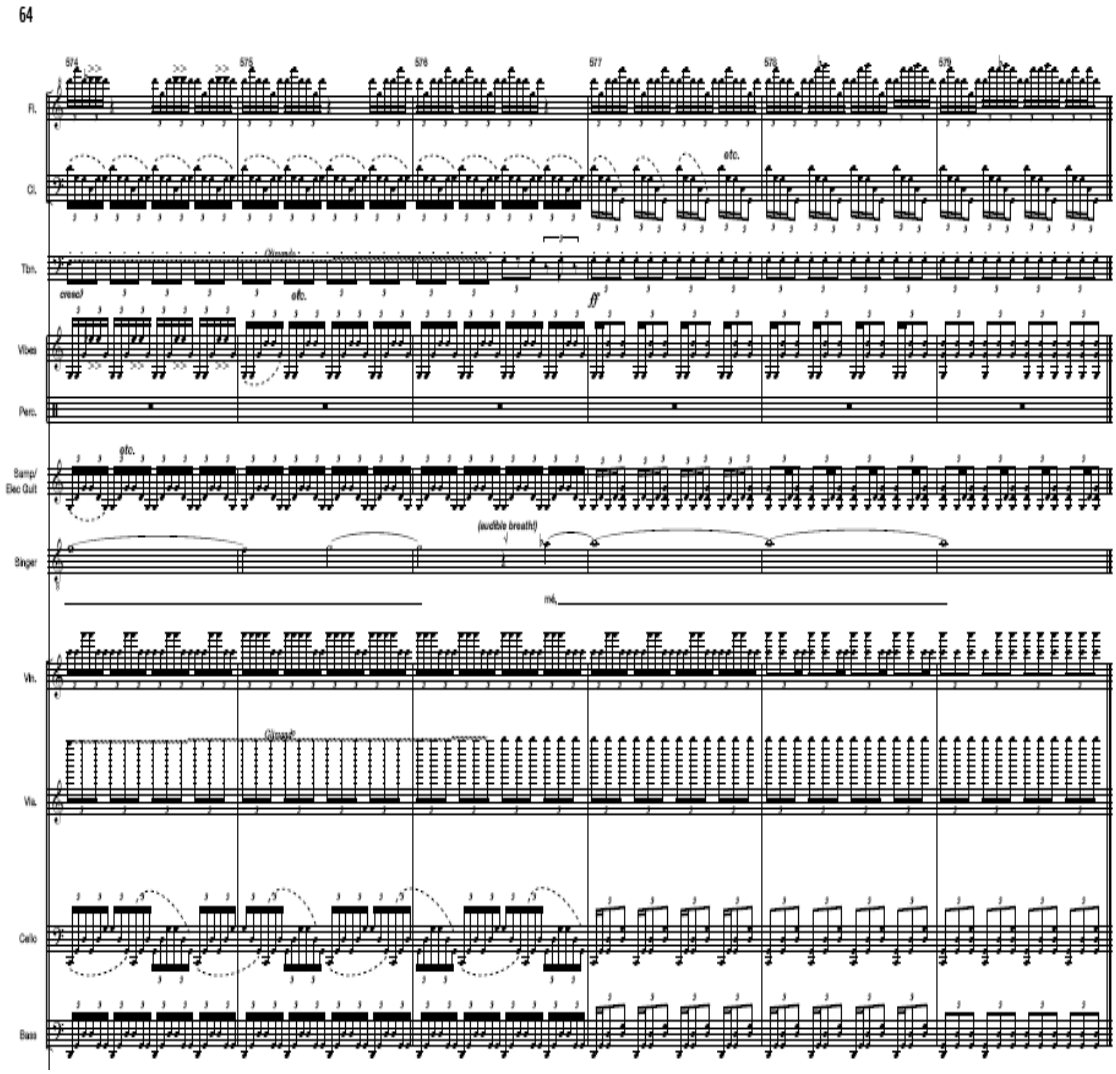


Figure 3.112 Dennehy, *Grá agus Bás,* 574-579.

Gerald Barry's music is characterised by the use of motor rhythms. The following description of Barry's approach to rhythm might lead one to conclude that the rhythm of traditional music has had a strong influence on Barry.

> By and large, his rhythm is thrusting and stomping, set off against haunting moments of sensuality. He delights in regular rhythms which are, however, tripped up now and then by the insertion of an irregular beat.
>
> (Volans, Kevin, and Hilary Bracefield: "A constant state of surprise: Gerald Barry and The Intelligence Park." *Contact*, Autumn 1987: 9).

Could the thrusting and stomping of Barry's music be related to the traditional dance music he no doubt encountered in his youth in County Clare? Could his occasional insertion of an irregular beat, as demonstrated by the 3/4 bars in the following example, be related to the 'extra beat insertion' discussed in Chapter 3.2.3?

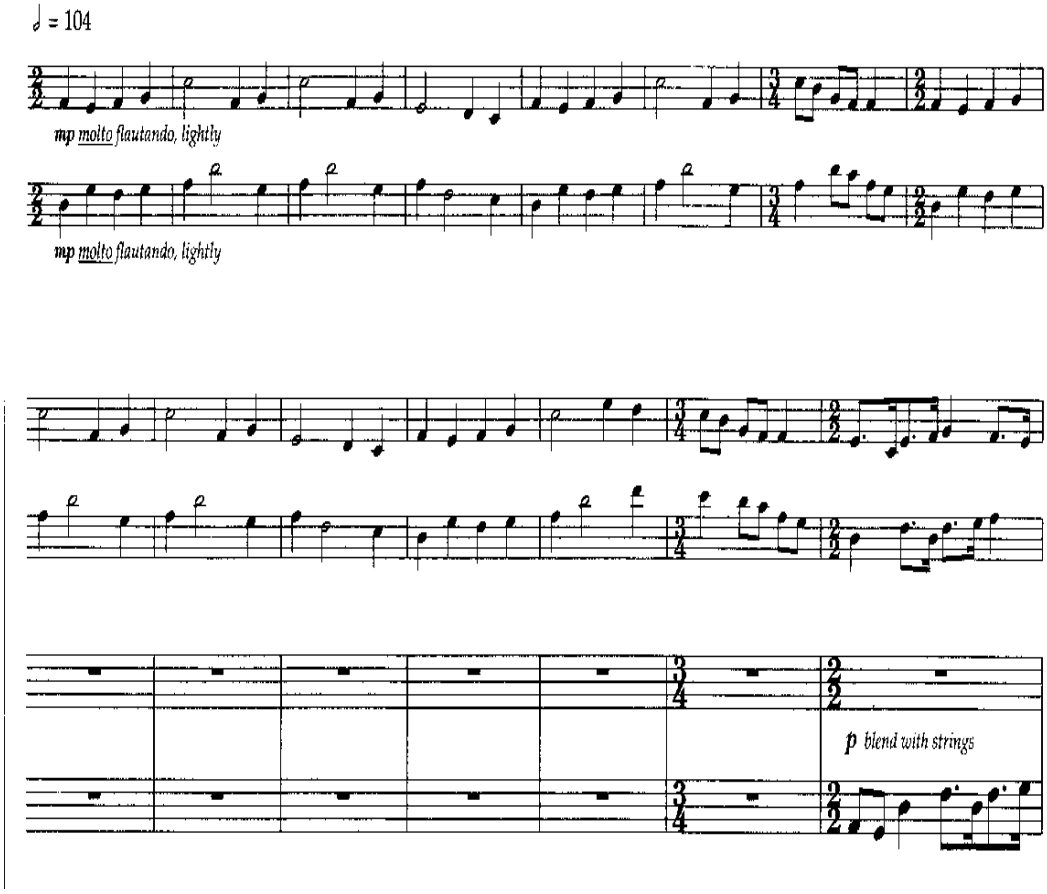


Figure 3.113 Extra beat insertion in Barry, *Piano Quartet No.1*, page 31.

I could find no evidence to confirm or negate this speculation. Barry refused to be drawn on the subject of the influence traditional music has had on his works.[74]

Motor rhythms are extremely important in my music. In a large number of my earlier works, including *Mesh for String Orchestra* (2002) and *Polymetric Cycles for Large Ensemble* (2003), I would attribute the use of motor rhythms more to the influence of rock music, African music and minimalist music. My attraction to traditional music is partly due to my attraction to motor rhythms. In the works I have composed since 2003 the influence of motor rhythms derived from traditional music has become more pronounced, starting with the orchestral work *Paddy's Rambles Through*

[74] Jonathan Grimes from the Contemporary Music Centre emailed Gerald Barry on my behalf to see if he would be willing to be interviewed on the subject. Barry declined the request.

Africa and The Balkans (2003) and continuing through *String Quartet No.2 – The Cranning* (2005/rev. 2009); *Music for the Departed* (2006) and the works I have submitted with this dissertation. All the works discussed in Chapter 4 are at least somewhat influenced by traditional motor rhythms, especially *Aontacht*; *Le Chéile is in Aonar; The Valley of the Lunatics* and *The Longest Reel*.

3.2.6.4 Summary

The rhythmic aspect of traditional music has been influential on contemporary composers in three main ways. The use of traditional melodies has an obvious impact on the rhythms of a newly composed piece, as does the composition of new tunes in traditional rhythmic structures such as *reels* and *jigs*. *Jigs* and *slow air*s are the most often used traditional rhythmic structures in these works. I have utilised most of the common traditional music rhythmic structures and some of the more regionally specific structures such as *highlands* and *polkas*. The motoric element inherent in traditional dance music has also proved influential on some contemporary composers and it is particularly influential on many of the works I have composed since 2003.

3.3 Pitch

3.3.1 Intonation in Traditional Irish Music

> Intonation is a relative sort of field in traditional music, particularly in flutes and fiddle playing.
>
> Harry Bradley[75]

> Pitch is a question of taste and what your ear is familiar with and there's some traditional players and they play consistently at a particular pitch which is not in the conventional setting.
>
> Charlie Lennon[76]

> It's not a pinpoint sense of tuning, each note has a nebula and it's like a probability distribution graph for where each note will land and there's particular areas that have more density.
>
> Caoimhín Ó Raghallaigh[77]

> Equal temperament - the bland, equal spacing of the 12 pitches of the octave - is pretty much a 20th-century phenomenon. It was known about in Europe as early as the early 17th century, and in China much earlier. But it wasn't used, because the consensus was that it sounded awful: out of tune and characterless.
>
> Kyle Gann[78]

One of the most misunderstood aspects of traditional music concerns pitch and intonation. Most music in the modern western world is tuned according to the principles of equal temperament, the equal division of the octave. As the quotation above from Kyle Gann illustrates, music generally considered 'in tune' today was not necessarily considered 'in tune' two hundred years ago.

Those accustomed to the modern standards of equal temperament may find it hard to accept that the sense of pitching and intonation that many traditional musicians have is perfectly valid. In the early days of Irish national radio the assistant music director of *Radio Éireann* Arthur Duff dismissed many field recordings that Séamus Ennis presented him with on these grounds:

> When Séamus Ennis was bringing back recordings of *Sean-nós* to *Radio Éireann* in the early days they had to be passed by the music department and that tended to be staffed by people with experience of classical music and in particular a man called Arthur Duff who

[75] Bradley interview.
[76] Lennon interview.
[77] Ó'Raghallaigh interview.
[78] Gann, Kyle: "An Introduction to Historical Tunings." *Kyle Gann's Official Web site.* http://www.kylegann.com/histune.html#hist4 (accessed October 17, 2009).

> was a composer. My understanding listening to Séamus is that he (Duff) actually disqualified music, *Sean-nós*, on the basis that it was out of tune. Whereas it was out of tune to him in his training but it wasn't out of tune to Séamus because Séamus had a different understanding of the modal differences or possibilities of this, so it goes that deep with people.
>
> (Browne interview).

Any good traditional musician who plays notes 'out of tune' to equal temperament is usually doing so deliberately. There are no standardised rules concerning intonation and pitch in traditional music, however I have identified five characteristics in this area that can be defined to some extent. All these characteristics have been influential to my compositions.

- Intonation determined by instrument characteristics
- Drone based fiddle tuning
- Pitching based upon flexible notes
- Microtonal ornamentation
- Pitch heterophony

3.3.1.1 Intonation determined by instrumental characteristics

The *uilleann* pipes, wooden flute and tin whistle tend to be tuned in such a way that some notes would fall outside of equal temperament if they were played without any deliberate adjustment.

> You may have noticed that when different players try out the same whistle, one may make it sound more in tune to your ear than other players do. No whistle has inherently perfect intonation; or perhaps it is more accurate to say the meaning of "in tune" is subjective. It necessarily changes from situation to situation and it often involves compromise when playing with other people. Experienced players do their best to play what sounds sweet to their ear in any given situation. That personal judgement of good intonation usually does not conform to equal temperament. Instead we tend to prefer the sound of "pure intervals". It may be more useful to think of playing in-tune intervals rather than in-tune notes, for it is the relationship between the notes that we are really tuning.
>
> For instance, sometimes the third degree of the Ionian mode (or major scale) – let's consider F-sharp in the D-Ionian mode – sounds better to our ears, in relation to D (the tonic note), if it is played slightly flat of an equal tempered F-sharp. In another mode, such as E Dorian, a sweet or correct sounding F-sharp may be sharper than the sweet F-sharp or D Ionian.
>
> (Larsen, Grey: *The Essential Guide to Irish Flute and Tin Whistle.* Missouri : Mel Bay Publications, 2003:78).

Similar principles apply to the simple system Irish flute.

> It depends how you blow it. You're always compensating, it wouldn't be as standardised as the Boehm system or the other systems. I think generally it is even temperament. The *F* is a bit sharp, The *F-sharp* is a bit flat, *B* is left a bit flat. Different makers do different things, Sam Murray always leaves the *D* a bit flat so you have to over-blow and you get the big tone on the bottom *D* and the *G* is often the same in his instruments.
>
> (Bradley Interview).

The *uilleann* pipes are usually tuned in just notation, whereby the chanter and regulators are tuned relative to the drones of the instrument, meaning the tuning is based on the overtone or harmonic series.

> The pipes are not tuned to a piano for instance, they have their own melodic tuning and the *F* is flat and the *C-sharp* is flat and the only two notes really that would be tempered scale really would be the low *D* and high *D*. The *A* is +2, the *G* is -4, the *F* is -16……any pipe that has a drone, it (the chanter) has to harmonise with the drone.
>
> (O'Brien Interview).

These tuning issues are all connected and they even have a bearing on the approach to pitching by fiddlers and players of other instruments where intonation is flexible.

> You may have noticed that with old simple-system flutes, the F-sharp tends to be flat, A tends to be sharp, *C* natural tends to be sharp, and *C* sharp tends to be flat, At least that's how these notes sound compared to equal temperament. Those same pitch "distortions" are typically found in tin whistles and uilleann pipes. A very similar pattern is often observed in Irish fiddling. Since fiddlers determine their intonation by finger placement, and by comparison of fingered pitches to those of the open strings, these pitch "distortions" are clearly a matter of choice, though probably an unconscious or conditioned one. It seems that there is a kind of natural intonation "profile" or "dialect" that is inherent in the design of simple-system instruments…which is also inherent in the nature of traditional Irish music.
>
> (Larsen, 2003:78).

Equal temperament is now standard in the general world of classical music. However there are occasions, even in standard repertoire, when classical musicians pitch certain notes outside of equal temperament.

> When playing in ensembles (particularly smaller groups where each voice is individual) then it is discussed and rehearsed as certain notes in certain chords need to be flexible in order to create the right overall pitch. It's a much-discussed and argued-over topic and is very much a subjective choice. As an individual, a musician will often use it for emotional reasons to add pathos to a performance, bending notes upwards to yearn, for instance.
>
> (Petcu-Colan Interview).

3.3.1.2 Drone based fiddle tuning

The fiddle is perhaps the most versatile instrument commonly used in traditional music, in terms of pitching. It is possible for a skilled player to play in equal temperament if he or she wishes, or for him or her to adjust pitching to fit in with the inherent tuning of a piper. Some players even tune their open strings slightly differently to achieve a certain sound.

Tommy Peoples (b.1948) has a very individual approach to pitching. He often tunes the D string sharper than it would be in equal temperament. According to Caoimhín Ó Raghallaigh this makes perfect sense if you consider the fact that Peoples is probably basing his approach on an *A* drone due to his Donegal heritage. Ó Raghallaigh distinguishes between a southern and northern approach to tuning, based on drones.

> If we go back to the concept of it as a drone based music I would say that south of a certain line across the country, you could say that the coherent sense of tuning seems to be based on a *D* drone and then Donegal seems to be based on an *A* drone and then it becomes very clear why you choose certain positions.
>
> (Ó Raghallaigh Interview).

Ó Raghallaigh then demonstrated to me how if one wishes to play with pure intervals in the framework of an *A* drone, in other words the harmonic series based on *A*, then the *D* will need to be slightly sharper than it would if one were basing tuning on a *D* harmonic series. Whilst it is beyond the scope of this dissertation to examine in mathematical detail the pitching difference between northern and southern Irish fiddlers, I would tend to agree with Ó Raghallaigh's general assertion that a West Clare fiddler like Bobby Casey (1926-2000) would have subconsciously based his pitching on a *D* drone, whereas a Donegal fiddler like John Doherty would have subconsciously based his pitching on an *A* drone. The possible reason for this is the influence of the highland bagpipe on Donegal fiddle music. Highland pipes are normally tuned to an *A* drone. I have always felt there was a sharper sound to Donegal music in general and so Ó

Raghallaigh's theory regarding the *A* and *D* based drones on pitching would go along way to explaining where this sharper sound comes from.

3.3.1.3 Pitching based upon flexible notes

I have already described how certain notes tend to be treated as flexible so that, for example, a tune that would seem to be rooted in D Ionian could not in fact be defined this way because some players might play an *F-natural* where others would play an *F-sharp.*

The most common flexible notes in traditional music in terms of scales or modes are the 3rd, 6th and 7th and it seems to be these notes that are most often played with varying pitches. In my transcriptions of Tommy Potts' and Martin Hayes' versions of 'My Love is in America' (Chapter 2.5) there are five versions of the note F.

Figure 3.114 Flexible 'F' notes.

The pitch variance is almost certainly a conscious choice of the musicians. Martin Hayes applies intonation changes to flexible notes despite the fact that he consciously plays in equal temperament much of the time.

> I'll go back to hearing Yehudi Menuhin on those Sunday afternoons playing and on some level recognising the absolute perfection of the pitch and then there was nothing like these Bach Sonatas and to hear them with clarity and perfection of pitch. Then after a while just messing around on the fiddle, I began to realise that modern classical sense of pitch is in and of itself because of its mathematical purity almost. It is beauty itself. On some level I'm trying to develop that sense of the absolute pristine quality of precise pitch because when you hear a Paddy Fahey tune there'd be nothing like hearing it in pristine perfect pitch. It would only amplify the beauty that's already in it, I've always felt that.
>
> On the other hand we have Junior Crehan and Bobby Casey and Patrick Kelly and we have all these variants of it and so, on some level, I want to bring these two pitch worlds together. So from my own playing I've always tried to establish some sense of achieving some perfection of pitch and then to make the deliberate distortion of the tempered scale, to have that capacity to weave and bend those notes in a feeling way. I always felt that the more precise I could have other elements of pitching the tune, let's say the first two or three bars of the tune were in as perfect a pitch as I could get, then when I wanted to weave and bend the notes I could do so and it was always clear that it wasn't accidental but intentional.
>
> (Hayes Interview).

Hayes' desire to make it obvious the intonation changes are intentional reflects the fact that there are fiddlers who have a bad sense of tuning, so it can sometimes be hard to distinguish who is adjusting the pitching of notes deliberately from those who simply cannot play in tune! There can be confusion as to whether the fiddler is pitching out of tune deliberately or not, from the point of view of a classical musician like Ioana Petcu-Colan.

> I hear it as a different approach but it does depend on the fiddler – there must surely be better and worse trad players just as there are classical players!
>
> (Petcu-Colan Interview).

Some of the most accomplished players consistently pitch flexible notes sharper or flatter than equal temperament for deliberate effect. I have noticed this in the playing of fiddlers as diverse as James Byrne, Paddy Fahey, Bobby Casey and Pádraig O'Keeffe. Each of these players would have their own approach to the 3rd and the 7th in particular.

Flexibility of the root is also relatively common, particularly in *Sean-nós* singing where a singer will begin with the root and then upon returning to it they will deliberately pitch it slightly flatter. Fiddlers imitate this effect by playing a note slightly flatter on a stopped string than the open string.

3.3.1.4 Microtonal ornamentation

There are a number of ornamentation techniques in traditional music which rely on subtle pitch variations for their effect. These techniques were discussed in Chapter 2.4.2.

3.3.1.5 Pitch heterophony

Individual players often have different senses of tuning, so when they play together it accentuates the intonation issue, giving rise to pitch heterophony. This is a separate issue to the inherent intonation of instruments. Pitch heterophony might occur if, for example, three fiddlers played together and made sure their open strings were perfectly

in tune with each other. Each player may have a different sense of the intonation for a *C-sharp* or a *B* or so on, so unless they really know each other's playing and try to adjust to each other's sense of tuning, pitch heterophony is certainly going to occur. Rather than being a problem this can be quite a unique and eminently listenable sound.

This effect would probably be considered abhorrent in the context of a classical string orchestra playing a Mozart *Divertimento*, but in the context of traditional Irish music it is perfectly natural. Slight clashes in intonation like this can give the music a special colour. One of the most fascinating ensemble sounds I have heard occurs every year at the *Donegal Fiddle School* in Glencolmcille where as many as twenty fiddlers can be crowded into a pub playing together. The resultant ensemble sound is exhilarating and very different to a classical string orchestra.

Pitch heterophony is even a deliberate feature of certain styles, most notably in the Sligo flute tradition.

> In Sligo there they tune the flutes sharp with each other and sharp with the fiddles and if the fiddlers tuned up they just go sharper again! It's the sound, sharp flutes.
>
> (Bradley Interview).

In informal discussions, Harry Bradley suggested to me the reason for this sharp tuning is to give a very clear differentiation between the players, so if you listen closely enough you can hear the subtlest variations of each player.

3.3.1.6 Summary

Historical evidence regarding the evolution of equal temperament, coupled with the inherent tuning of the *uilleann* pipes and early recordings of traditional music, suggest that the music has, until relatively recently, rarely been performed in equal temperament. It is only the introduction and general acceptance of fixed pitch instruments such as accordion, concertina, piano and guitar into the tradition that almost forced the music into equal temperament. This can cause particular difficulties for pipers, for example the differences in inherent tuning between the *uilleann* pipes and the

accordion means one will rarely hear a duet between an *uilleann* piper and an accordionist. I know some pipers who will not join a pub session if there is an accordionist already playing. On the other hand I know an accordionist who does not like the pipes because he considers them out of tune.

These issues clearly illustrate why pitch and intonation is such a gray area in traditional music. It also explains how traditional musicians have learnt to tolerate intonation clashes in ensemble situations. It is common to find flutes, pipes, whistles, fiddles, guitars, banjos, accordions, concertinas etc., in the same pub session. It is virtually impossible for all these instruments to be in tune with each other, so traditional musicians can learn to accept these differences to the point where it does not bother their ear. This is a strange kind of acceptance that is not without its pitfalls:

> One night I sat down with a piper and I think there was maybe a concertina player as well, which meant the tuning was not gonna happen! The pipes were probably a quarter tone out and he didn't hear. And I remember sitting down and I was like 'Jesus, I'm gonna get a headache here. I'm not gonna be able to play, this is excruciating. Everything sounds horrible'. Then I says 'Oh what the hell just play like' and you know what, after fifteen minutes I wasn't hearing any intonation problems. I was scared, I realised it would take very little for me to slide into that world where you didn't hear anything anymore.
>
> (Hayes Interview).

Overall, these issues regarding the idiosyncrasies of traditional Irish intonation are extremely important for any composer to take into account when utilising any element from the tradition. This has influenced my own compositions, particularly *String Quartet No. 3 - The Keening* and any pieces I have written specifically for traditional musicians. More details on the influence of pitching and intonation on these works are found in Chapter 4.

3.3.2 Modality

It is difficult to describe traditional Irish music in terms of tonality or modality, due to the issues of intonation and note flexibility previously discussed. Yet it is common to hear traditional musicians speaking of tunes as being in a major or minor key. Whilst many tunes can, in their skeleton notation, be defined as being in a major key, detailed examination of traditional music suggests it would be more correct to describe traditional music in general as being modal.

> All Gaelic tunes - airs and dance music - have been composed in one of four modes. There's nothing mysterious about this system, since the modes are based on the first, second, fifth and sixth notes of the diatonic scale.
>
> (Breathnach, Breandán: *Ceol Rince na hEireann, (The Dance Music of Ireland)*. Dublin: Government Publications, 1963: Preface).

It is a bit misleading of Breathnach to say 'all' Gaelic tunes were composed in these four modes. There are tunes which use different modes and scales, but most of the living repertoire of traditional Irish tunes is indeed based on the Ionian, Dorian, Mixolydian and Aeolian modes.

In addition there are tunes which change mode in the B part; or for tunes with more than an A and B part, the mode can change with each section. Finally there are some tunes whereby the modality varies throughout the tune, meaning the tune as a whole, or even a section of the tune, does not fit conveniently into one standard mode.

When discussing the commonly used modes in traditional music I refer to them as they would be found on non-transposed instruments, in other words, it is very common to find tunes in D Mixolydian but quite rare to find them in E-flat Mixolydian. A fiddler such as Frankie Gavin will often actually be playing tunes in E-flat Mixolydian because he tunes each string of his fiddle up a semi-tone. This analysis of the commonly used modes in traditional music is based on instruments as they are most usually pitched and tuned, i.e. *uilleann* pipes, flute and tin whistles pitched in *D* and a fiddle tuned *GDAE*. When I define a tune as being in a certain mode it is only in relation

to how the tune is most commonly played. It is quite feasible for a musician to change the modality of a tune. My transcriptions of Martin Hayes, Con Cassidy and Tommy Potts in Chapter 2.5 reveal this. The version of 'My Love is in America' in O'Neill's (1907) is in D Ionian. Since Cassidy, Hayes and Potts all treat the note *F* with flexibility, then it is impossible to define their versions as being exclusively in one mode. One could say that they constantly vary between Ionian, Dorian and Mixolydian modes or that the tune is rooted around the note *D*. The reader is asked to temporarily leave this idea aside in order to examine the basic modal frameworks of traditional Irish music.

3.3.2.1 The Ionian mode

Many tunes exist in the Ionian mode, which is identical to the major scale. One such tune is 'The Girl with the Laughing Eyes.'

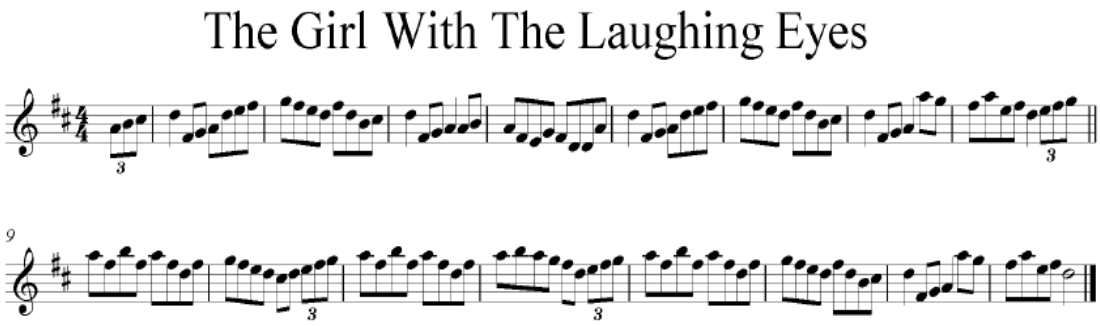


Figure 3.115 Ionian tune 'The Girl with the Laughing Eyes,' (O'Neill, 1907:130).

Only the notes of the D Ionian mode are used throughout this version of the tune. Other Ionian modes commonly used on non-transposing instruments are A, C and G. Tunes in E-flat, E, F and B-flat Ionian are also found, particularly in the fiddle repertoire. The difficulty of performing in these modes on the *uilleann* pipes, flute and tin whistle has meant tunes such as these are not as commonly played as those in D, G, C and A Ionian.

3.3.2.2 The Dorian mode

The Dorian mode is one of the most characteristic modes in use in traditional Irish music. One will often find such tunes mislabelled in a minor key. Tunes are commonly found in A, B, D, E and G Dorian. [79]

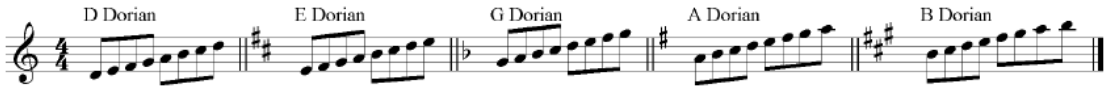


Figure 3.116 Common Dorian scales used in traditional music.

A commonly played E Dorian tune is 'The Merry Sisters.'

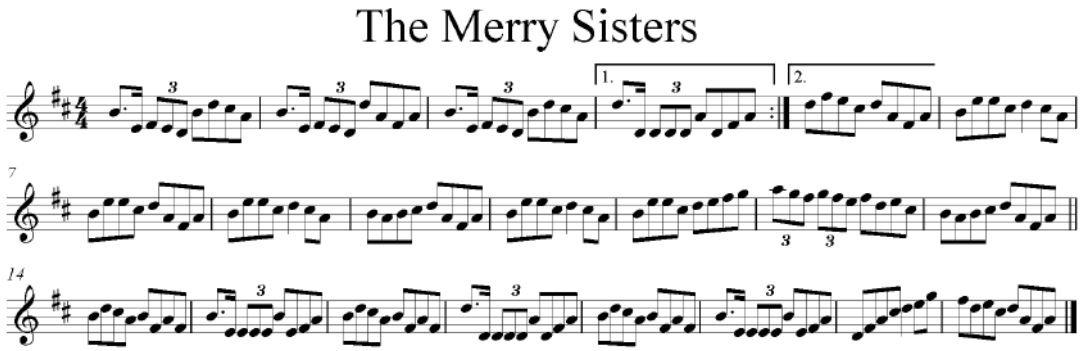


Figure 3.117 Dorian tune 'The Merry Sisters,' (O'Neill, 1907:100).

The prevalence of the note C-*sharp* makes it clear this version of the tune is in the E Dorian mode and the key signature reflects this.

3.3.2.3 The Aeolian mode

Tunes in the Aeolian mode are also commonly misinterpreted as being in a minor key. They do use the same key signatures; however they differ by way of the fact that neither the melodic or harmonic minor scale is ever used in such tunes when they are notated in skeleton form.[80] Instead they tend to exclusively use the notes of the Aeolian mode. The most common uses of the Aeolian mode are in D, E, G, A and B. Any other instances are rare.

[79] It is important to note that modal key signatures are different to tonal key signatures. They same key signature of two sharps is used for D major and E Dorian.
[80] Some players may vary a tune which is usually in the Aeolian mode by using the melodic or harmonic minor scale.

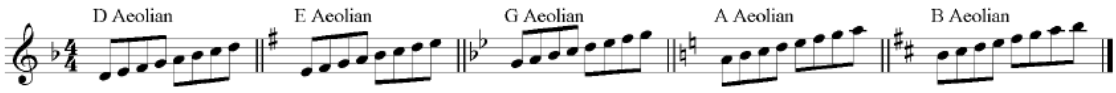


Figure 3.118 Common Aeolian scales used in traditional music.

'Charlie O'Neill's Highland' is in E Aeolian, although there is a change in sound and emphasis in the B part which suggests G Ionian.

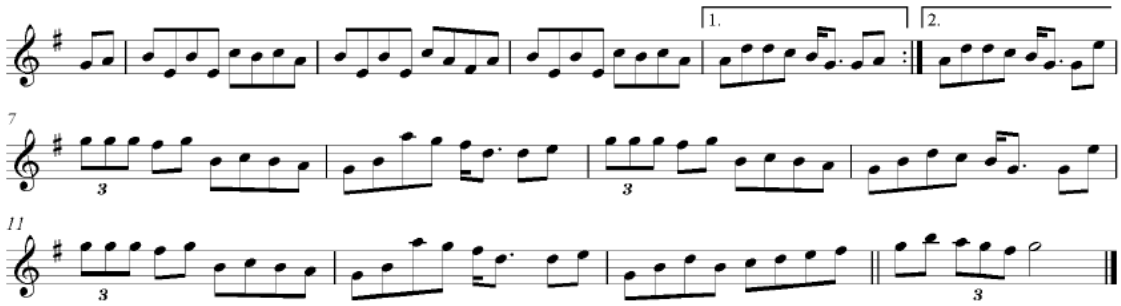


Figure 3.119 Aeolian Tune 'Charlie O'Neill's Highland.'

3.3.2.4 The Mixolydian mode

The Mixolydian mode is very common in traditional Irish music. It has a very characteristic sound that is distinguishable from the Ionian mode due to the appearance of a dominant 7th instead of a leading note (major 7th). A, D and G are by far the most common degrees of the Mixolydian mode found in traditional music. C and E Mixolydian are sometimes found; any other instances are rare.

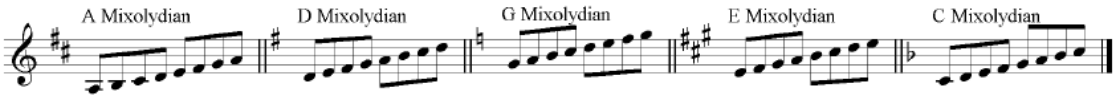


Figure 3.120 Common Mixolydian scales used in traditional music.

'The Girl Who Broke My Heart' is most commonly played in the G Mixolydian mode as per my notation below, however in O'Neill (1907:89) it is found in the Dorian mode. Some people, including Martin Hayes, play this Dorian setting.

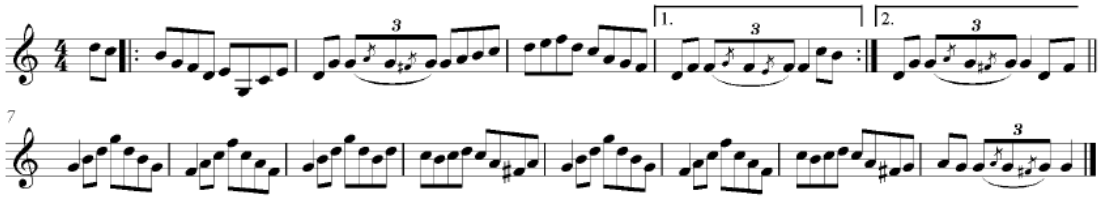


Figure 3.121 Mixolydian tune 'The Girl Who Broke My Heart.'

3.3.2.5 The Lydian mode

Breathnach (1964) did not mention the Lydian mode in his description of the 'Gaelic modes'. Within traditional music there is one anomaly which makes the Lydian mode more commonly used than many people realise. When a melodeon player is playing a G Ionian tune on a melodeon pitched in D, they are more likely going to play it as a G Lydian tune because there are no *C-naturals* on the D melodeon. So, instead of playing a *C-natural* many melodeon players will play a *C-sharp*, thus implying the G Lydian mode. Some musicians who play other instruments have been influenced by this in that they transform a tune which is usually set in the Ionian mode to the Lydian mode.

The Lydian mode is rarely found in traditional Irish music otherwise, but it is found in more modern compositions. Its use can be explained by the fact that it produces the reverse effect of the more common Mixolydian mode. For example, the G Mixolydian mode often produces a change from a phrase based on a G triad to one based on an F triad. Some composers have reversed this sequence to create tunes in F Lydian. This is more likely a case of creative spontaneity than a conscious use of the Lydian mode. I have noticed tunes using B-flat, C, D, G and F Lydian. I would suggest any other degree of the Lydian mode is unlikely to be found, other than in a very recent composition. I am constantly surprised by what I find in old tunes though, so I would not count the possibility out.

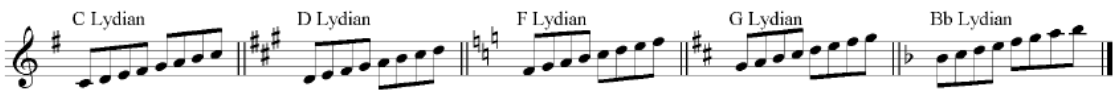


Figure 3.122 Lydian scales used in traditional music.

'The Old Cameronian' is a *reel* composed by Ed Reavy. The tune is notated in F Ionian (F major) in *The Collected Compositions of Ed Reavy*, [81] however the absence of

[81] Reavy n.d:81.

B-flat in favour of *B-natural* would suggest this is an F Lydian tune and so I have changed the modal signature to reflect this.

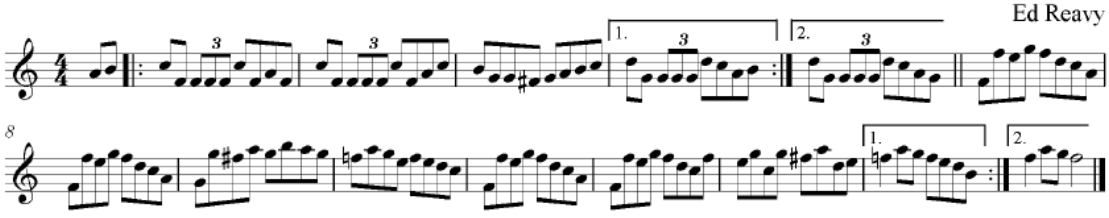


Figure 3.123 Lydian tune 'The Old Cameronian.'

Those are the most common modes found in traditional Irish music. The Phrygian and Locrian modes are generally not found, although Flood (1905), suggests the Phrygian mode was a feature of ancient Irish music. 'The ancient Irish cultivated three species of musical composition, answering to the *three* modes (the Dorian, Phrygian, and Lydian).'[82] Unfortunately, these ancient compositions in the Phrygian mode have been lost to us. However, there are some other scales in prominent use.

3.3.2.6 Pentatonic scales

Some tunes are based on pentatonic scales, so named because they contain only five notes. There is a perception that the pentatonic scale and other such 'gapped' scales are a major feature of traditional music,[83] however there are not so many exclusively pentatonic tunes within the instrumental tradition as we know it today. Flood (1905) suggests the tradition has evolved from an older tradition which was more exclusively pentatonic. 'From a long and careful study of some thousands of our ancient melodies, I have arrived at the conclusion that the old Irish scale was pentatonic, proceeding as follows: *C D E G A C.'*

[82] Grattan Flood, William H: "A History of Irish Music: Chapter IV ." *Library Ireland.* 1905. http://www.libraryireland.com/IrishMusic/IV.php (accessed June 9, 2010).
[83] A number of commentators, including White (1998) and Graydon (1999, 2008); have mentioned gapped scales as being particularly characteristic of traditional Irish music.

It is rare nowadays to find an Irish tune without an *F* or *B* or its flexible equivalent, so Flood is clearly referring to a style of music which is also lost to us. There is another potential source of pentatonic Irish tunes.

> Many Irish melodies - such as Joe Heaney's "Going to Mass Last Sunday" are pentatonic most of the time, with only occasional, unaccented appearances of tones other than the basic five. These melodies tend to *sound* pentatonic despite the infrequent appearance of what might be called "infix" pitches.[84]
>
> (Cowdery, James R: *The Melodic Tradition of Ireland.* Ohio: Kent State University Press, 1990:15).

Cowdrey's definition is problematic in that he considers the occasional appearance of tones other than the basic five to be relatively unimportant. In my conversations with traditional musicians, I have found that these subtle shadings of the melody are considered of huge significance, so Heaney's use of these non-pentatonic tones might distinguish him from another singer. Therefore I am reluctant to agree with the assertion that there are a lot of traditional Irish tunes based on gapped scales. There are, however, tunes which contain pentatonic *phrases*. In this context it is possible to say that the following pentatonic scales are relatively common in traditional music, particularly those rooted in D and G.

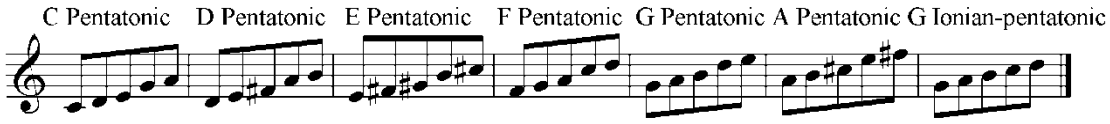


Figure 3.124 Pentatonic scales used in traditional music.

One example of a tune which, in skeleton notation, exclusively uses a form of G pentatonic scale is 'The Blacksmith's Reel'.

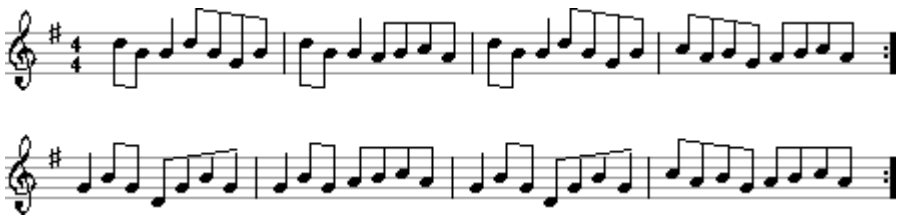


Figure 3.125 Pentatonic tune 'The Blacksmiths Reel.'

[84] Cowdery, James R: *The Melodic Tradition of Ireland.* Ohio: Kent State University Press, 1990, 15.

This melody does not use what is commonly considered the G major pentatonic scale *GACDE*. The pentatonic scale found here contains the first five notes of the G Ionian mode, so it is not really a gapped scale. Since only five notes are used at all then this could be considered a pentatonic melody. Logically the key signature given in the transcription is not really necessary either. In practice however, we return to the dilemma of Cowdrey's theory. It is possible and quite common for musicians to use other notes including *F-sharp* when they add variations to this tune. The example below is a possible variation to the tune which utilises the note *F-sharp* yet maintains the integrity of the tune.[85]

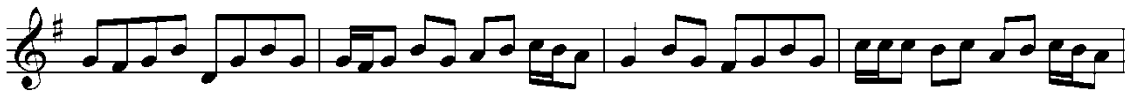


Figure 3.126 Possible variation for 'The Blacksmiths Reel.'

This use of *F-sharp* could be seen by some to be rather insignificant, but those attuned to the subtle shadings of melody would consider it to be a very significant variation. The use of the *F-sharp* takes the tune away from a purely pentatonic nature, to a hexatonic nature.

3.3.2.7 Hexatonic scales

The theoretical term for a six note scale is a hexatonic scale or hexachord. The term 'hexatonic' is not commonly found in music writing and I have rarely noticed it used to describe any traditional Irish music. One prominent reference to the term in relation to traditional music comes, ironically, from James R. Cowdrey.

> Most authorities on Irish music seem not to distinguish between the purely pentatonic, the mostly pentatonic and the purely hexatonic scales: such distinctions, though confirmable by ear, are problematic on paper.
>
> (Cowdrey, 1990:15).

[85] This is a variation of my own imagination which is based on variations commonly applied in traditional music.

There is more of an abundance of tunes which are based on six note scales than pentatonic scales. Since I noticed this phenomenon I have encountered many traditional Irish tunes which are hexatonic.

I must qualify this statement against my own criticism of Cowdrey's defence of the pentatonic scale. I believe it would be much more likely for a musician to embellish a fundamentally pentatonic tune with additional notes, as in my 'Blacksmiths Reel' example, than it would be for a musician to add extra notes from a hexatonic scale. In the examples which follow, it would be very rare to find performers embellishing the tunes to the point that would change them from hexatonic to full modes.

'The Geese in the Bog' is a popular *jig* which has caused a lot of confusion amongst accompanists who often consider it to be in the key of A minor. It is centred on the note *C* and it seems to be in the Ionian mode. The note *F* is never used in the melody; therefore it is based on a hexatonic scale.

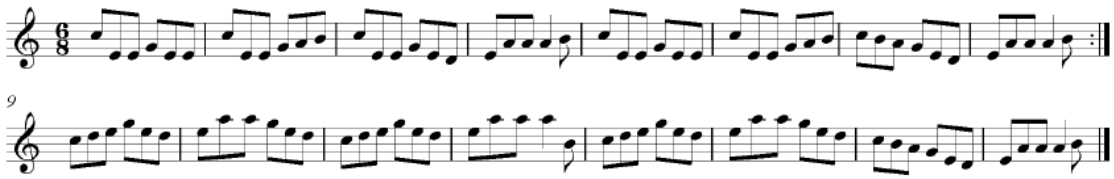


Figure 3.127 Hexatonic tune 'The Geese in the Bog.'

A more adventurous musician might use an *F* or *F-sharp* as an occasional passing note, however it would be rare for this to occur.

Another popular *jig* and one of the few tunes in any form of *F-sharp* mode is the *slip jig* 'Keane's Favourite'. At first glance, this tune could be assumed to be in F-sharp minor with a modulation to A major in the B part; however the note *G* is never used, so it is impossible to define it in the F-sharp Aeolian mode as logic might dictate. It must therefore be considered F-sharp Hexatonic. Perhaps F-sharp Aeolian Hexatonic would be the appropriate term. One may also wish to define the B part as being in A Ionian, but again the lack of *a G-sharp* makes it difficult to define in this way and indeed if a

G-sharp were introduced to this melody, even in a subtle way, it would alter its character considerably.

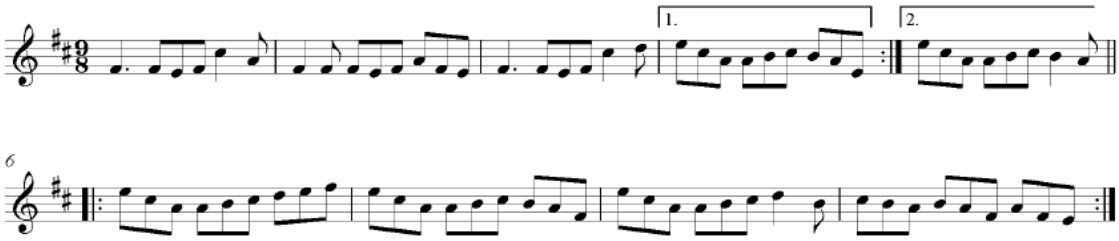


Figure 3.128 Hexatonic tune 'Keane's Favourite.'

3.3.2.8 The 'Irish' flexible modes

One of the most notable aspects of traditional Irish music is the flexibility of certain notes which make it impossible to define some melodies in one definite key or mode. It is however possible to define a scale which includes all the notes used in a particular melody, presuming the melody does not firmly modulate to another mode at some stage. In other words, the root remains the same but occasionally the 3rd, 6th and/or the 7th can be flexible. For this reason I have identified two specific 'Irish' modes. The first mode contains a flexible 3rd and 7th, the second mode adds a flexible 6th. These modes are mostly found rooted in D, E, G and A.

Directly chromatic phrases in traditional Irish music are rare; it is more common to find the flexible notes separated from each other by the root, the 5th or another flexible note.

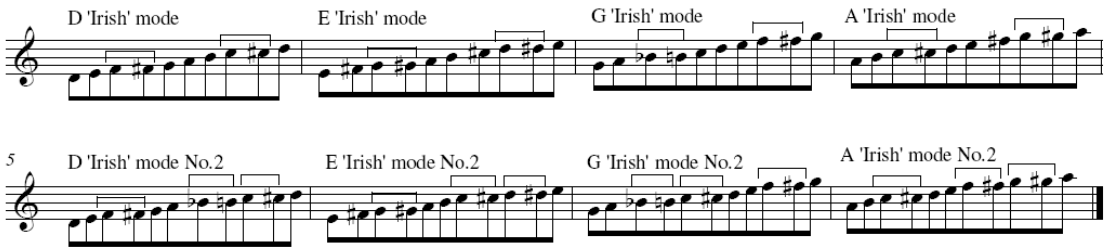


Figure 3.129 Irish flexible modes.

Eleven notes of the chromatic scale can be found in the examples labelled 'Irish mode No.2'. The fact that so many notes of the chromatic scale can be used in tunes such as

these is a reflection of the fact that tunes which utilise these 'Irish' modes are mostly modern compositions or modern interpretations of older tunes.

A few notable composers and musicians are most responsible for utilising the flexibility of the 3rd, 6th and 7th to create a major development in traditional music, beginning around the mid-twentieth century. These include the composers Ed Reavy, Paddy Fahey, Finbarr Dwyer (b. 1946) and Paddy O'Brien (1922-1991) and the fiddlers Paddy Canny and Tommy Potts. There also was great invention in this area from a number of Donegal fiddlers including John Doherty and Con Cassidy. The fact that all of these musicians were roughly contemporaries has led me to conclude that the period when these musicians were at their peaks, from the 1950s to 1980s, was a highly creative time with regard to the melodic development of traditional music. This is something which both Martin Hayes and Charlie Lennon acknowledged, particularly in reference to Paddy Fahey.

> Paddy Fahey's music fascinates me because he's brought in that modal stuff in a beautiful way and if you play it with an East Galway style it is beautiful, it really is. It all fits together so well. There's been a lot of developments in the last 50 years alright, big sea-change.
>
> (Lennon interview)
>
> If you look at them relative to the older tunes they're structured a little differently I think. First of all it would have been impossible to imagine any arpeggios in older *reels* but they're all over this. So I think something of the wider musical world crept into some of these too and they're ever so slightly more complex than the other ones and I think they're elegant in a way.
>
> (Hayes interview).

'Leddy from Cavan' is an Ed Reavy composition which uses the D 'Irish' mode. The unusual treatment of the 3rd and the 7th is notable. It is possible to analyse this tune as having a number of different key changes, but it is perhaps more logical to just say it is based on this D 'Irish' mode and to leave out any modal signature in the notation.

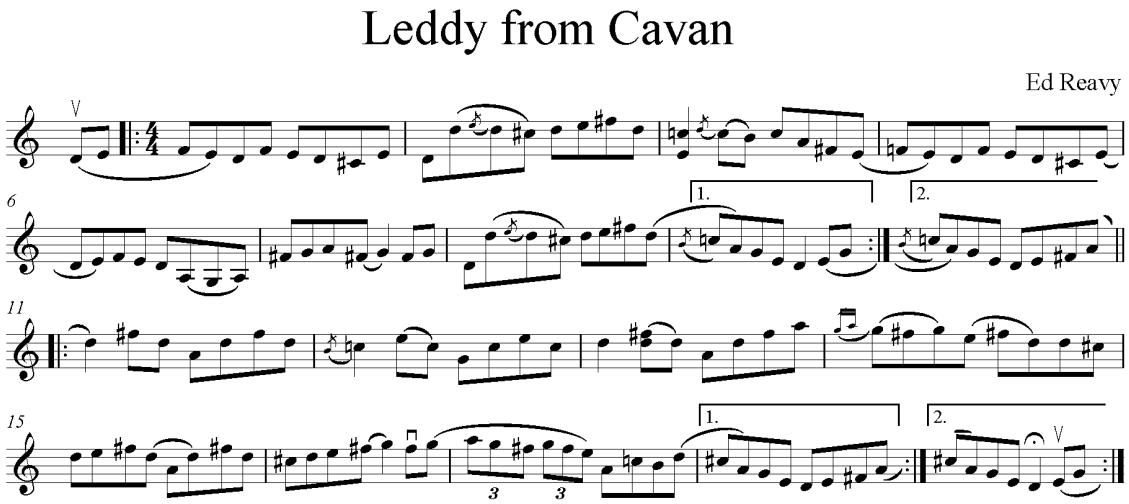


Figure 3.130 D 'Irish' mode tune, Reavy, 'Leddy from Cavan,' (Reavy, n.d.).

Another Reavy *reel* 'The Wild Swans at Coole' shows an example of the 'Irish D Mode No.2' where the flexible possibilities of the 3rd, 6th and 7th are found.

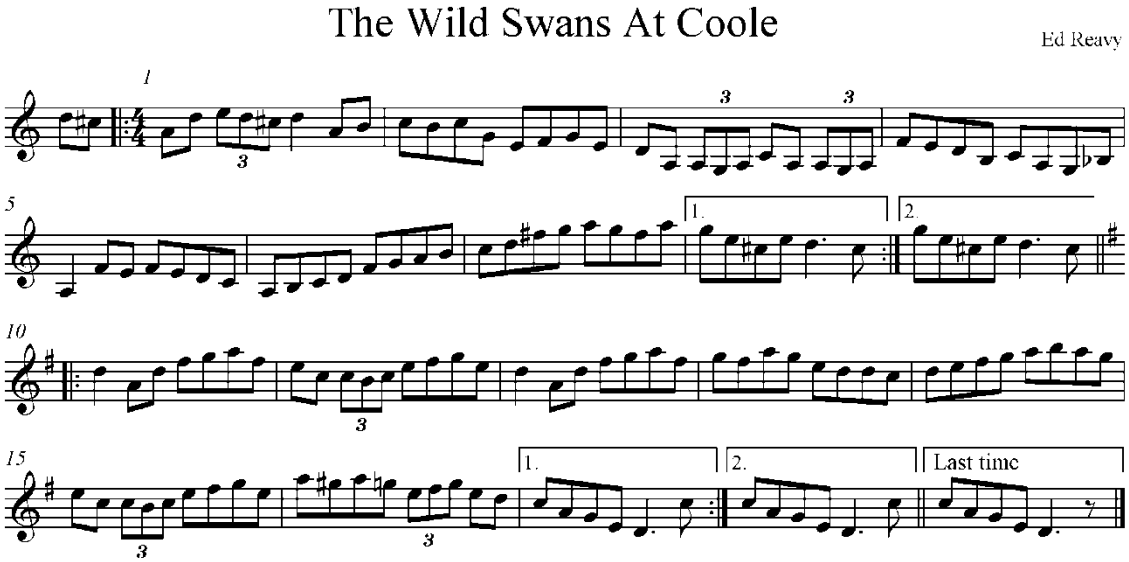


Figure 3.131 'Irish' Mode No.2 tune, Reavy, 'The Wild Swans at Coole,' (Reavy, n.d.).

All the musicians mentioned and many others have applied these flexible 'Irish' modes to standard traditional tunes. This is very noticeable in my transcriptions of 'My Love is in America' in Chapter 2.5. Combining the individual interpretations of this tune into one 'scale' produces an even longer scale containing microtones. On first look, one would be forgiven for thinking this was an Indian *raga* scale.

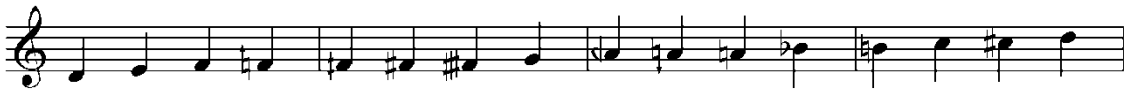


Figure 3.132 Scale combining all notes used in 'My Love is in America' transcriptions.

This example demonstrates my point at the beginning of Chapter 3.3.2 that it really is a folly to definitively say that any particular tune fits comfortably within any standard mode or key. If one defines 'My Love is in America' by O'Neill's skeleton notation, then it is in D Ionian, if one defines it by combining the versions recorded by Con Cassidy, Martin Hayes and Tommy Potts, then it is just a tune rooted in D with microtonally flexible 3rds, 5ths, 6ths and 7ths. Further analysis of other interpretations of the same tune could reveal an extent of flexibility regarding the 2nd, 4th and indeed the root itself.

In conclusion, one can really only define the characteristics of a traditional Irish tune by the musician who plays it. So in this respect any time I refer to a melody as being of a particular mode or scale, it is only for ease of analysis.

3.3.3 Common Motifs in Traditional Irish Music

There are many common motifs found in traditional Irish tunes. It could be argued that almost every traditional Irish tune is based on a combination of some of these common motifs. Knowledge of these common motifs is essential in order to compose material that bears any resemblance to the melodic character of traditional Irish music.

Most people who learn traditional music aurally acquire knowledge of these common motifs naturally through the process of learning tunes. They then draw upon these common motifs when creating melodic variations and new tunes. This is the main way in which I acquired the knowledge of these motifs. My knowledge of music theory and notation has enabled me to identify a selection of these motifs according to their function in traditional music as compositional devices.

I present some of these motifs and their variants below in skeleton notation with reference to common tunes in which they are found. The motifs are divided into three categories.

- Opening motifs - Motifs that commonly open a tune or a part of a tune
- Linking motifs - Motifs that commonly link between other motifs
- Closing motifs - Motifs that commonly close a tune or part of a tune

Certain motifs mainly occur in one particular mode, so particular attention is given to how each motif relates to the most common modes found in traditional music. To begin I present an example of how all these motifs can appear in one tune.

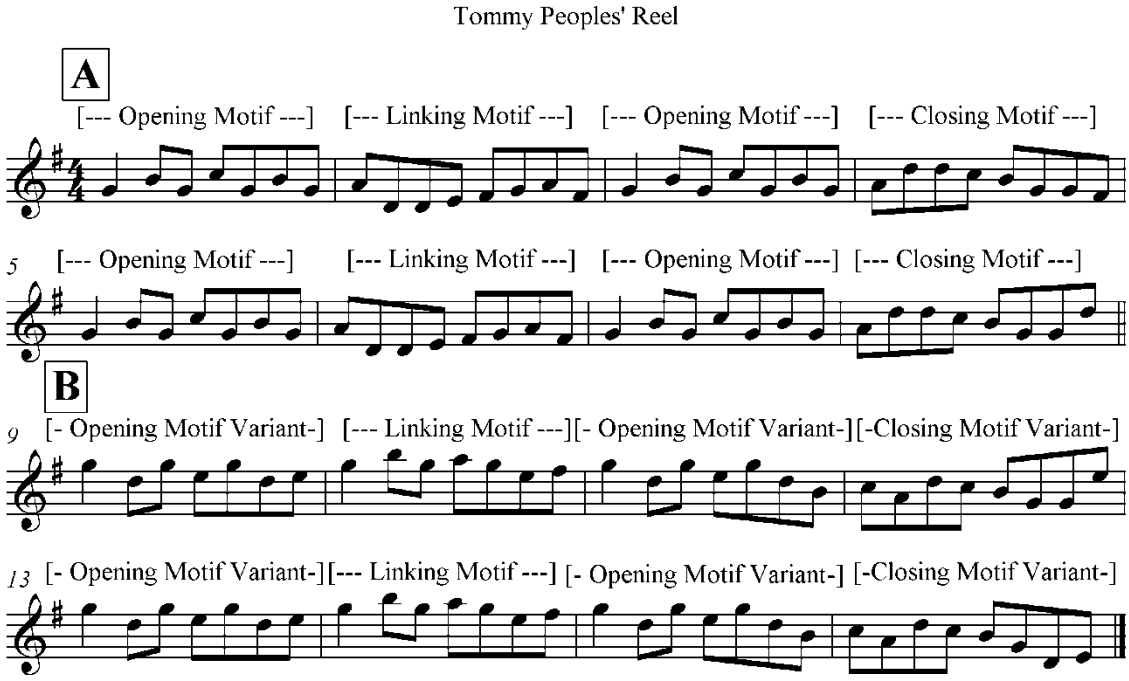


Figure 3.133 Common motifs in 'Tommy Peoples' Reel.'

Some melodic motifs form the basis of the opening, linking or closing motifs of many different tunes. Some examples of each motif follow. Numerous other examples exist.

3.3.3.1 Opening motifs

3.3.3.1.1 Drone-based trichordal opening motifs

Many traditional tunes open with motifs based on trichords formed from the main mode inherent in the tune.[86] It may seem inappropriate to refer to trichords when analysing music which is essentially monophonic, however the basis of the following examples are notes which make up trichordal formations. I use the term 'trichords' loosely here as these are not really 'chords', rather melodic motifs that imply certain trichords. I call these *drone-based trichords* because they generally revolve around one root note, which acts like a drone. Trichordal openings most commonly occur in tunes rooted in G, D, A and E.

[86] A trichord is any three note formation, the term triad would be inappropriate to use here because triads by definition must contain a root, 3rd and 5th. Some of the given examples do not contain 3rds.

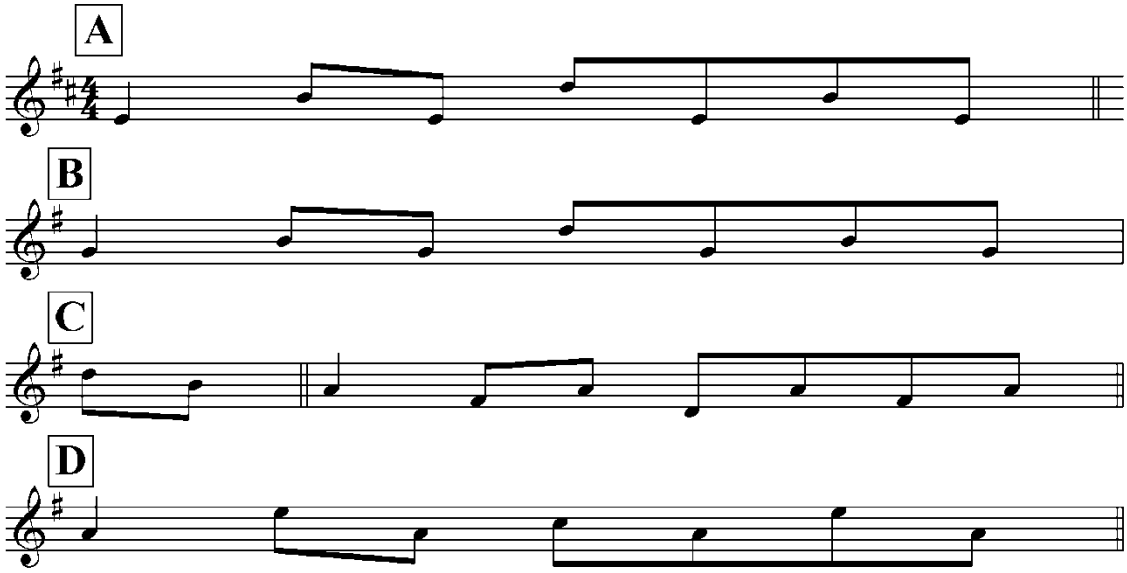


Figure 3.134 Trichordal openings.

The common motif notated in example A is often used as the building blocks for E-rooted *reels*. I have placed the letter A over parts where the following tunes are built on these common motifs. 'The Pigeon on the Gate' provides an example of a variant of this motif.

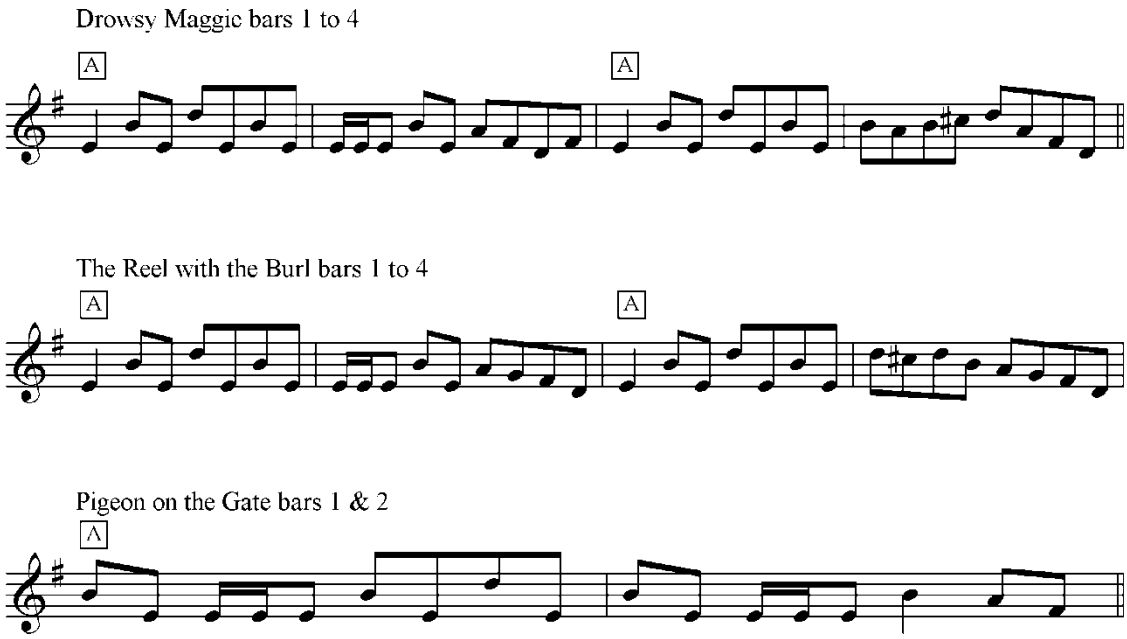


Figure 3.135 E-rooted trichordal openings in three reels.

Ed Reavy's 'The House of Hamill' provides evidence of how motif A continues to be used in more modern compositions. The opening to the C part of the tune shows

similarities to motif A. Bar 17 is a modally changed variation of motif A with a *G-sharp* changing the mode from E Dorian to E Mixolydian.

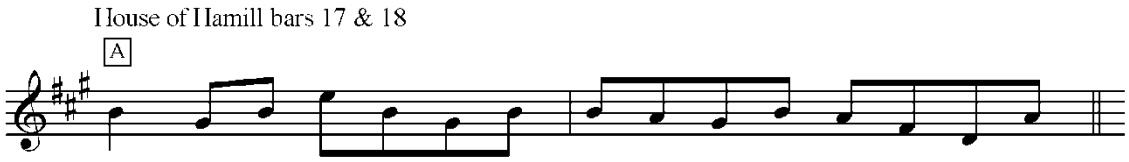


Figure 3.136 Trichordal opening to the C part of Reavy, 'The House of Hamill.'

The following examples demonstrate common variants on G, D and A-rooted openings.

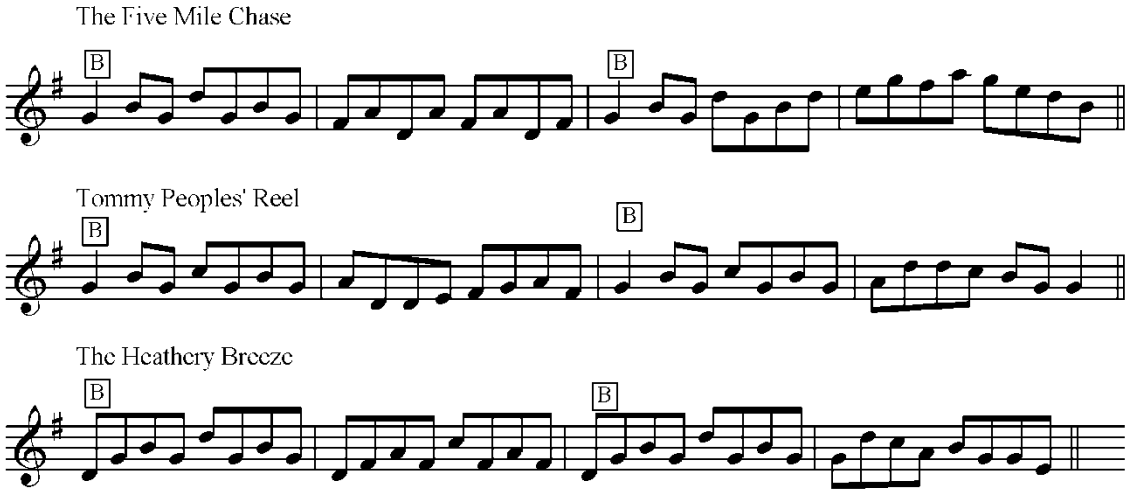


Figure 3.137 G-rooted trichordal opening motifs in three reels.

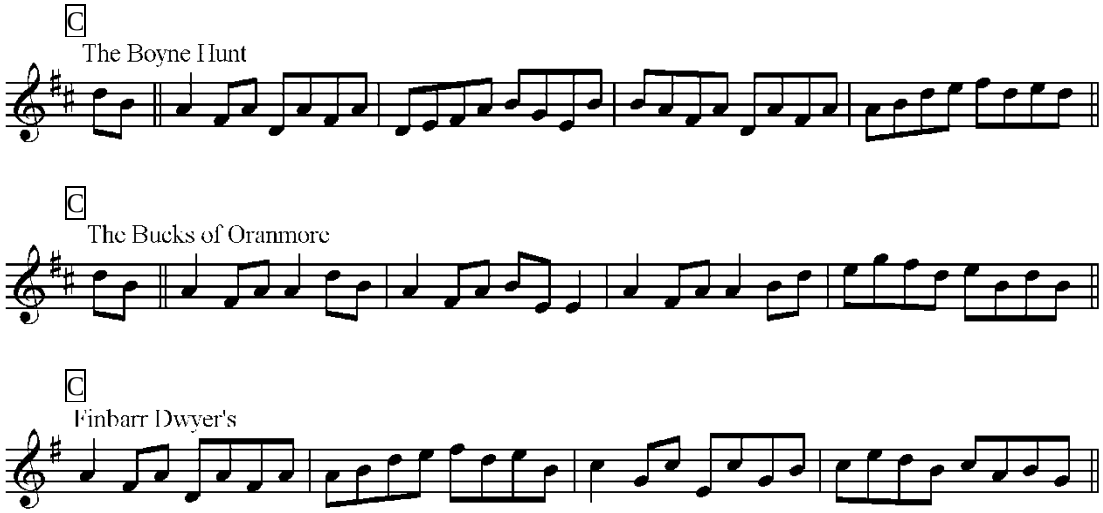


Figure 3.138 D-rooted trichordal opening motifs in three reels.

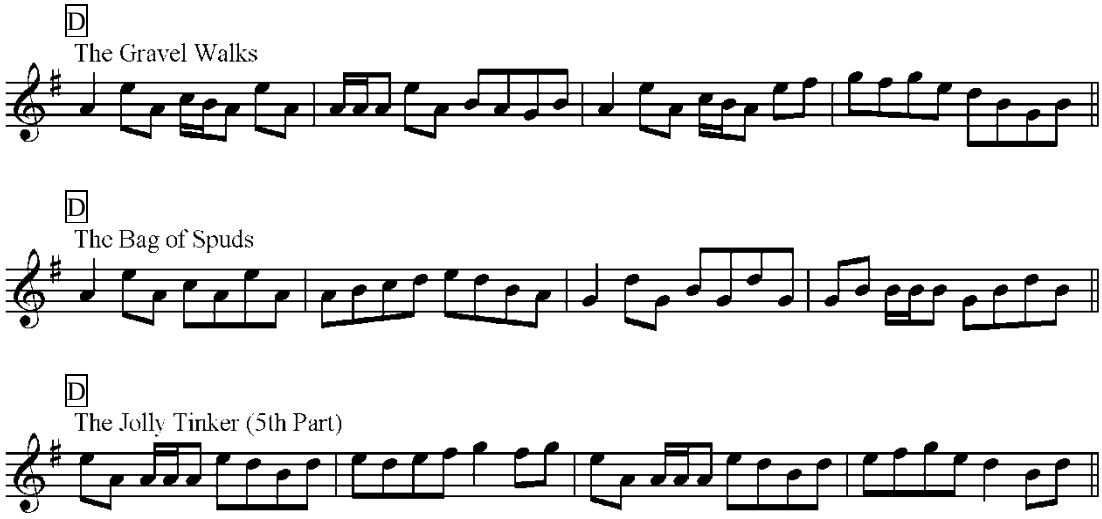


Figure 3.139 A-rooted trichordal opening in three reels.

Trichordal openings can be found in other modes which are less commonly used in traditional music, including C Ionian.

3.3.3.1.2 Opening motifs based on ascending or descending scales

A large number of tunes have openings based on ascending or descending scale movement. The following examples have a similar motif shape with a 3+4 division of a descending scale, in other words, the first three notes descend, and then the melody returns to the first note and descends down four notes.

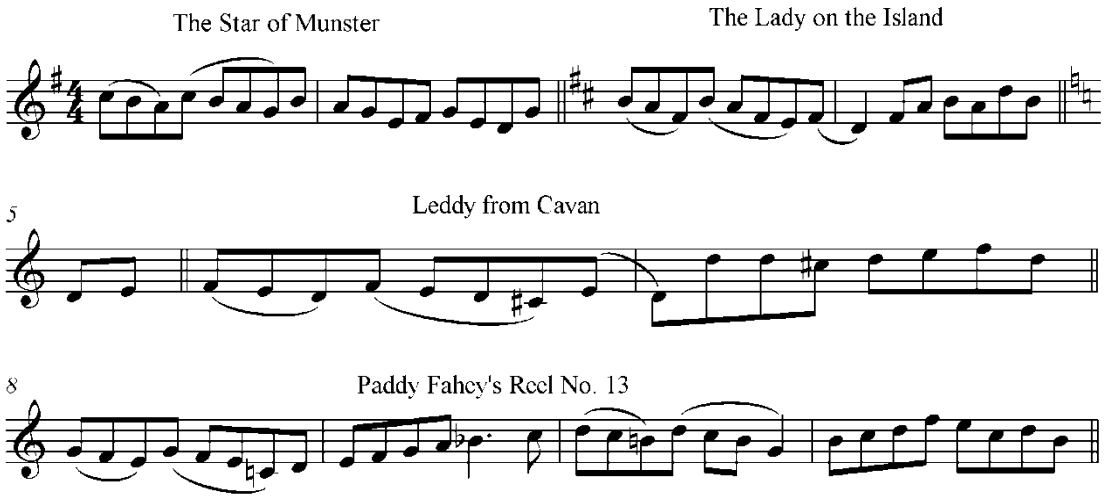


Figure 3.140 Descending 3+4 motifs in four reels.

Paddy Fahey's *reel* alters the descending 3+4 motif slightly by removing the 2nd from the C Ionian scale in its descent. The sixth note (*E*) of this opening 3+4 motif goes

down to a *C* rather than a *D* or *D-sharp* as one might have expected from studying the previous examples. The same motif is also used in the third bar but transposed up a 5th.

Some tunes begin with an ascending motif, which holds on the first note of the scale through the use of a *roll* on that note before the ascending scale passage begins. Sometimes players will vary this by going down one step then back up the scale, as can be seen by the *ossia* staff in the opening to the popular *hornpipe* 'Chief O'Neill's Favourite'.

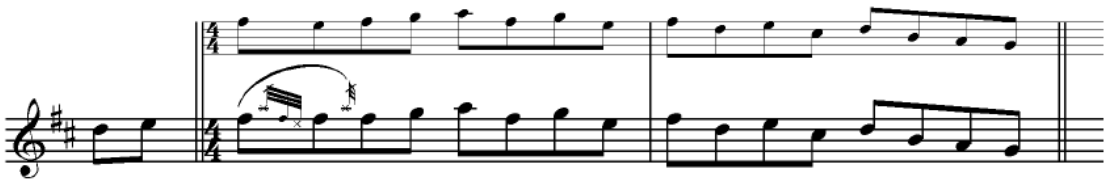


Figure 3.141 Ascending motif with held or rolled beginnings in 'Chief O'Neill's Favourite.'

Some players may just hold the opening note without any ornamental or melodic variation before ascending, as can be seen by the *ossia* staff at the opening of 'My Love is in America.'

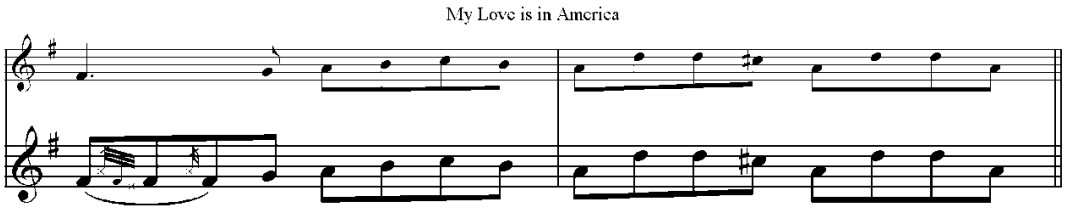


Figure 3.142 Ascending motif with held or 'rolled' beginnings in 'My Love is in America.'

This particular opening is very common and it can be found in tunes in D Ionian and D Mixolydian.

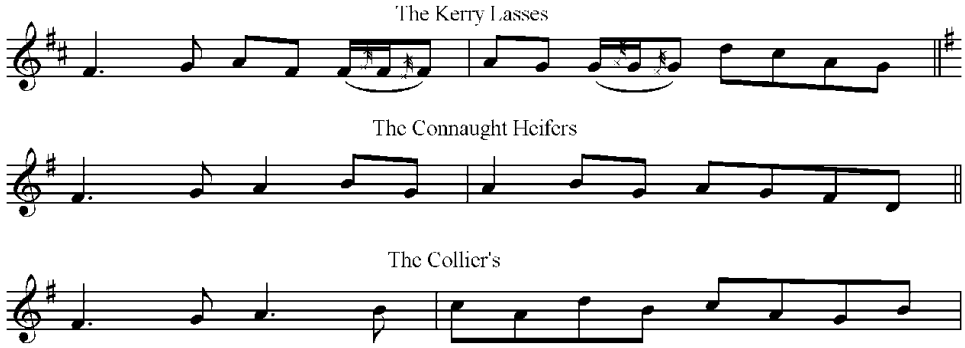


Figure 3.143 Ascending motif with held beginnings in three reels.

3.3.3.1.3 Opening motifs based on held or 'rolled' notes, without scale patterns

Many tunes begin with a single note held for a beat and a half. In performance this held note can be left unadorned or be elaborated upon with an ornament or melodic variation. It is usually left without a marking in skeleton notation.

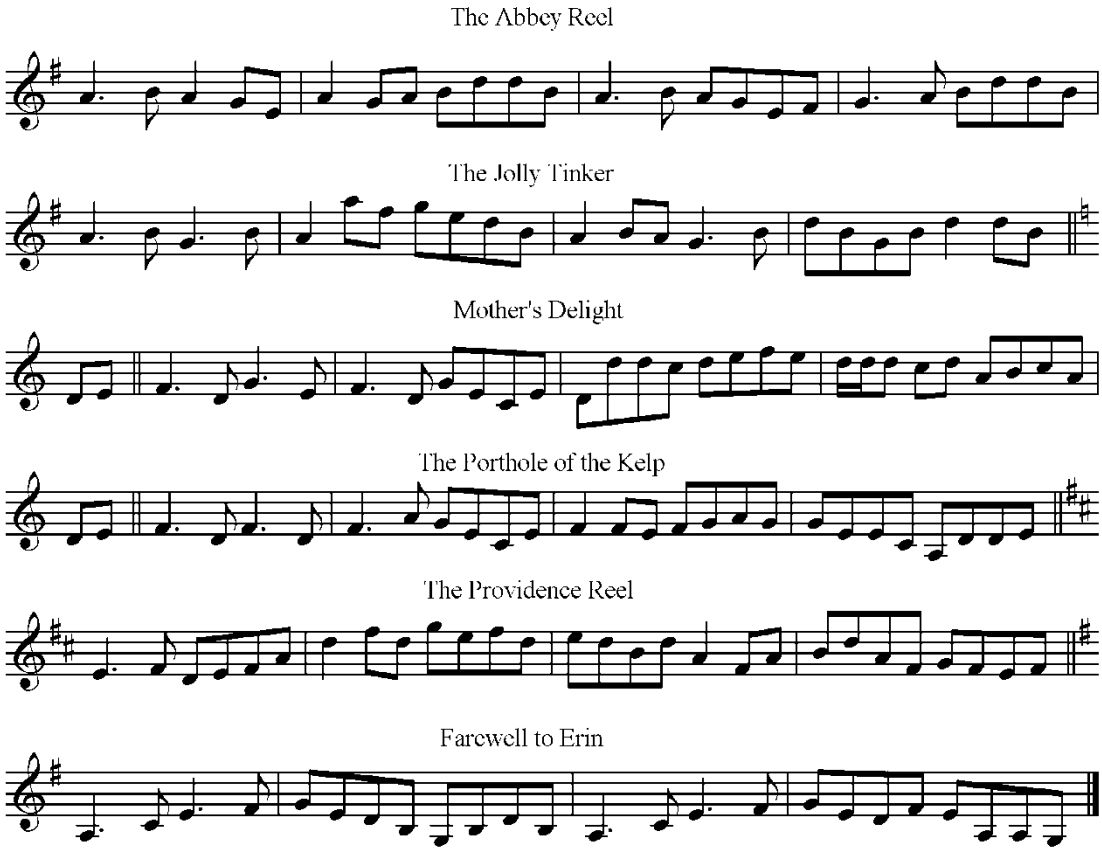


Figure 3.144 Opening motifs based on held or 'rolled' notes, without scale patterns.

3.3.3.1.4 The ascending double 4th opening motif

I call this style of opening motif, 'the ascending double 4th' because it involves a note being played once, and then the note a 4th above that, usually the root note, played at least twice. The following examples demonstrate that this opening occurs in nearly all tune types and modes.

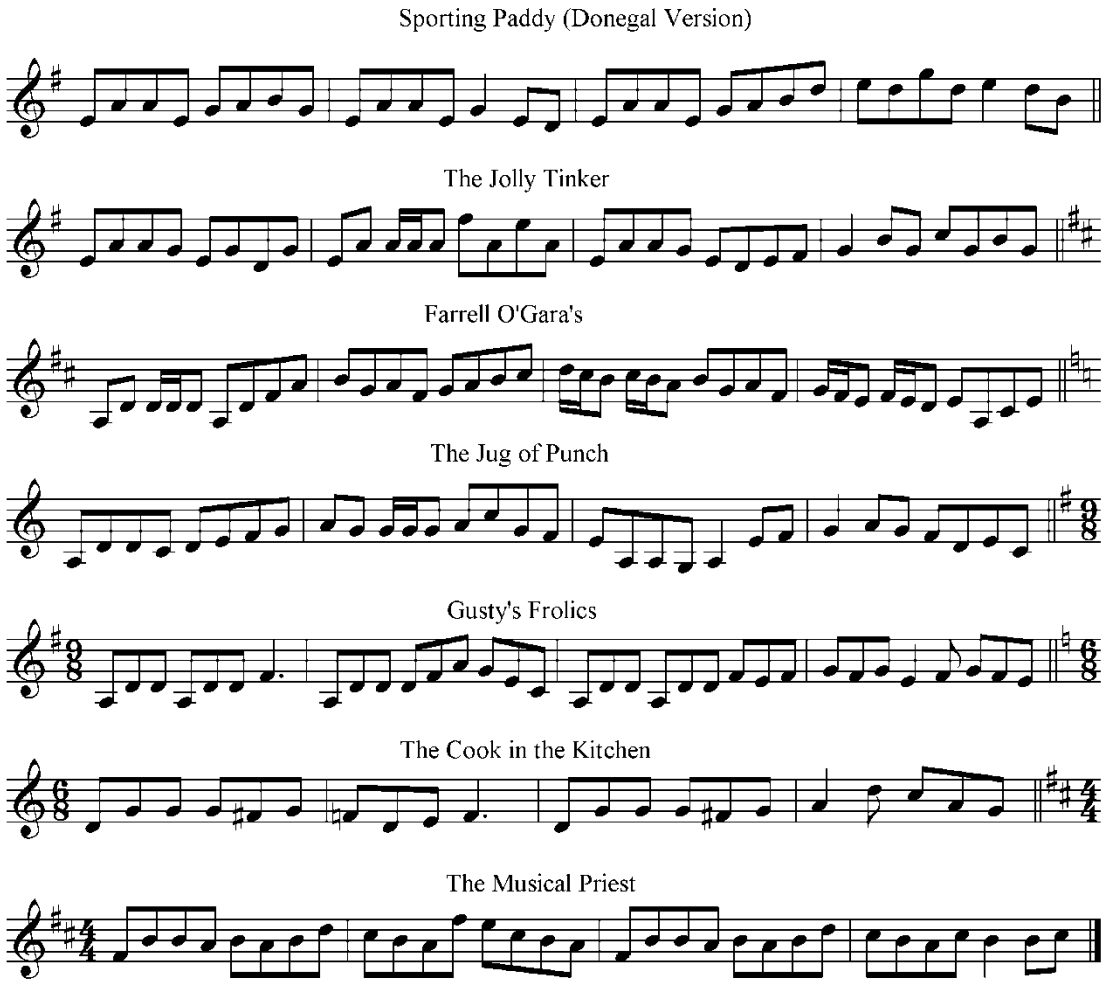


Figure 3.145 Ascending double 4th openings.

3.3.3.1.5 The descending rolled minor 3rd opening motif

Another common opening is for a note to be played, often the 5th of the scale, and then for it to be followed by a note a minor 3rd below that, usually the 3rd of the scale. This note is usually then played again with the addition of a *roll*, *treble* or similar ornament.

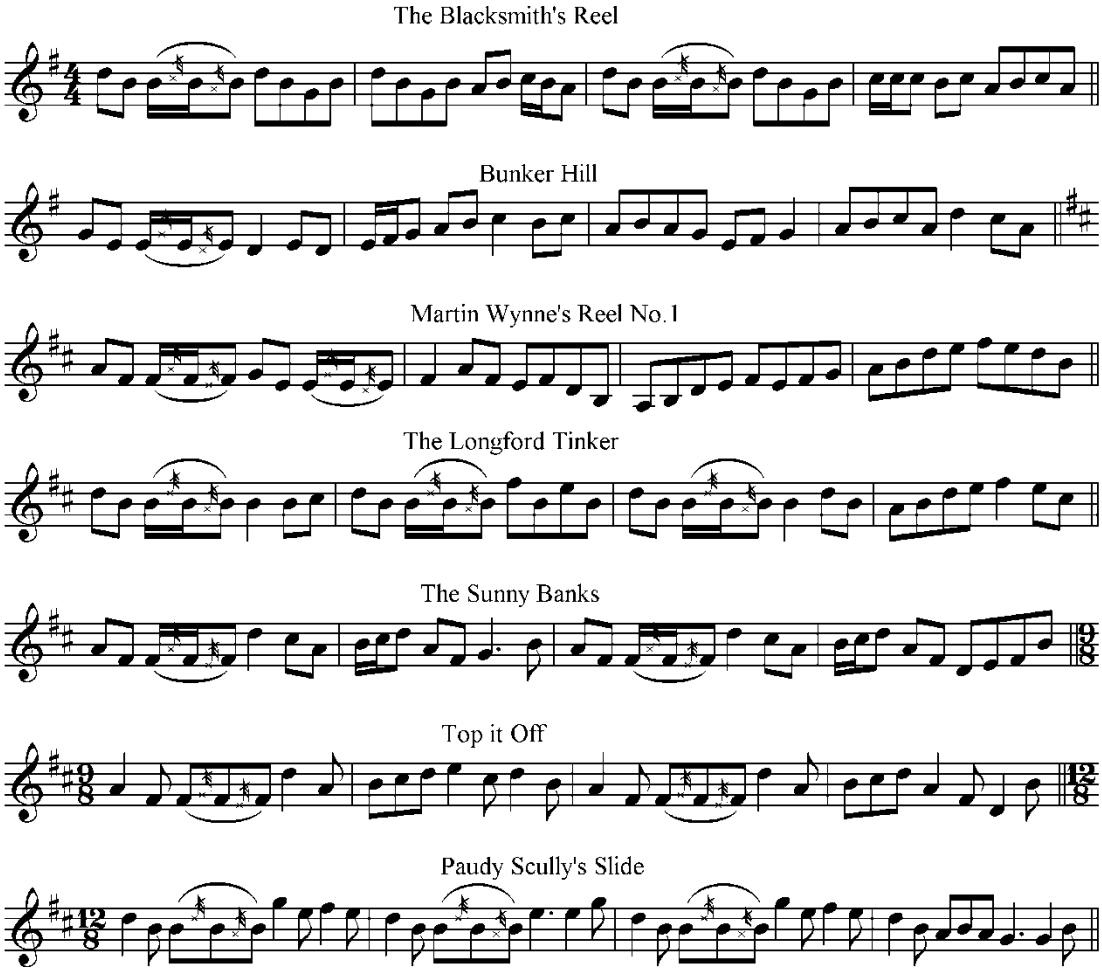


Figure 3.146 Descending rolled minor 3rd openings.

3.3.3.1.6 The rolled ascending 4th opening motif

This is like a combination of the previous two openings where the notes used are an ascending double 4th with a *roll*, *treble* or similar ornament placed on the second beat, as happens in the rolled descending minor 3rd opening. This opening is very common in tunes rooted in G.

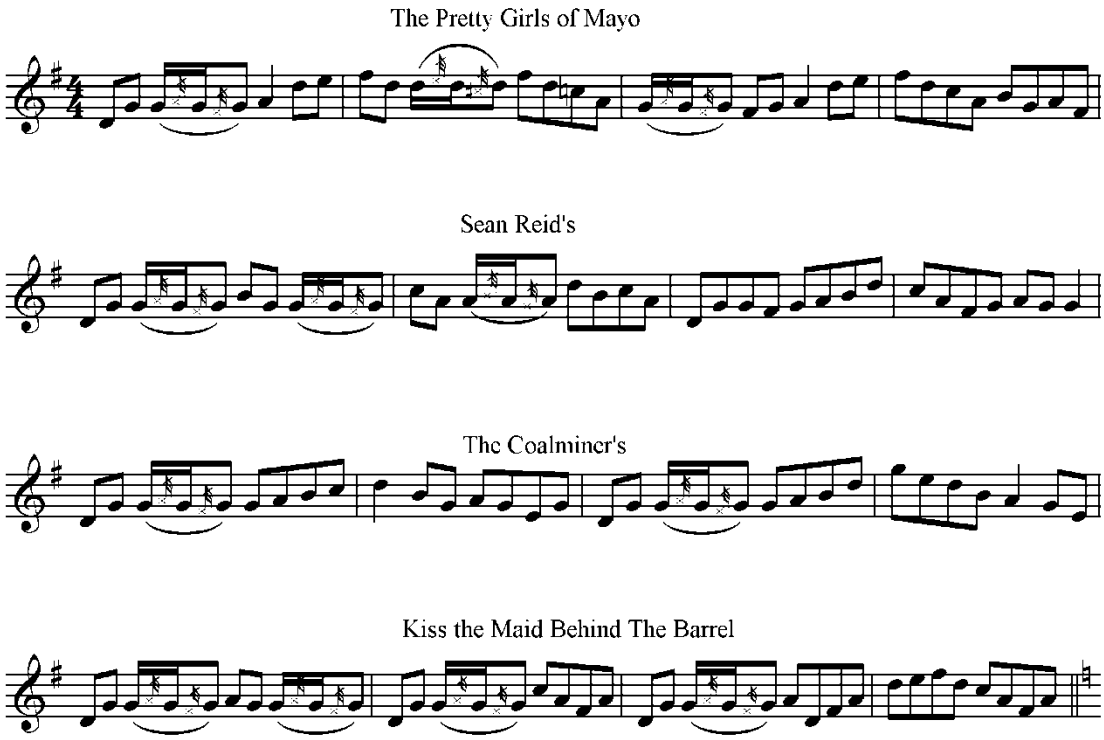


Figure 3.147 Rolled ascending 4th openings.

3.3.3.2 Linking motifs

Linking motifs provide connections between other motifs. This is normally the freest part of a tune so there are literally hundreds of linking motifs in traditional music. There are two principle common linking motifs.

3.3.3.2.1 The descending D link

This linking motif and variants of it are common in D rooted *reels*. It usually begins half way through the third last bar of a tune and descends in the second last bar towards a resolution in the last bar.

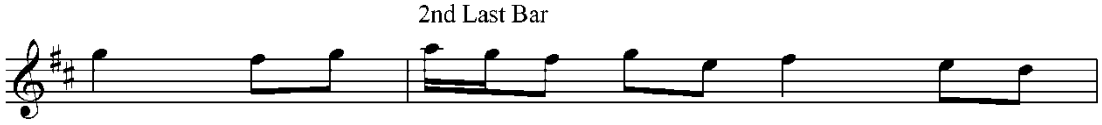


Figure 3.148 The descending D link.

This linking motif is the most consistent feature common to all the following tune excerpts.

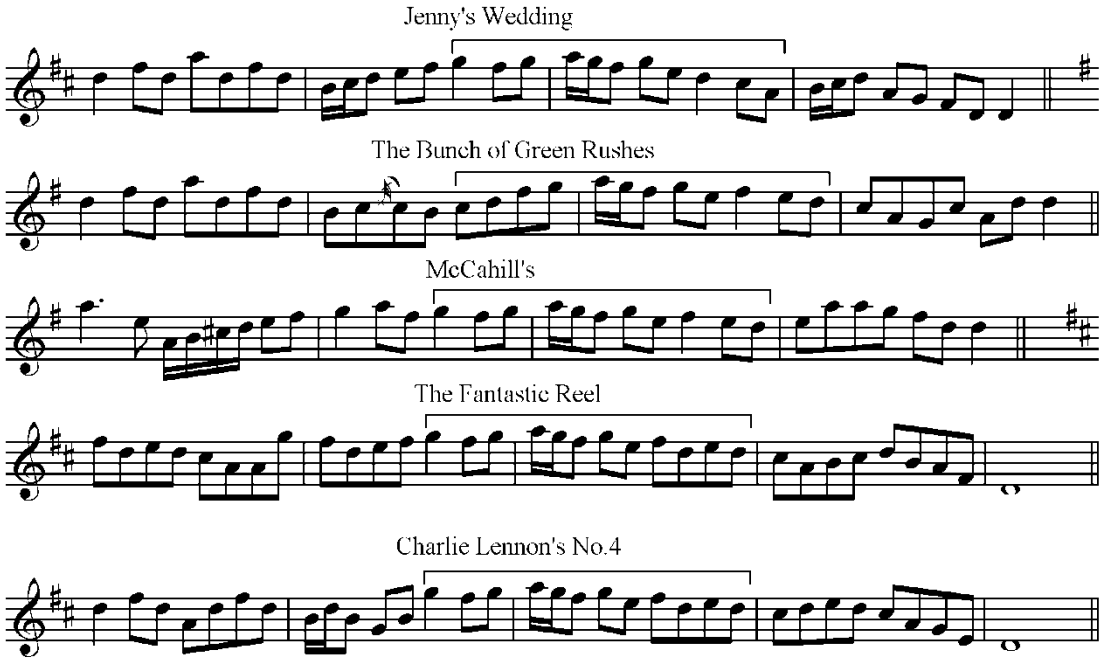


Figure 3.149 The descending D link in five reels.

Ed Reavy demonstrates his mastery of the art of subtle innovation throughout 'Leddy from Cavan'. At the end of the tune he uses this familiar link but gives it a new twist in the second half of the penultimate bar by leaping down a 5th to an *A* and then going to a *C* natural, followed by a *B* and a *D*.

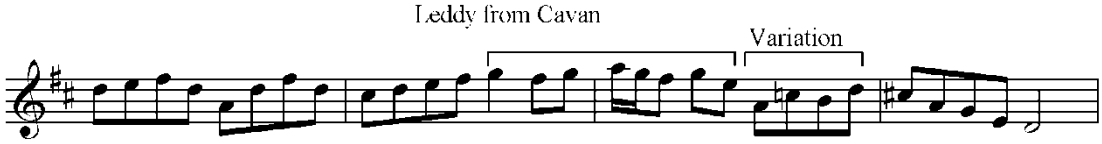


Figure 3.150 Descending D link variation in 'Leddy from Cavan.'

This is remarkable because, in all the other examples and most other tunes which use this linking motif, the note *F-sharp* would be played at this point. Reavy creates a real surprise for the listener by dropping down to an *A* instead of going up to an *F-sharp*. None of the three notes which follow are found in the other examples either, so what at first glance may appear to be a simple four note motif, is really an ingenious melodic innovation.

3.3.3.2.2 The modulating linking motif

I call this a 'modulating linking motif' because it gives the illusion of a modulation to another key, whereas in reality it is just a motif that accentuates the modal nature of the music. In other words, if the tune is in D Mixolydian, the motif will initially feature notes that do not define the tune as either Mixolydian or Ionian, but then the motif will land strongly on the note *C*, thus confirming the mode as Mixolydian.

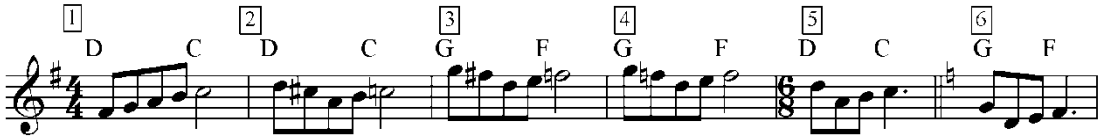
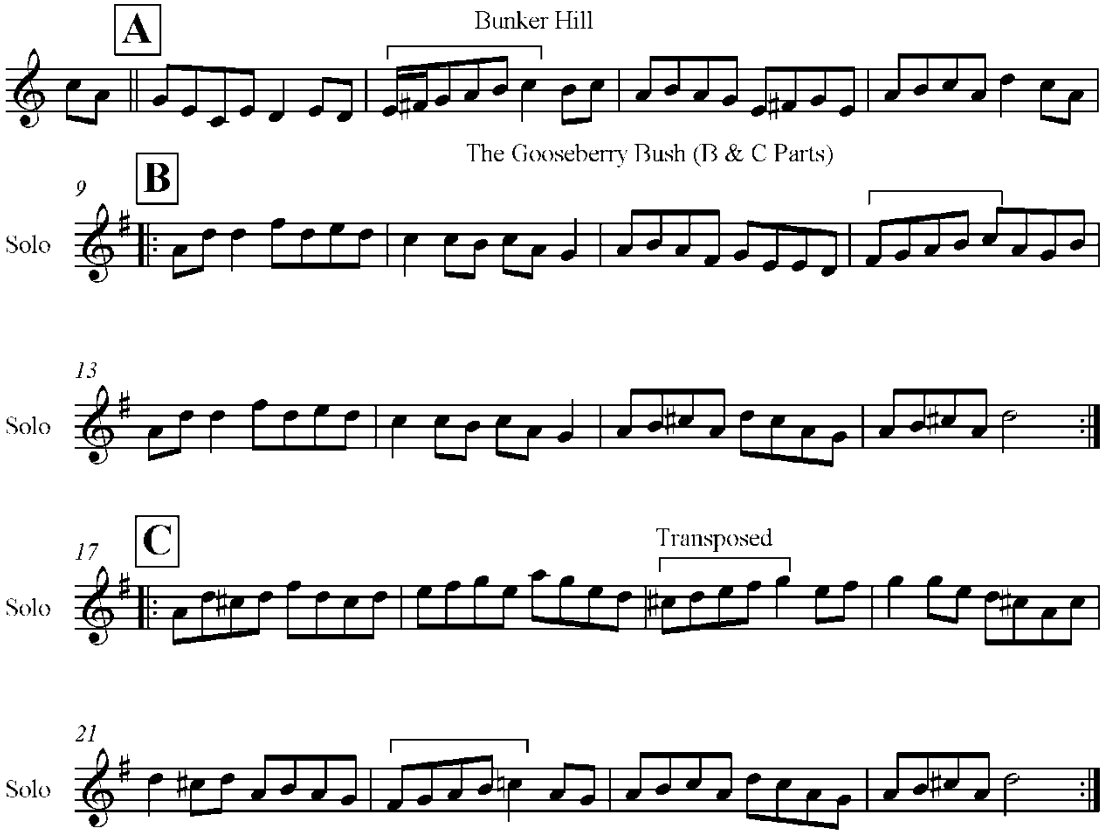


Figure 3.151 The modulating linking motif and its variations.

This motif implies a harmonic shift from *D* to *C* in a D-rooted tune or *G* to *F* in a G-rooted tune. It has duple and triple time versions. All but example 1 have a descending then ascending structure. Example 1 is in step-wards movement ascending the Mixolydian scale, but it has the same effect of emphasising the shift from *D* to *C*. The following tunes contain example 1.



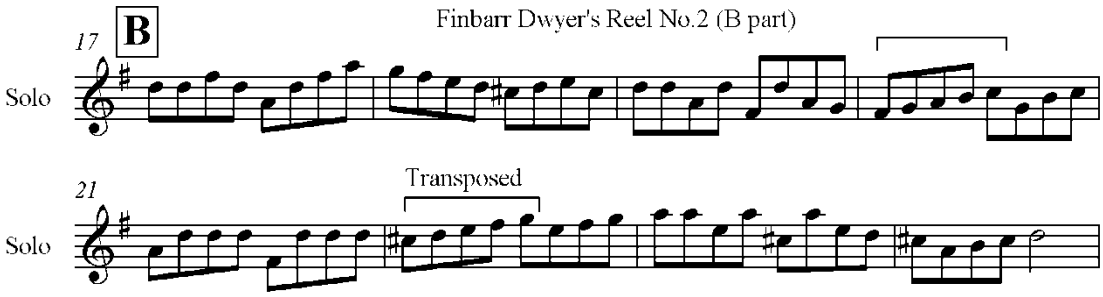


Figure 3.152 Modulating linking motif in three reels.

3.3.3.3 Closing motifs

Closing motifs round off a melodic idea. They can occur at the very end of a tune or at the end of a part of a tune, or even at the end of the first main motif in a tune. There are not as many common closing motifs as opening motifs, particularly with regards to *reels*. Many *reels* start off with similar opening motifs, if they were to end with similar closing motifs they would not make for particularly interesting tunes. One closing motif that I did identify in *reels* is what I call a descending 3rd-2nd-3rd closing motif.

3.3.3.3.1 Descending 3rd-2nd-3rd closing motifs

This motif descends down a 3rd then down a 2nd and down another 3rd. It can occur with minor or major 3rds as in the following examples, which are all rooted in G. Similar examples occur in tunes rooted on other notes, particularly D-rooted tunes.

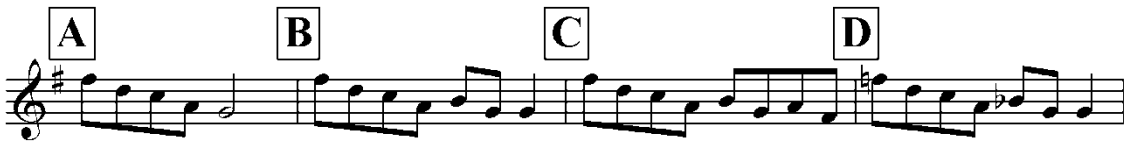


Figure 3.153 Descending 3rd-2nd-3rd closing motif.

'Paddy Fahey's Reel' contains example A at the end of both its parts.

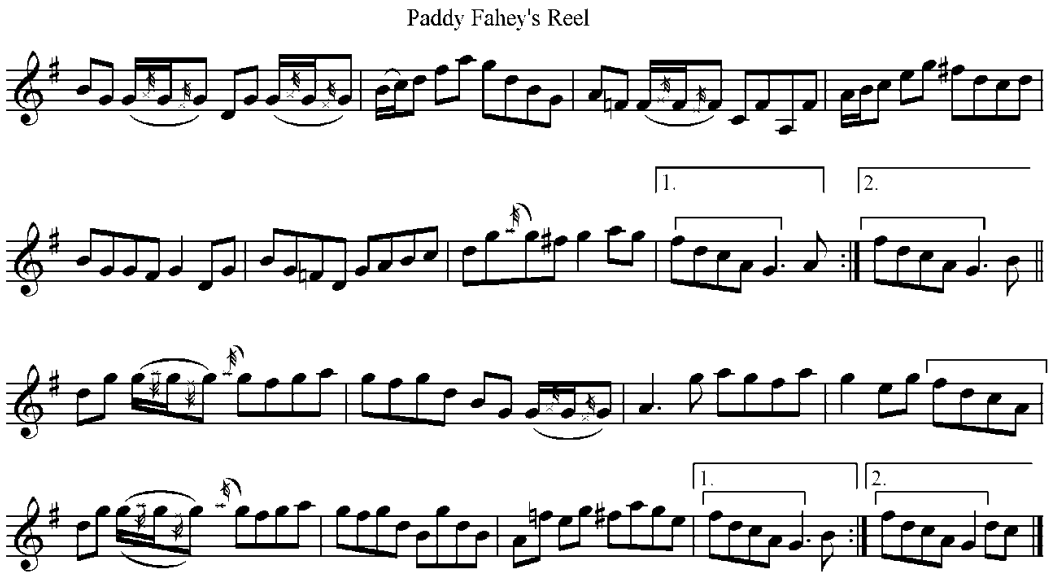


Figure 3.154 Descending 3rd-2nd-3rd closing motif in 'Paddy Fahey's Reel.'

The motif appears transposed in another mode in the following examples. In this case all the tunes are in D Dorian and the descending closing motif occurs in a slightly modified version at the end of each tune. (These are the A parts of these tunes).

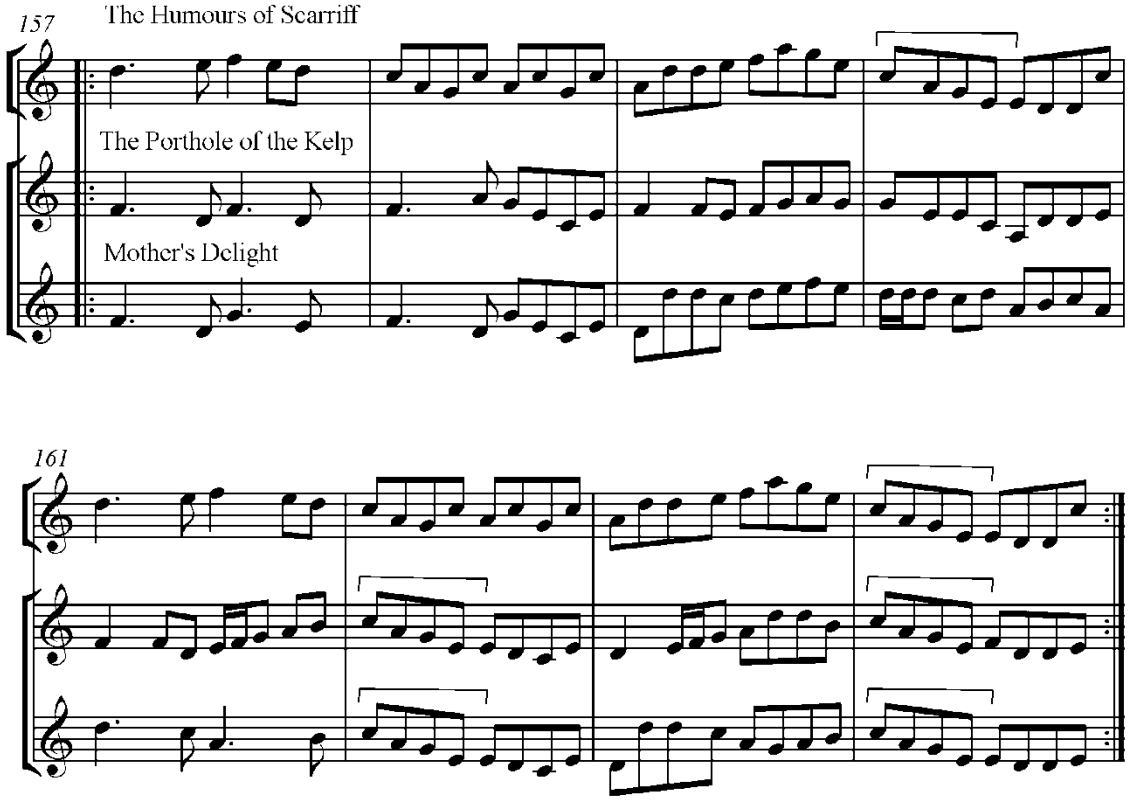


Figure 3.155 Descending 3rd-2nd-3rd closing motif in three D Dorian reels.

3.3.3.3.2 Descending closing motifs

Some tunes or parts of tunes end with a run of notes which descend the mode of the tune, as in the following E-rooted *slip jigs*.

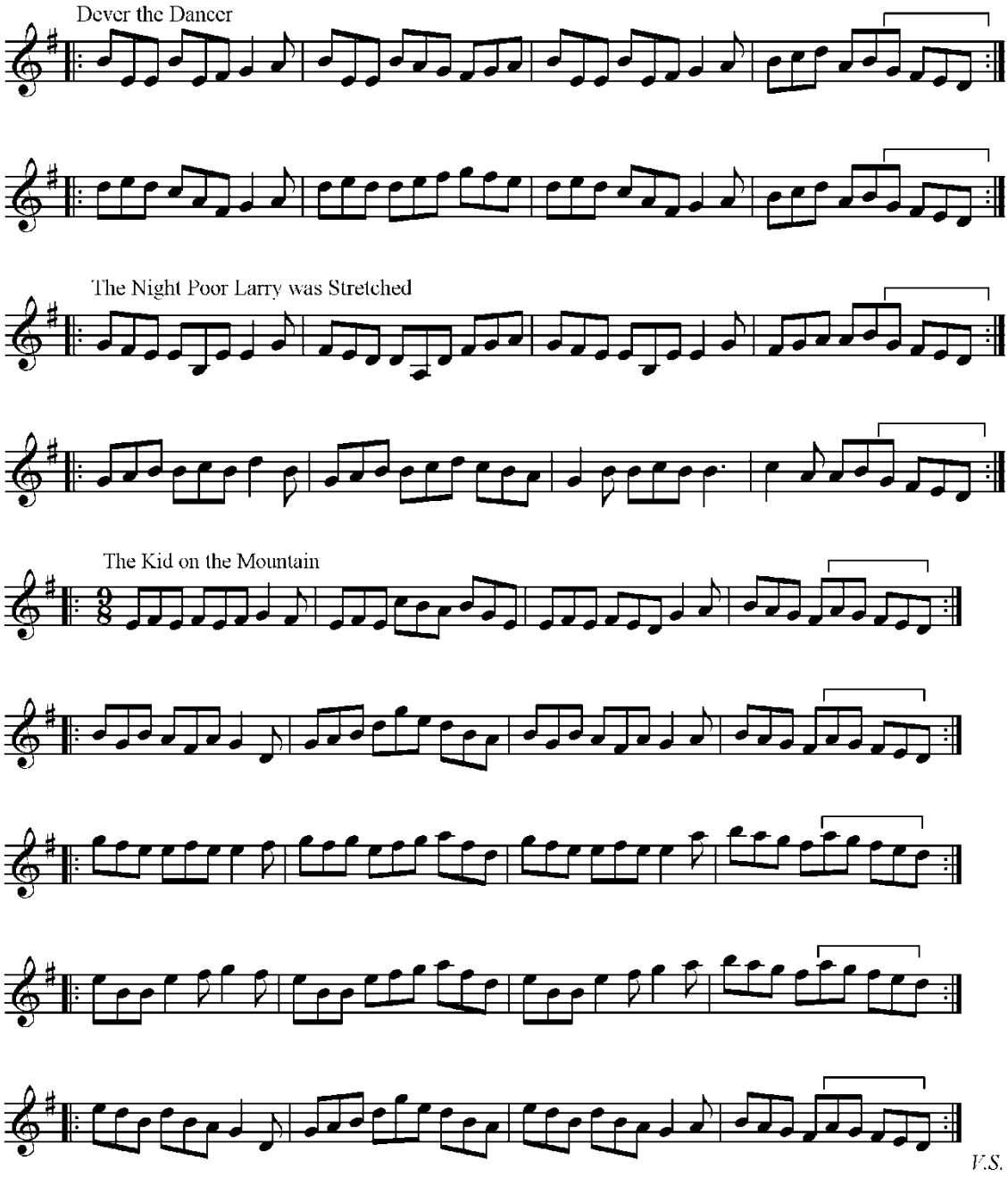


Figure 3.156 Descending scale closing motif in three slip jigs.

Both parts of 'Dever the Dancer' and 'The Night Poor Larry Was Stretched' end with a four note descending scale. The last six notes of each tune are the same. All five parts of 'The Kid on the Mountain' end with a five note descending scale.

3.3.3.3.3 3rd to root closing motifs

Many tunes end with a short descending phrase with the 3rd sounded once and then the root sounded twice or three times. This is particularly common in *jigs* and *hornpipes*.

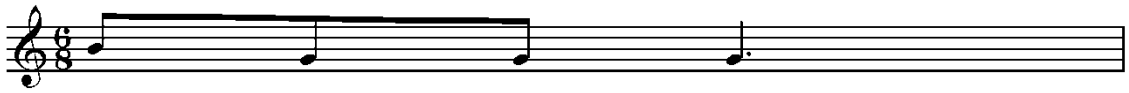


Figure 3.157 3rd to root closing motif.

The example above is found in many *jigs*, including those which follow.

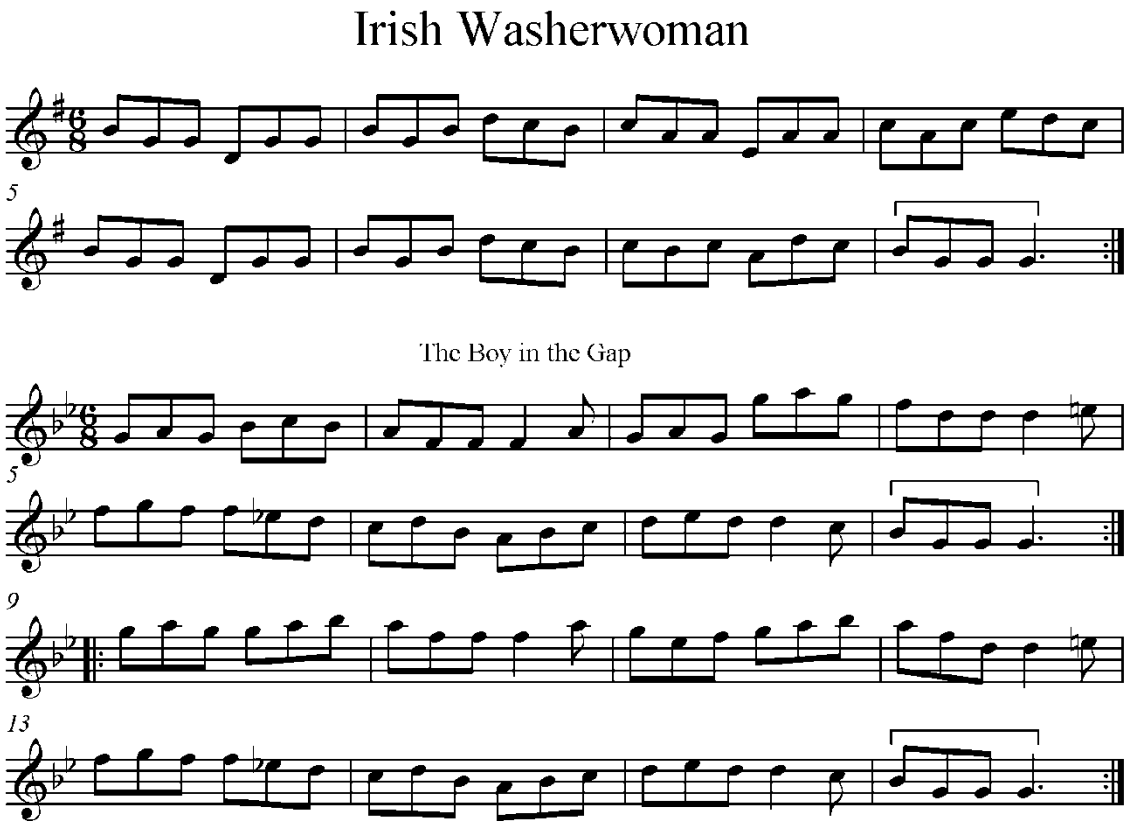


Figure 3.158 3rd to root closing motif in two jigs.

The following motif variations are very common for ending *hornpipes*.

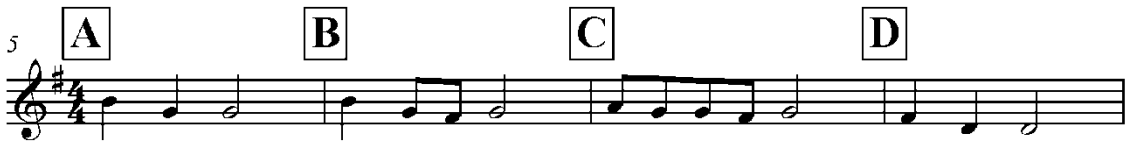
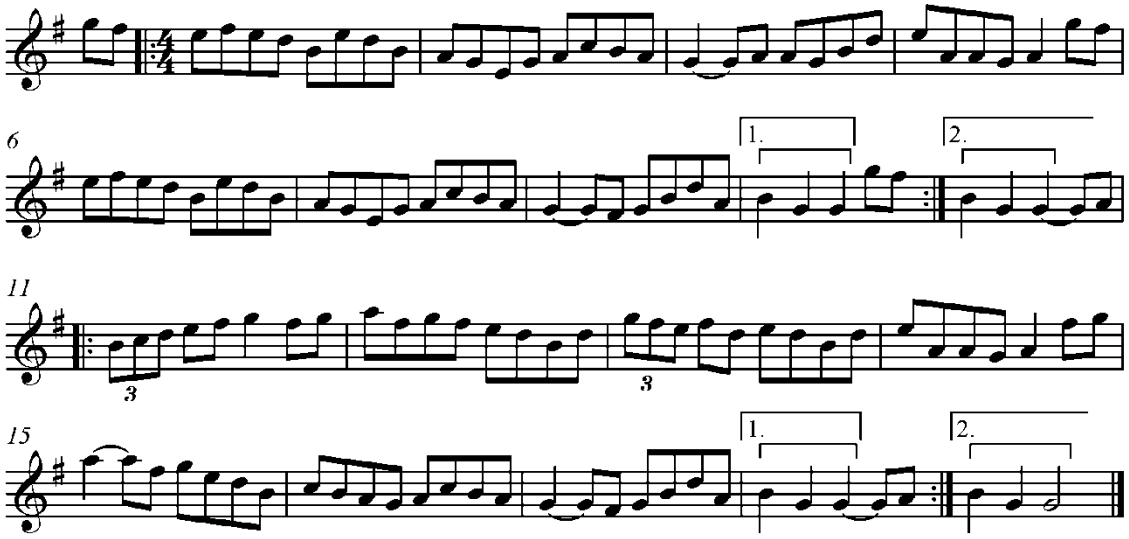


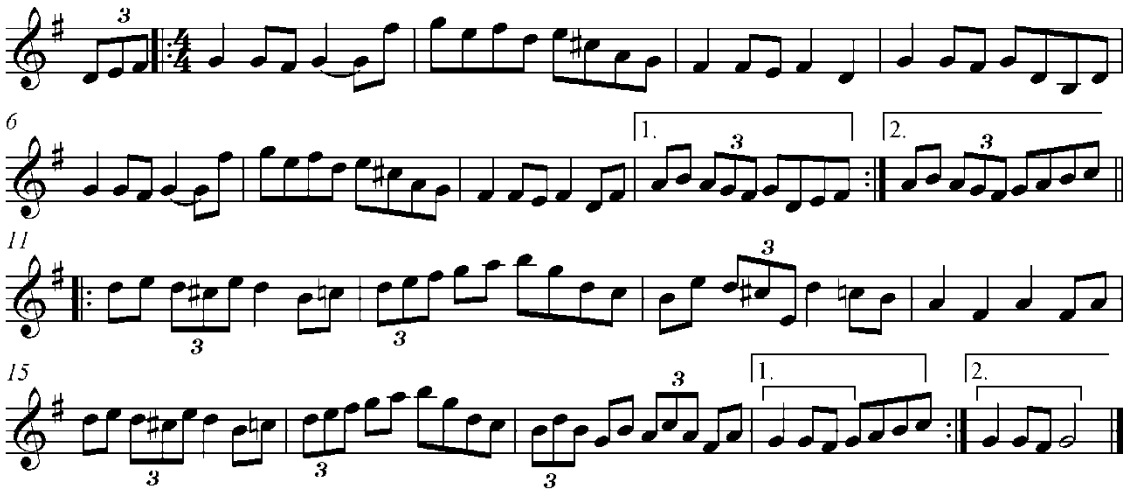
Figure 3.159 3rd to root hornpipe endings.

Examples of each variation to this *hornpipe* ending are found in the following tunes.

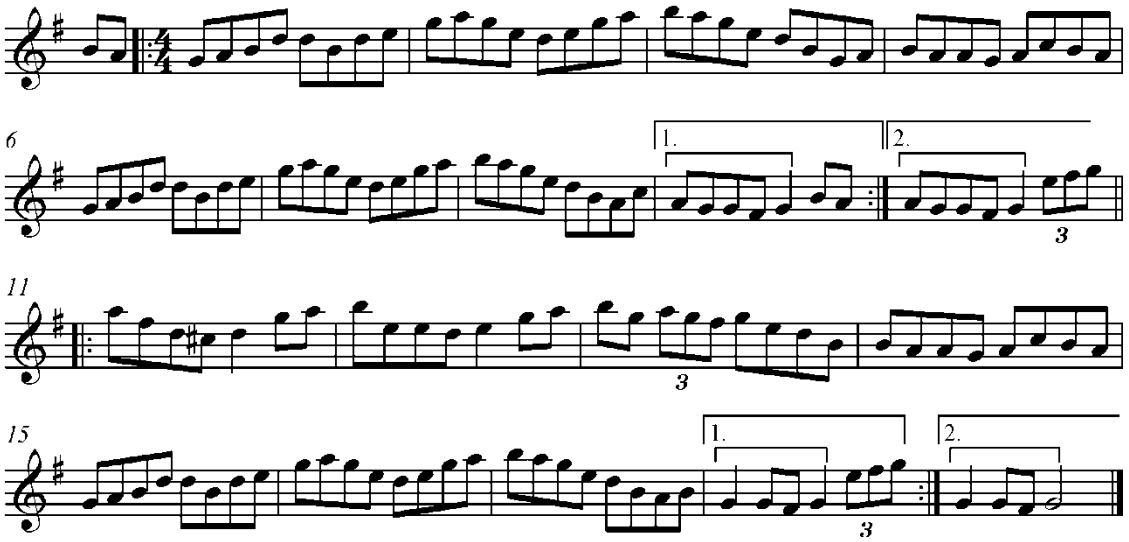
The Stack of Barley



The Atlantic Roar



Cronin's



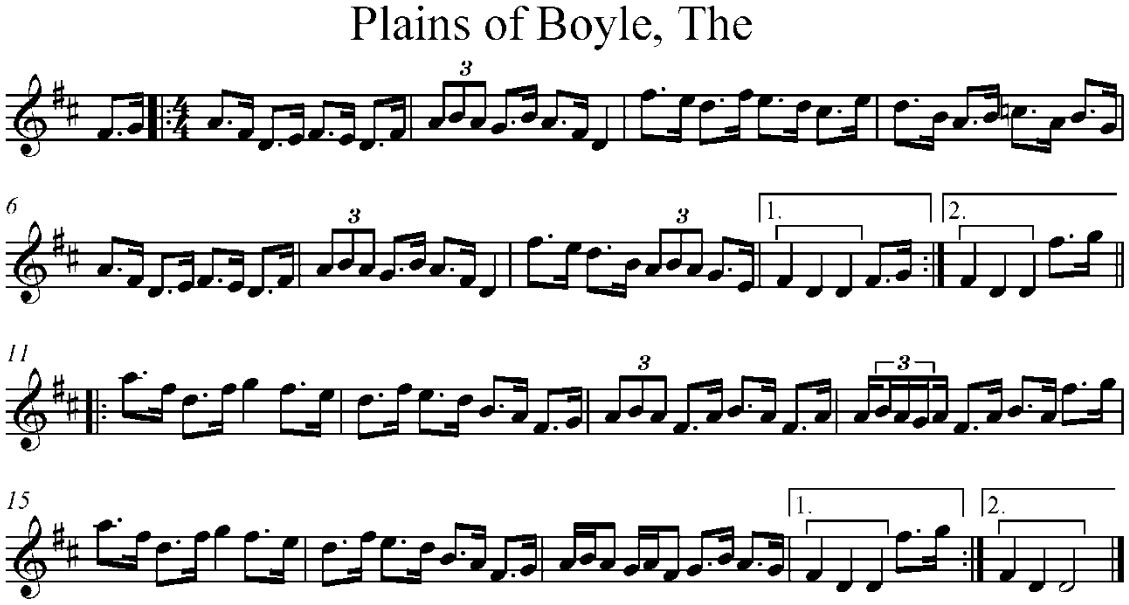


Figure 3.160 3rd to root closing motifs in four hornpipes.

3.3.3.3.4 Cranned closing motifs

Many tunes end with *crans*, particularly piping *jigs*. In skeleton notation this form of ending is usually represented by the first bar of example 3.161. The actual sound is more like the second bar.

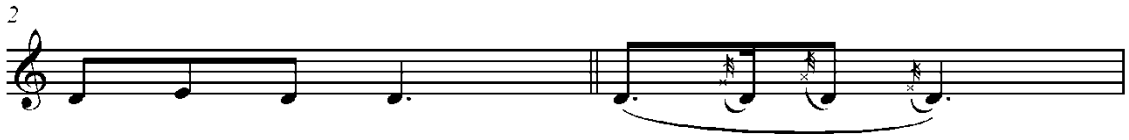


Figure 3.161 Cranned closing motif.

This *cranned* closing motif is found in the first three parts of the *jig* 'The Frieze Breeches'.

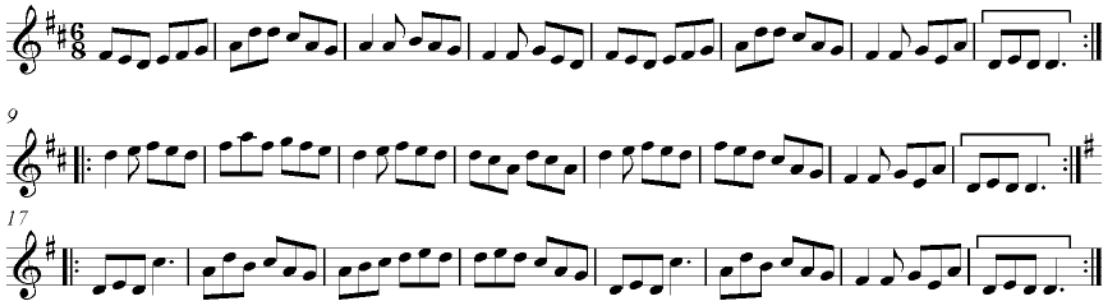


Figure 3.162 Cranned closing motif in 'The Frieze Breeches.'

In 'The Humours of Ballyloughlin' it is found in three of the four parts of the tune. It even occurs twice in the last two bars of the first part of the tune.

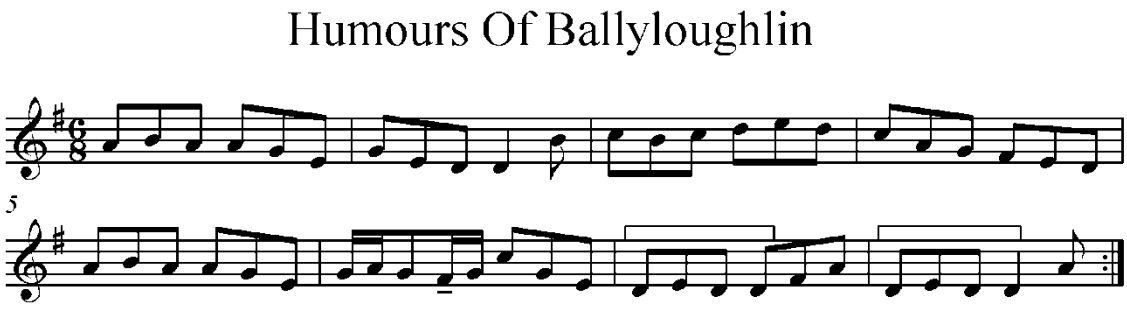


Figure 3.163 Cranned closing motif in 'The Humours of Ballyloughlin.'

3.3.3.4 Summary

Many traditional tunes are based upon a combination of common motifs. These motifs can be divided into three main groupings: opening motifs, linking motifs and closing motifs. I found a greater abundance of common opening motifs than linking or closing motifs. This demonstrates that many tunes take seed from a common opening motif and the process of variation ensures the linking and closing passages tend to be more varied. Since these common motifs have such a bearing on traditional Irish tune compositions, they have influenced any composer who uses existing tunes, or who composes tunes inspired by the tradition. These motifs have been particularly influential in my pieces *Stories from the Old World; Aontacht* and *Le Chéile is in Aonar*. The latter piece was directly inspired by my research into common motifs.

3.3.4 Harmonic Implications of the Melodic Line

In Chapter 3.1.3 I discussed the issue of harmony in traditional music, as it is dictated by the drones and chanters of the *uilleann* pipes and the open strings of the fiddle. There is another aspect of harmony in traditional music that has had an important bearing on my compositions: the implied harmony of the single melodic line. By this I mean that many traditional melodies imply certain harmonies that will fit naturally with the melody. This is illustrated in the opening of 'Drowsy Maggie'.

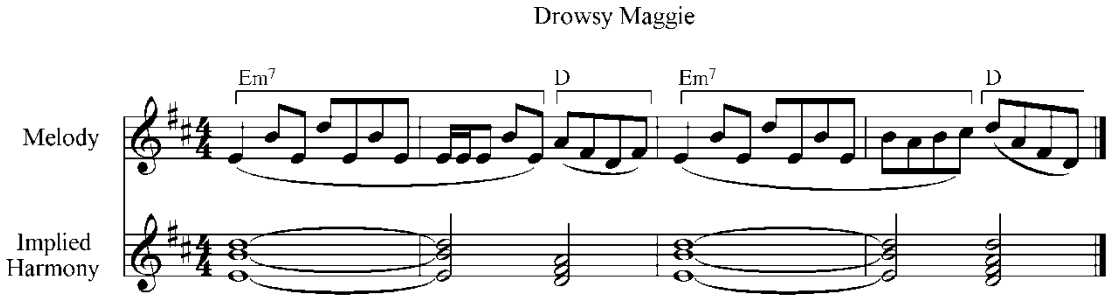


Figure 3.164 Implied harmony in 'Drowsy Maggie.'

In the first bar and a half, the melody is repeatedly returning to the lower *E* note and the *B* and *D* notes above it imply a chord formation. In this case Eminor7 without a 3rd. The absence of a 3rd could lead one to speculate that the chord is not minor but major and therefore the implied chord would be E7. I have never heard anyone harmonise 'Drowsy Maggie' with an E7 chord though, it is usually taken to be a tune in the Dorian mode and so some form of E minor chord is usually used to harmonise it.

In practice a fiddler might blend the lower *E* note with the higher notes, thus creating double-stops. This emphasises the implied harmony. An exaggerated possible example of this follows.

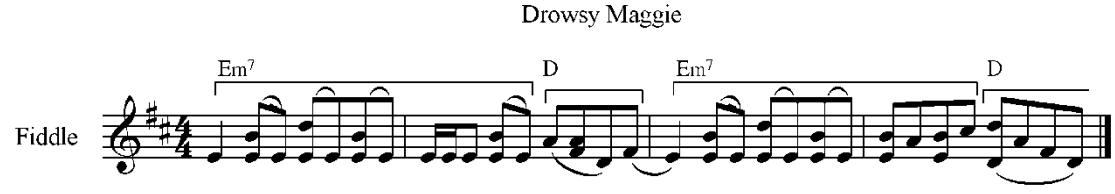


Figure 3.165 Possible fiddle double-stopping during 'Drowsy Maggie.'

The implied harmony here revolves around two tonal centres, six beats rooted in *E* and two beats rooted in *D*. The second half of 'Drowsy Maggie' implies a faster moving harmonic structure which could be interpreted in many different ways using the principles of chord substitution.[87] In the following example the most obvious implied chord is shown with a possible chord substitution given beside it in brackets. These implied chords are deciphered through the connecting tones, as indicated by slurs. Most of these connecting tones are in thirds and so the implied harmony is easy to decipher.

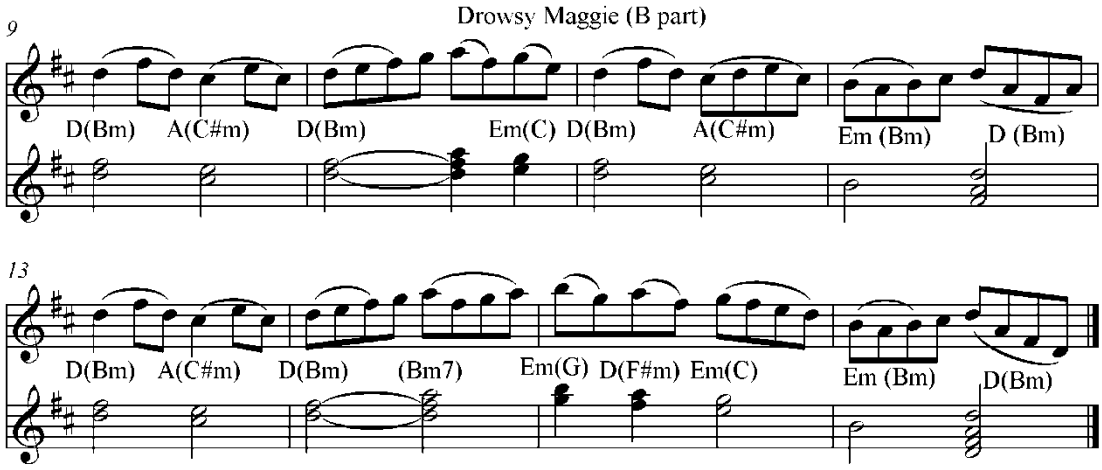


Figure 3.166 Implied harmony for the B part of 'Drowsy Maggie.'

Since there really are no rules to harmonising traditional music, only standard approaches, there are numerous possibilities to harmonising a melody like this. Some accompanists would harmonise this with chords taken from jazz theory. To give an example of a jazz-influenced approach I occasionally take when harmonising melodic lines, I provide a basic notation for the chords I used when accompanying a slow version of 'Drowsy Maggie,' as played by the guitarist Ciarán Swift on the album *Draíocht* (2006). [88]

[87] Chord substitutions are often used in jazz to add harmonic interest to a melody. A prime example of chord substitution is to substitute the tonic chord with its relative minor.
[88] There are various rhythmic variations to this accompaniment on the recording.

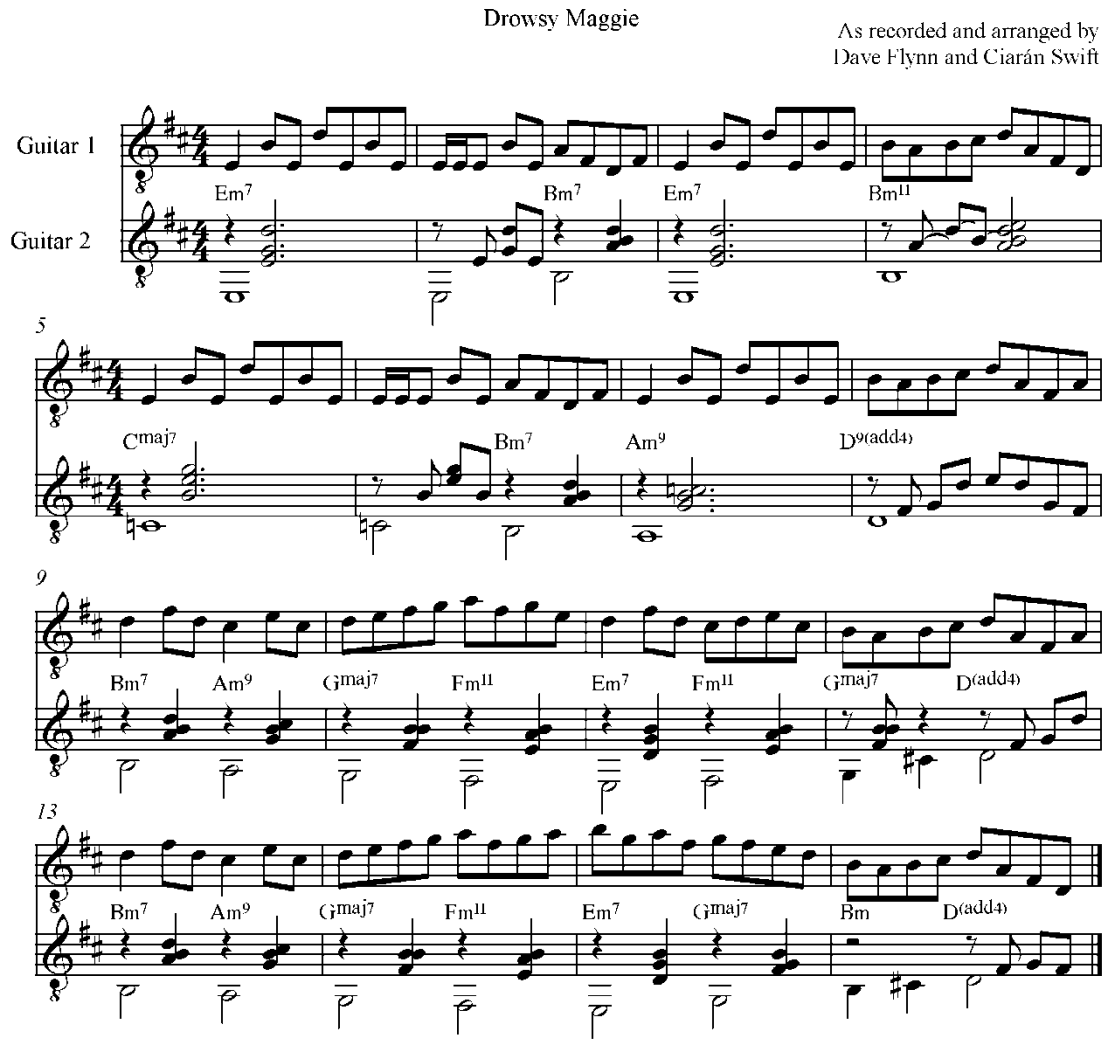


Figure 3.167 Harmonisation of 'Drowsy Maggie' from Dave Flynn, *Draíocht,* CD.

Extended chords like 7ths, 9ths and 11ths are so associated with jazz that they are often called 'jazz chords'. However these kinds of chords have been used for centuries in western classical music. It is becoming more common for such chords to be used by traditional music accompanists; Dennis Cahill, Martin Dunlea and Donough Hennessy are three well known guitarists who commonly use chords like this. Whilst the use of extended harmony in traditional music is not to everyone's taste, I feel it can be quite effective in certain situations. In some of my compositions I have taken this approach of harmonising the melodic lines through chord extensions and substitutions. This approach is particularly prevalent in *Aontacht*. I discuss this in my commentary on the work in Chapter 4.4.

3.3.5 Traditional Irish Pitch Material in Contemporary Concert Music

The methods by which I analysed the influence of the pitch-based aspects of traditional music upon contemporary concert music are similar to those I used when analysing the rhythmic influences in Chapter 3.2.6. In some cases composers identified to me works which were influenced by these pitch aspects. In other cases composers identified the pitch-based influence in writings which I referenced. Any other examples I reference were discovered through my own analysis.

Folk music has proved inspirational to many composers. Béla Bartók (1881-1945) is generally regarded as the leading pioneer in this field:

> Bartók's supernal talent….enabled him to homogenize the polyglot musical folklore and develop five innovative levels of complexity for its use in composition:
>
> (1) Genuine folk tunes are featured, and the invented additions are of secondary importance. In other words, the folk tune is the 'jewel' and the added parts function as its 'mounting' (an example is the fifth Sketch Op.9);
> (2) the folk tune and the invented material are treated equally (For Children, vol.2, 'Rhapsody');
> (3) the folk tune is presented as a kind of musical 'motto', and the invented material is of greater significance (second Romanian Dance Op.8a);
> (4) the composition is based on themes which imitate genuine folk tunes (first Romanian Dance);
> (5) the highest level is abstract composition in which neither folk tune nor its imitation is used, but the work is nevertheless pervaded by the 'spirit' of folk music. Thus for example it might have Hungarian pentatonic turns (second Dirge), the Slovak Lydian tritone (third Burlesque Op.8c), or other characteristics of Eastern European rural music.
>
> (Suchoff, Benjamin. "Fusion of National Styles: Piano Literature, 1908-11 ." In *The Bartók Companion*, edited by Malcolm Gillies, 124-145. London: Faber and Faber limited , 1993:125-126).

I have adapted Suchoff's five levels to formulate an analysis of how traditional Irish pitch material has influenced contemporary composers.

3.3.5.1 Traditional melodies at the forefront

When traditional tunes are used in this manner there is ambiguity as to whether the works are compositions or arrangements. For example, in Donnacha Dennehy's spectral setting of the *Sean-nós* song 'Aisling Gheal' (2007), Iarla Ó Lionáird sings the song exactly as he would if he was singing unaccompanied, the song remains at the forefront throughout. The accompanying texture Dennehy created for *The Crash Ensemble* is not too far removed from the ambient textures Ó Lionáird used on his album *Invisible Fields* (2005). Ó Lionáird credits these all as arrangements on his album, yet Dennehy feels his own setting of 'Aisling Gheal' is more than an arrangement.

> It's a half-way house, it's not just a simple accompaniment…. There's a significant change with each new verse which is accumulative. I was just reading Seán Ó Riada there recently which said that all variations of *Sean-nós* are never accumulative…and I was thinking of my setting of 'Aisling Gheal' which is accumulative.
>
> (Dennehy Interview).

The settings on 'Invisible Fields' could not be described as 'simple accompaniments' as they are densely constructed ambient textures utilising traditional musicians, classical musicians and electronics. Dennehy's setting is certainly original in that it is entirely based on the overtones of the melody and utilises the amplified sound of *The Crash Ensemble*. The ensemble texture is dominated by harmonics, microtones and *tremolo* effects.

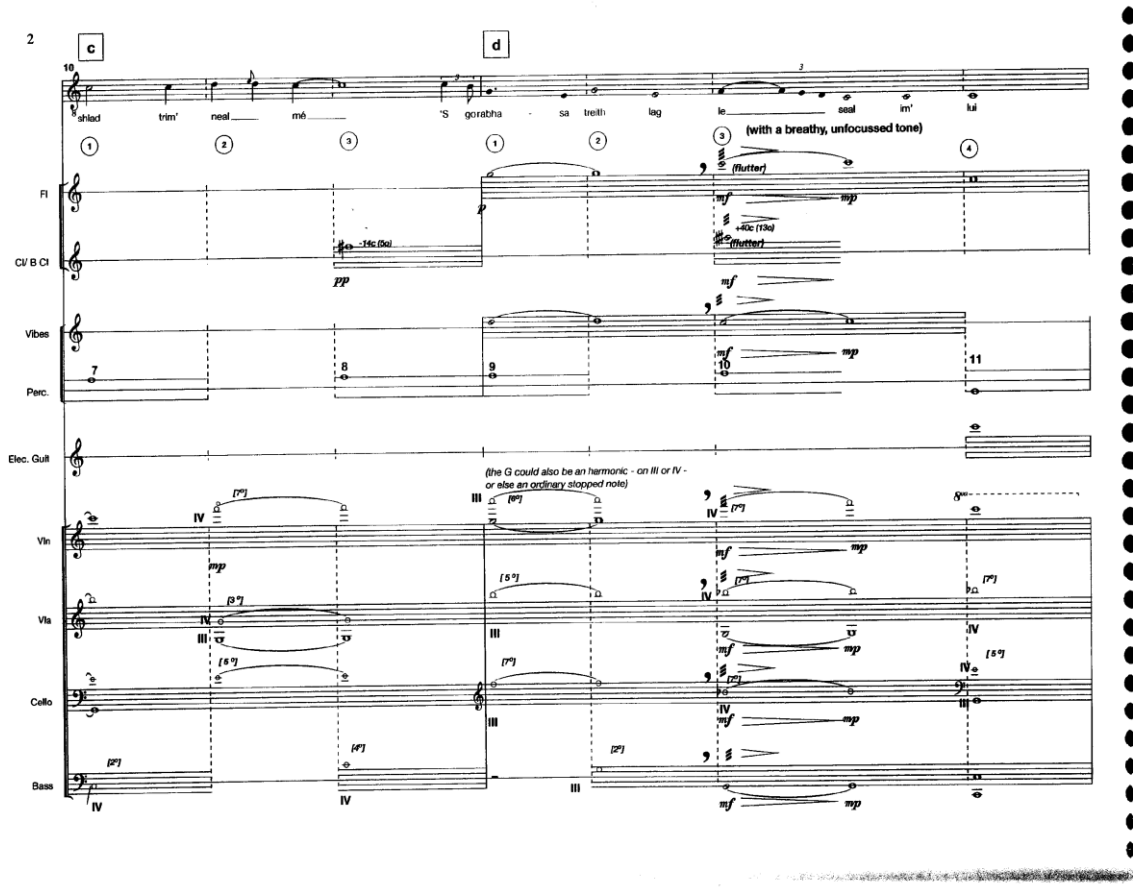


Figure 3.168 Dennehy, *Aisling Gheal*, 10-16.

The nature of the arrangement is quite removed from the way traditional songs have been accompanied. In this respect Dennehy's arrangement has proved difficult for some listeners.

> My setting of 'Aisling Gheal' has been more controversial than *Grá agus Bás*, because that's closer to the source and then they heard these strange kind of harmonies amplified in it….and then other people love it, they think it's really kind of atmospheric or whatever, but that's actually been slightly more controversial in a way, within the traditional world.
>
> (Dennehy Interview).

Frank Corcoran's *Irische Mikrokosmoi* from 1993 is a set of short solo piano pieces, each of which uses an old Irish air as its basis.

> I spent my 1993 Black Hole Year writing the "Irische Mikrokosmoi" for solo piano. Fair enough. I had to focus the mind between insanity and, well, insanity. After all that which had run its unquiet course, I had only two hands – the right was inked; the left hand attempted to ape the bass-buttons (– well, not exactly) of the Borrisokane 1950- ies *Céilí Band*. I wanted to distill first twelve, then fifty Irish *slow air*s. Rape them.
>
> (Interview with Frank Corcoran November 30, 2009).

Corcoran presents the traditional melodies in varied ways. The opening piece is a sparsely accompanied arrangement of the air 'An Cúach Beag.'

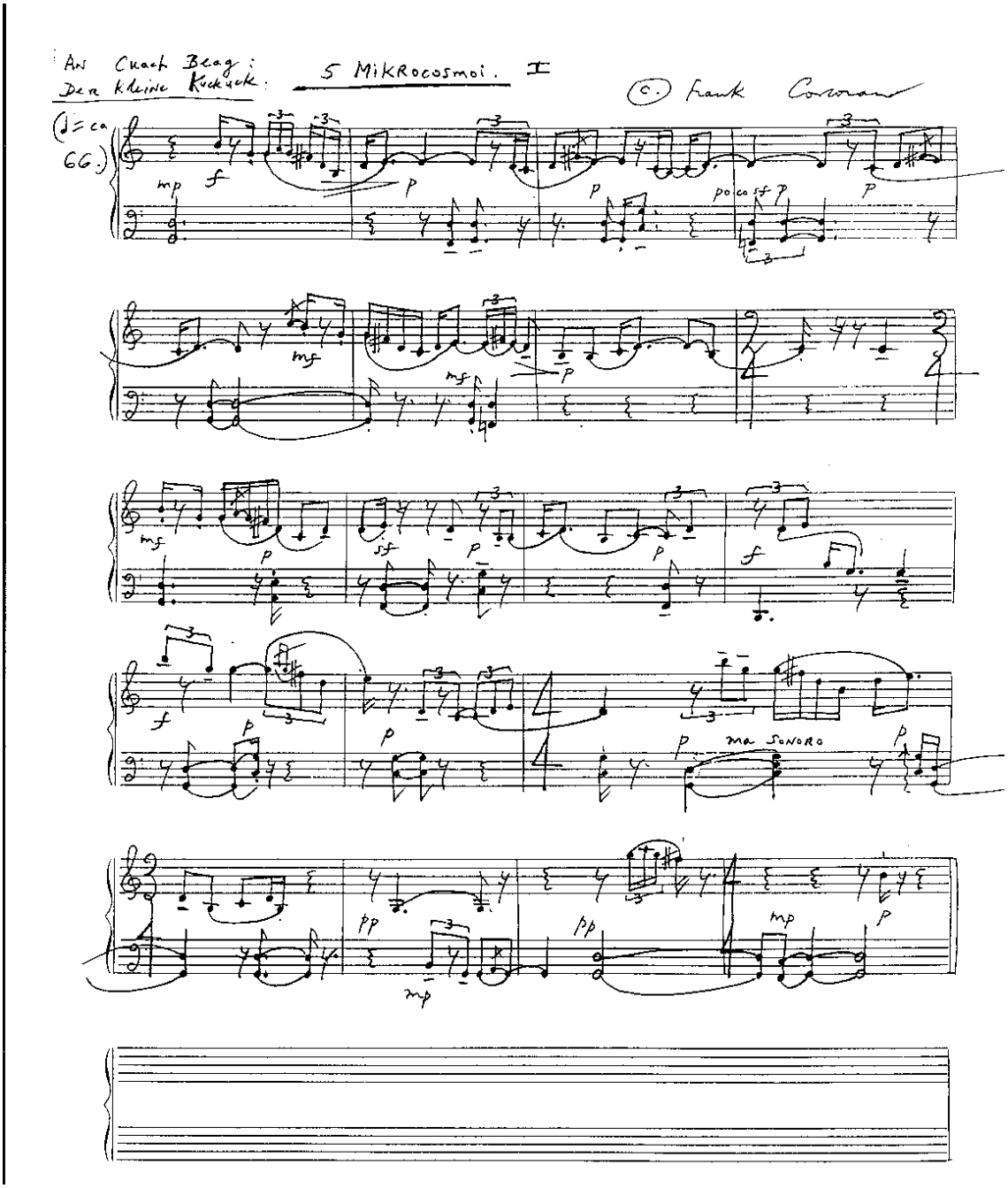


Figure 3.169 Corcoran, *Irische Mikrokosmoi for solo piano,* I.

The air is notated in great detail, so it could deceive the viewer into thinking Corcoran's 'distillation' is considerably more complex than the tune as it is usually performed by a *Sean-nós* singer. However, it is mainly the air performed with some octave displacements and very subtle harmonic accompaniment, mostly in 5ths. In this respect, it is more of an arrangement of the air for solo piano than an original composition.

Corcoran re-arranged some of these pieces for string orchestra. In doing so he created more detailed textures where the melody is more 'distilled'. The examples which follow are his original piano version of 'An Poc Ar Buille' and the more complex string orchestra version.

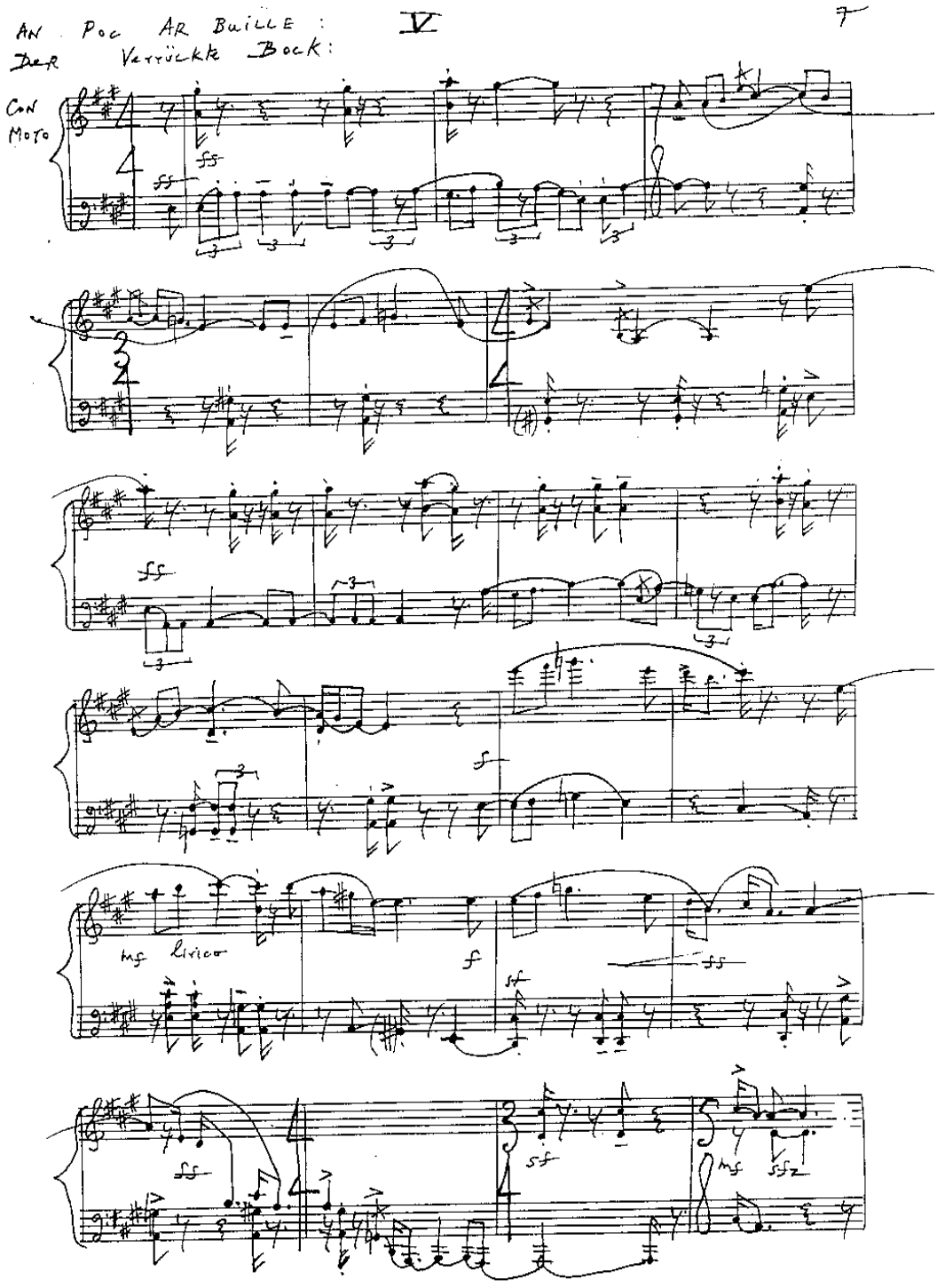


Figure 3.170 Corcoran, *Irische Mikrokosmoi for solo piano*, V, 1-22.

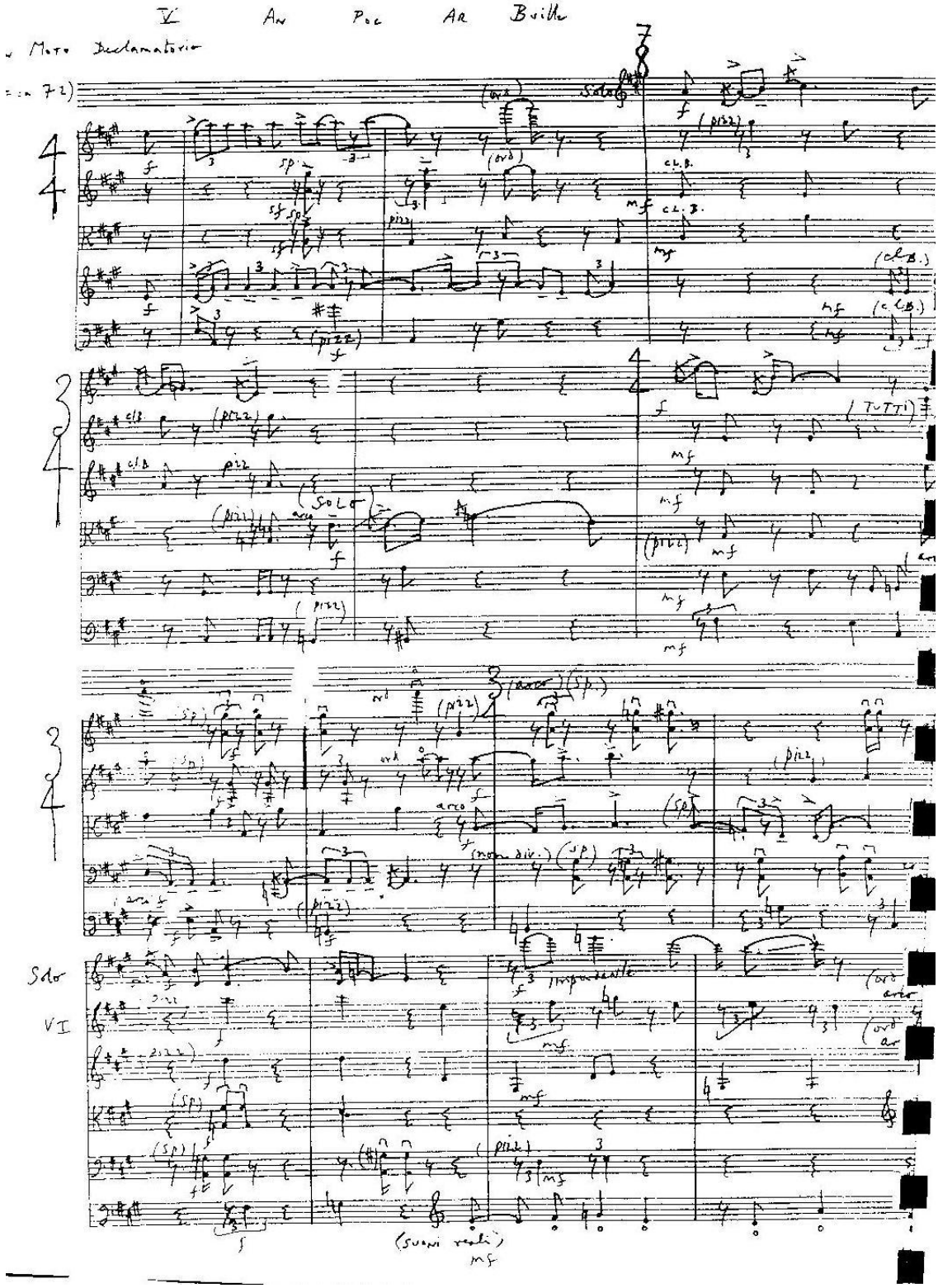


Figure 3.171 Corcoran, *Irische Mikrokosmoi for string orchestra,* V, 1-14.

Corcoran makes more use of 7ths rather than 5ths in his harmonisation of this tune. The pointillistic distribution of the main tune is another feature which makes this a more complex arrangement than that of 'An Cúach Beag'.

3.3.5.2 Traditional melodies prominent in some sections/newly composed material prominent in other sections

Seán Ó Riada's *The Banks of Sullane* (1956) is often overlooked in Ó Riada's oeuvre, perhaps because on the surface it seems to be nothing more than a pastoral arrangement in an impressionistic style. However, as the piece develops the pastoral mood is occasionally interrupted by more austere music. Particularly striking is a section with repeated rhythmic pulsations which bears some similarities to elements of the last of Steve Reich's *Three Movements* (1987). This section eventually merges with a variation of the main traditional melody in the violins at the end of bar 88. There is quite a significant section of the piece without the melody before this and therefore it would be fair to say that this classifies *The Banks of Sullane* as more of an original composition that quotes a traditional tune, rather than an arrangement.

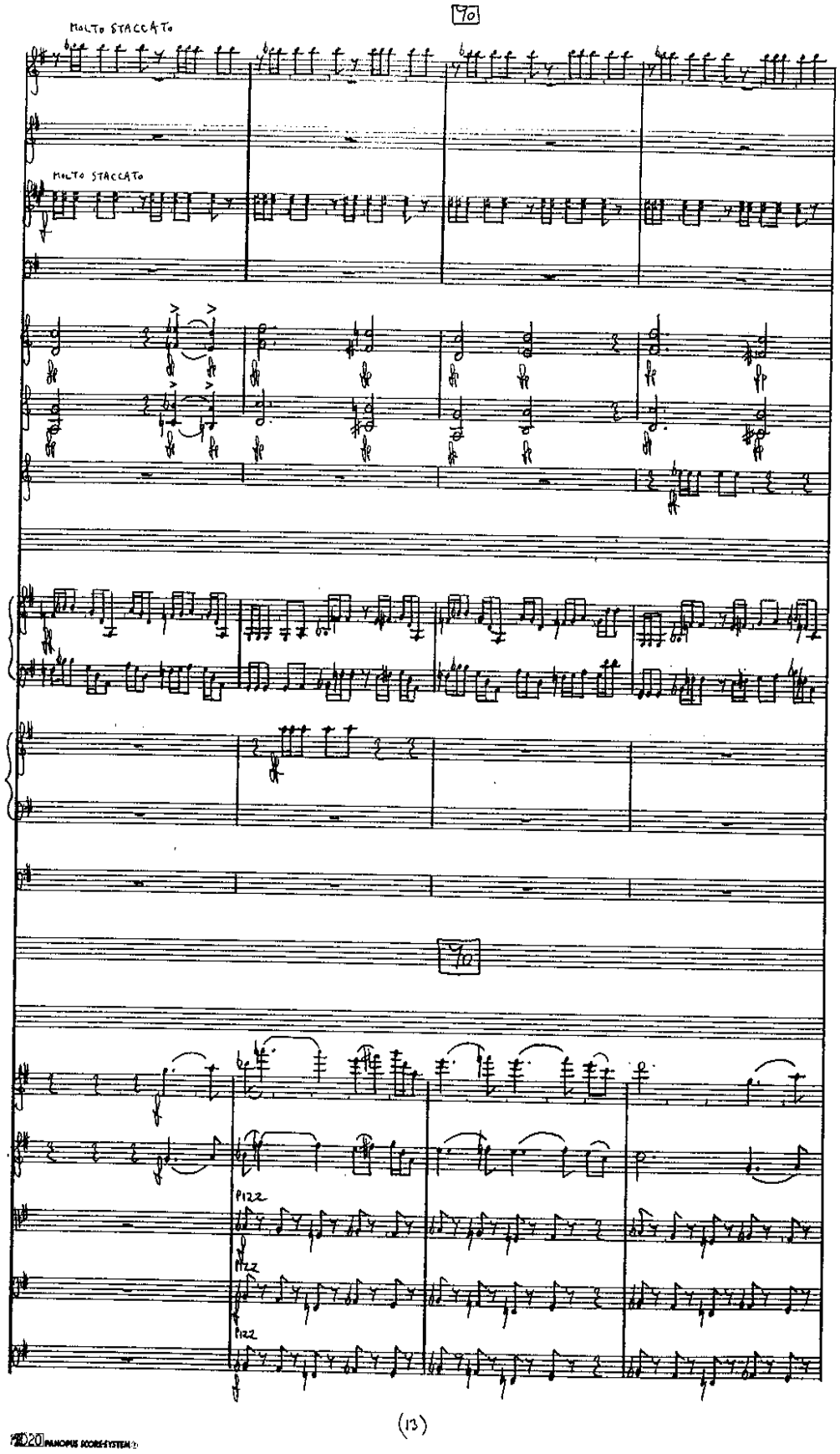


Figure 3.172 Seán Ó Riada, *The Banks of Sullane*, 88-91.

In Mícheál Ó Súilleabháin's *Oileán/Island* there are sections where traditional tunes are performed with spare string accompaniment. If this was the case with the entire piece then it would be fair to call it an arrangement rather than a composition. However there are significant sections of the piece, such as the opening, which contain newly composed material in a contemporary classical style.

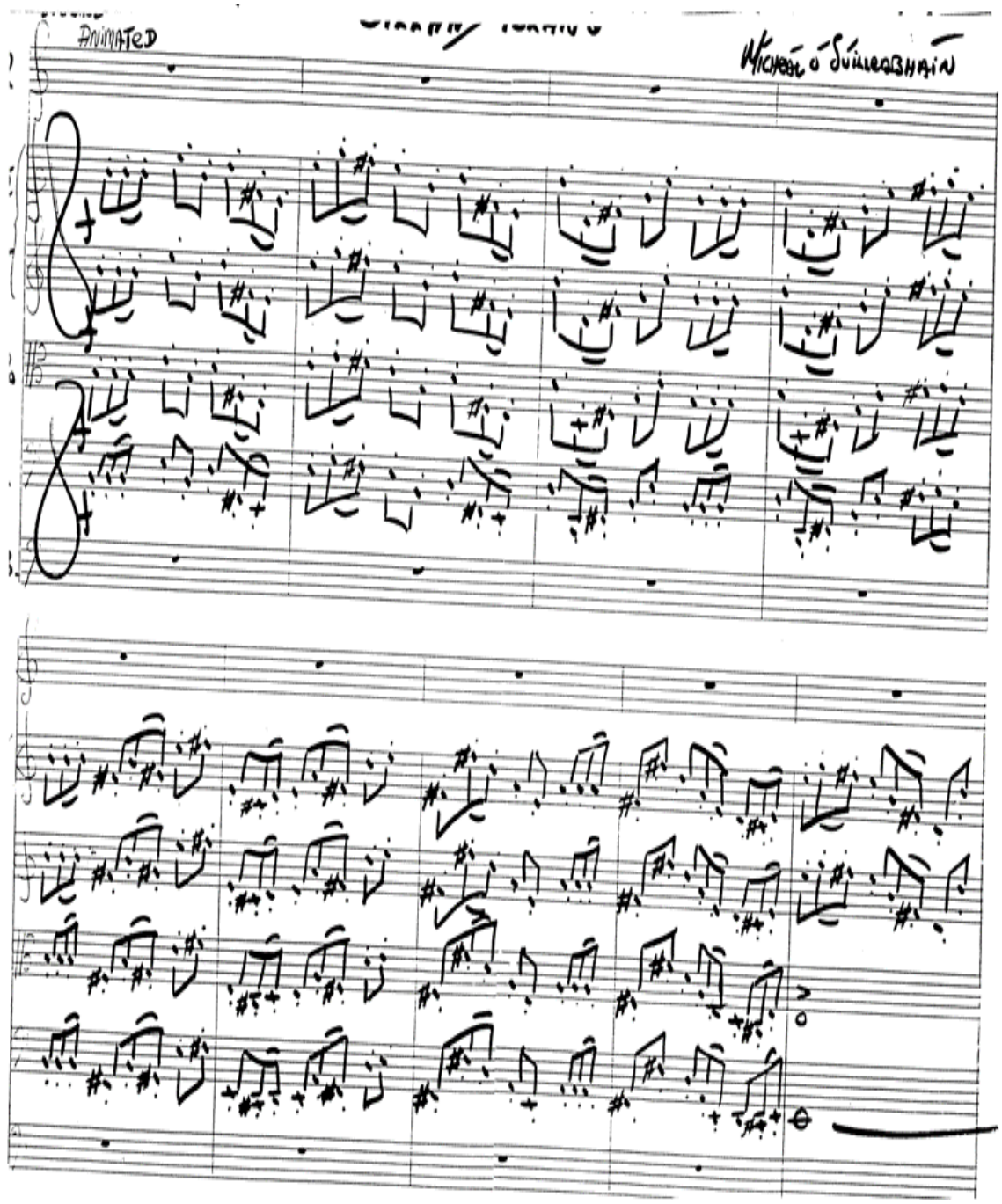


Figure 3.173 Ó Súilleabháin, *Oileán/Island,* 1-9.

In *Sliabh Luachra* John Gibson uses three traditional tunes, a *slide*, an *air* and a *polka*, as the three main themes. Whilst the *slide* and *polka* are clearly heard when they are played by the traditional flautist, Gibson creates a thick texture of dissonant harmonies, counterpoint, counter-rhythms and variations in the piano trio parts, thus transforming the context of these tunes away from purely traditional music. Gibson's newly composed material dominates these sections including the opening, which contains no obvious traces of a traditional melody.

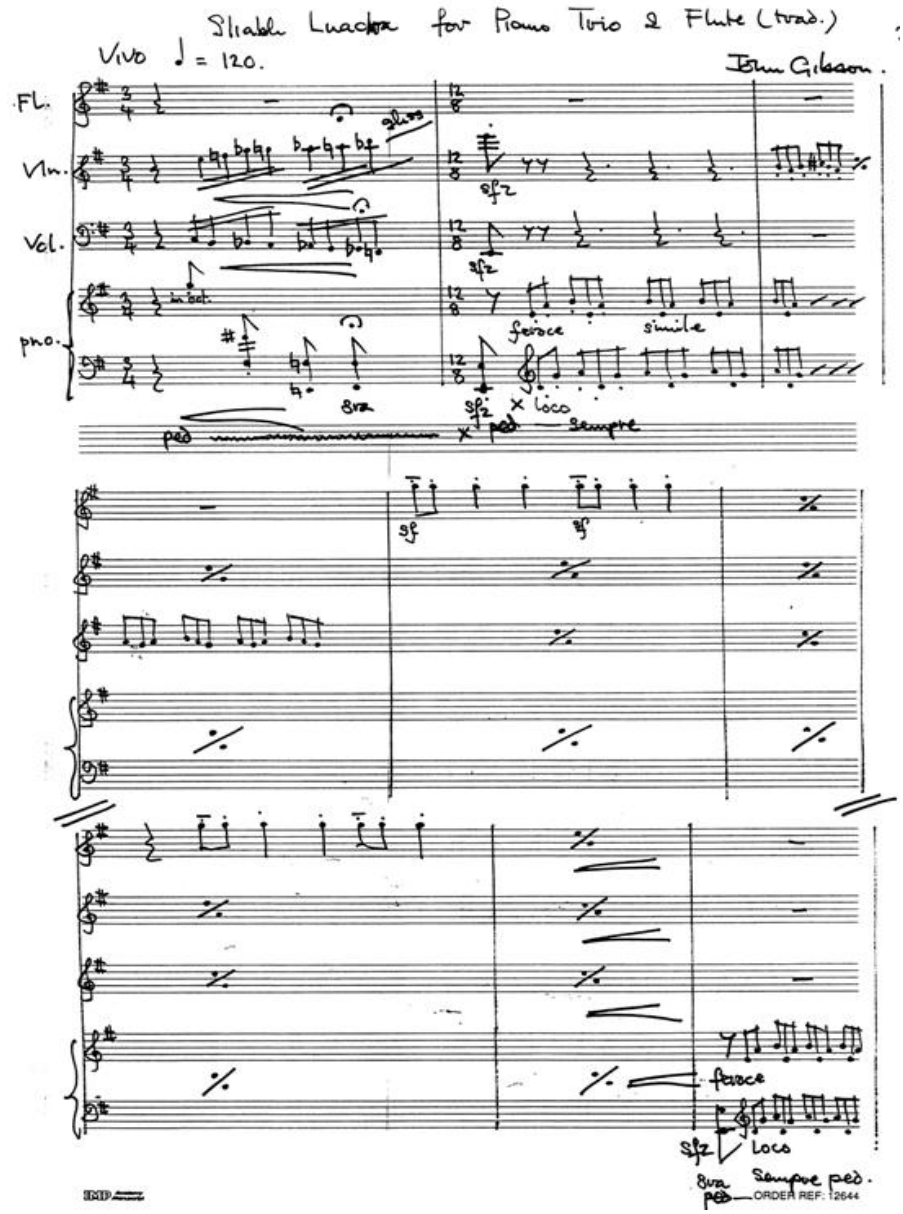


Figure 3.174 Gibson, *Sliabh Luachra*, 1- 9.

The harmonic world Gibson creates around the traditional melodies is often derived from twentieth century classical music approaches to harmony. The 2/4 *polka,* found in the flute (top stave) in the third section of the piece, is initially accompanied by dissonant cluster chords in the piano trio.

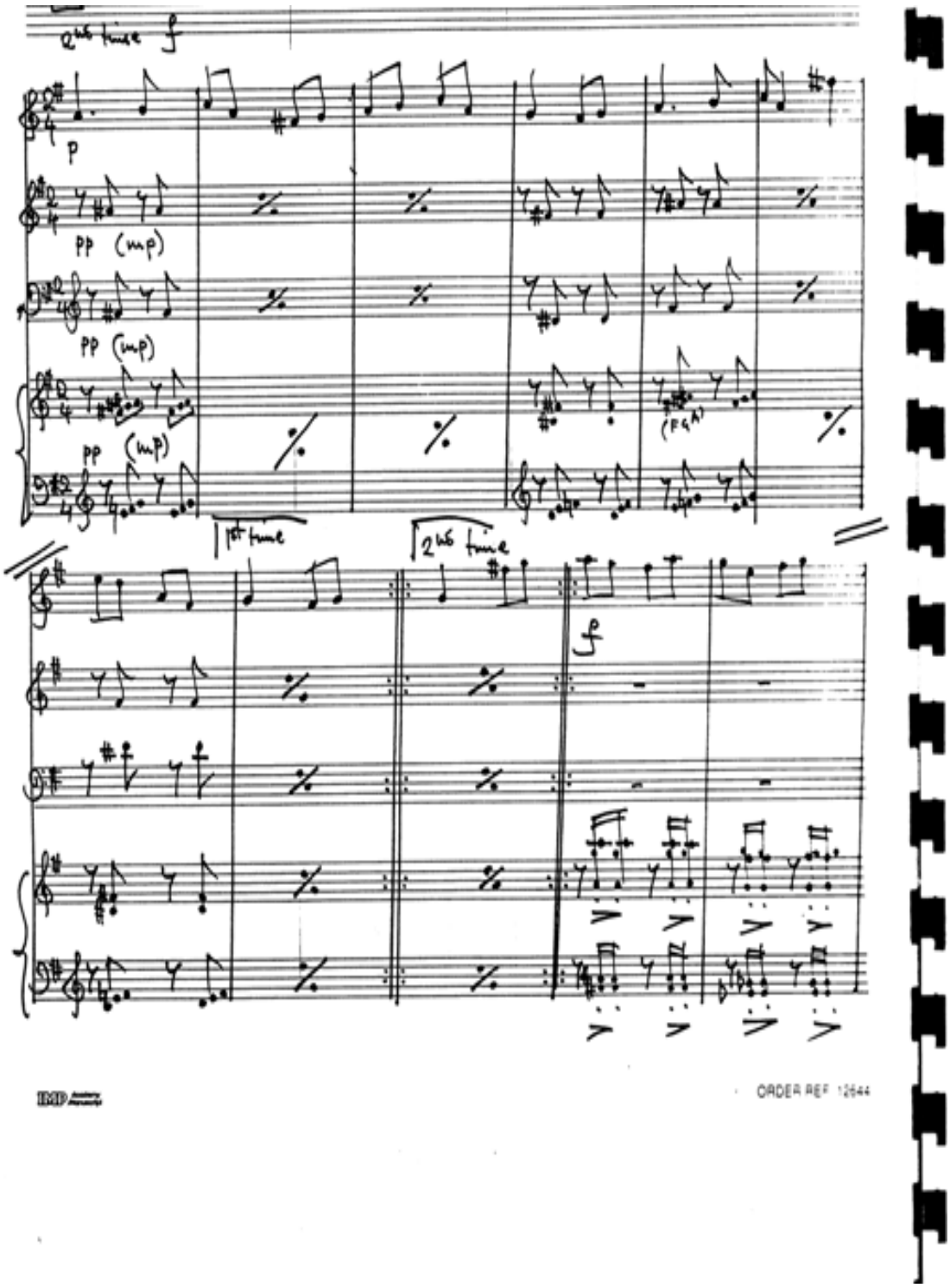


Figure 3.175 Polka in Gibson, *Sliabh Luachra,* 14.

3.3.5.3 Traditional melodies filtered into new compositions

The technique of filtering fragments of traditional melodies into new compositions is absent from Suchoff's levels of folk melody integration. Whether or not Bartók used this technique, it has certainly been used by a number of Irish composers, most notably Gerald Barry, Donnacha Dennehy and Eric Sweeney.

In *Grá agus Bás* Dennehy uses short phrases from the traditional songs 'Aisling Gheal' and 'Táim Sínte ar do Thuama.' He varies them, transposes them and writes new material in a similar style. Dennehy's approach here is akin to the sampling technique used in popular music since the 1980's.[89] I put this point to him when I interviewed him.

> D. F: Would you relate it to sampling at all?
>
> D. D: Yes, because the way I worked with it was I took these songs to begin with and had Iarla's singing and then I wrote around it with these little bits and then I started writing material off from that.
>
> (Dennehy interview).

The opening bars of the vocal part reveal how Dennehy has taken excerpts from the songs and put them through filtering techniques. The opening phrase, incorporating the words 'An ghníomh' and variants thereof, is repeated six times with slight melodic differences each time.

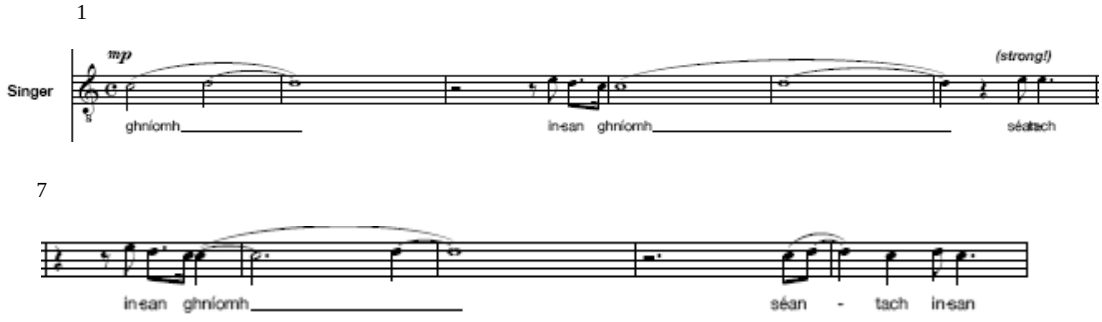


Figure 3.176 Dennehy, *Grá agus Bás,* 1-11, vocal part.

[89] In popular music, particularly hip-hop music, sampling involves taking exact parts of another recording (often by another artist) and adding these samples to other samples or original material to create a new piece of music.

This phrase was taken from Dennehy's own transcription of Ó Lionaird's singing of 'Aisling Gheal'. The following example shows where Dennehy sourced the 'in-san gníomh' melodic fragment used in bars 3 and 7.

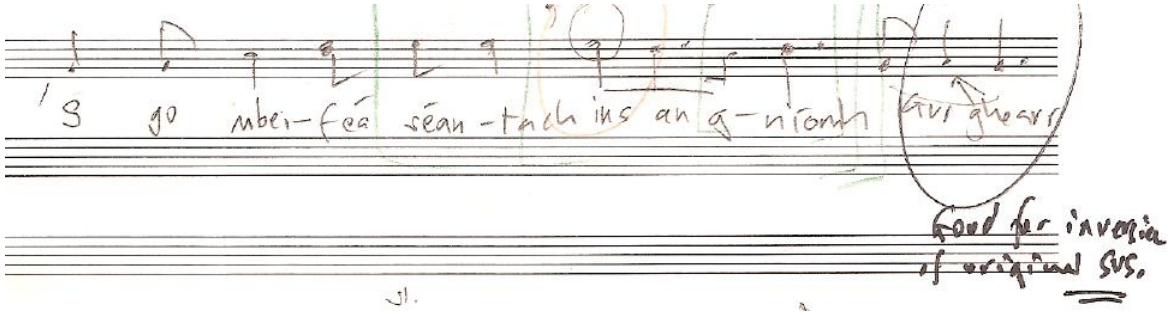


Figure 3.177 Excerpt from Dennehy's transcription of 'Aisling Gheal.' [90]

From bars 17-21 Dennehy distributes elements of the opening vocal part in bars 12-17 to flute, clarinet, trumpet and vibraphone.

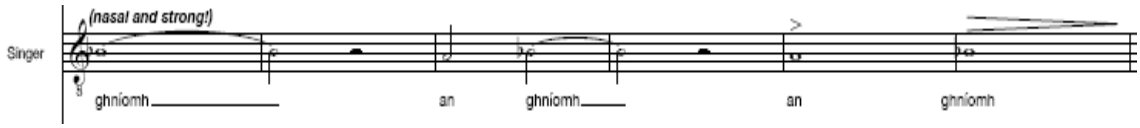


Figure 3.178 Dennehy, *Grá agus Bás,* 12-17, flute, clarinet, trumpet and vibraphone parts.

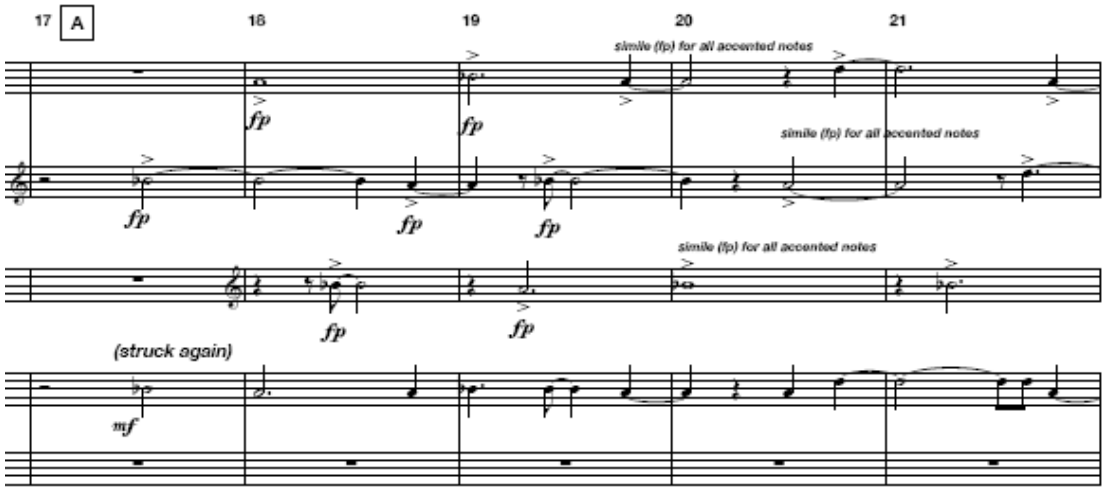


Figure 3.179 Dennehy, *Grá agus Bás*, 17-21.

[90] This transcription was supplied to me by Dennehy.

Gerald Barry's treatment of traditional Irish material seems to be no different to his treatment of elements he 'borrows' from other music styles.

> In 1978 Gerald Barry (b. 1952) composed a piece for two pianos with the graphic title 'Ø'. Here all the pitches are derived from the Irish folk-song "Bonnie Kate" by means of recondite procedures that leave the original unrecognisable, but part of the music's DNA nevertheless. Barry reaches for whatever materials come naturally, here an obscure sixteenth-century English song, there a venerable Bach chorale, elsewhere a rollicking Irish tune.
>
> (Deane, Raymond: "Exploding the Continuum - The utopia of unbroken tradition." *Raymond Deane's Official Web site.* http://www.raymonddeane.com/articles_results.php?id=11 [accessed June 10, 2010]).

The final sentence of Deane's analysis is of particular importance here. Whilst Barry uses the basic skeleton of 'Bonnie Kate' in his composition *Ø*, one would strain to hear any resemblance to the original tune. Barry takes the pitches from the skeleton notation and filters them by inserting extra notes between each individual pitch of the skeleton tune.

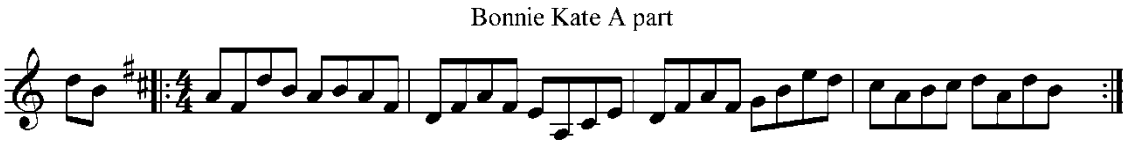


Figure 3.180 'Bonnie Kate', A Part.

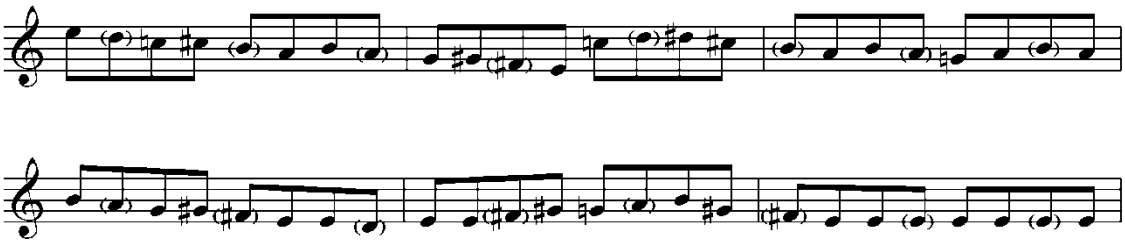


Figure 3.181 Melody derived from 'Bonnie Kate' that Gerald Barry used in *Ø*.

The overall result of this is that Barry is not actually replicating anything that a traditional musician might play. This is a deliberate decision according to Adrian Jack (1988:389), 'Since Barry has a horror of anything ethnic, and since any Irish tune would be only too readily identified, he successfully disguised it with intervening notes.'[91]

[91] Jack, Adrian. "Introducing Gerald Barry." *The Musical Times*, August 1988: 389-393, 389.

Barry's *Piano Quartet No.1* was described as 'the most explicitly Irish sounding of (his) works.'[92] This 'Irish sound' is most likely attributable to the opening of the work, where the pitch material and melodic contour are entirely derived from the melody 'Sí Bheag Sí Mhór'. The melody is inverted and filtered, thus it is not audibly recognisable. Nevertheless, the 'Irish' character of the melody obviously holds its integrity through these processes. I would qualify this by saying that while Barry's source material may sometimes be a traditional melody, that is the extent of his music's relation to authentic traditional music.

Eric Sweeney's use of the melodic features of traditional music is limited mainly to skeleton notations. In this respect the music is influenced by traditional pitch material but only as it is usually notated, not as it is performed. This is a very important distinction to make. When I asked Sweeney whether he felt his use of this pitch material was related to the filtering processes of Gerald Barry he unequivocally stated 'Not at all'.[93] In some respects he is correct to say this, as it is much easier to recognise the source material in Sweeney's works. In Movement II of his *String Quartet*, the skeleton notation of the air 'The Blackthorn Tree' is clearly visible in the first violin part.

[92] (Barry, Piano Quartet No.1 – Study Notes n.d.), 15.
[93] Sweeney interview.

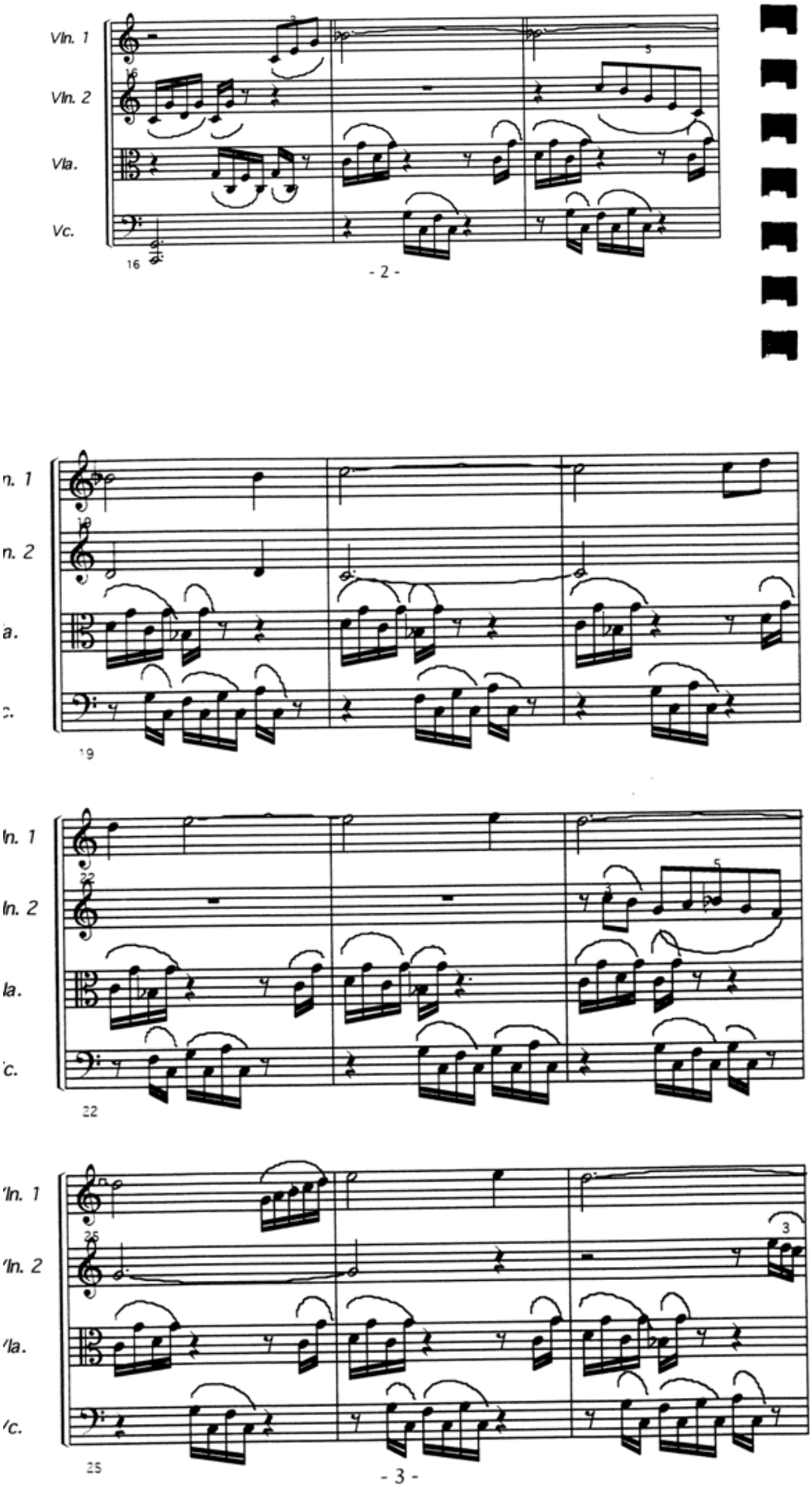


Figure 3.182 Sweeney, *String Quartet,* II, 16-27.

In Movement I, Sweeney filters notes from the skeleton notation of the *jig* 'The Banks of Lough Gowna' through additive minimalist processes.

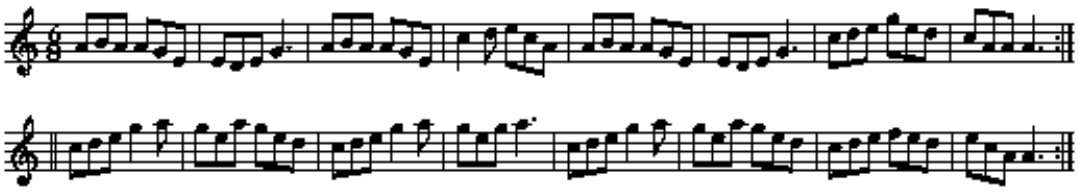


Figure 3.183 'The Banks of Lough Gowna.' (O'Neill, 1907:58).

The original tune is barely recognisable due to the additive processes. It is only as the texture thickens, through the gradual addition of notes from the melody, that one who is familiar with the original tune might recognise fragments from it. Most of the opening of the tune is visible in the violin parts in bars 19 and 20. This fragment is also found in the viola from bar 22.

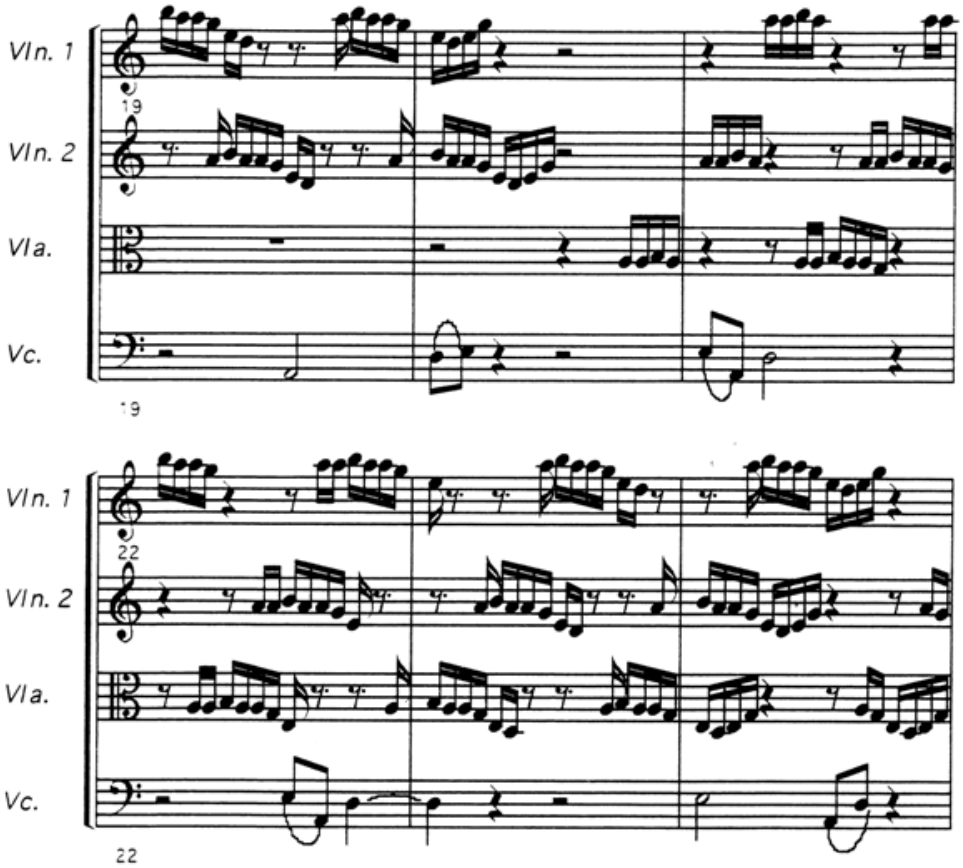


Figure 3.184 Sweeney, *String Quartet,* I, 19-24.

Sweeney has taken a fundamentally 6/8 tune and placed it into a 4/4 rhythm, where the first strong note of the original is now placed on the upbeat, so the strong/weak points in the tune are now misplaced.

Sweeney's use of traditional melodies was analysed by Farrell (2002). Farrell's analysis is based on the presumption that the skeletal sources that Sweeney uses are by definition Irish traditional pitch material.

> It is manifest from the pieces examined, particularly in all movements of this String Quartet, how completely Sweeney has absorbed Irish traditional pitch material into a compositional language.
>
> (Farrell, Hazel: *Aspects of Pitch Structure and Pitch Selection in Post-War Irish Composition: An Analytical Study of Tonal and Post-Tonal Referential Collections in Selected Works by Irish Composers* (Ph.D diss.). Limerick: University of Limerick, 2002: 249).

In light of my analysis, it is perhaps too definitive of Dr. Farrell to state that Sweeney has 'completely' absorbed Irish traditional pitch material into his works. It would be more correct to say that Sweeney has absorbed pitch aspects of traditional music as it is usually notated, rather than how it is usually performed.

3.3.5.4 Newly composed melodies imitating older style traditional melodies

This technique is related to level four of Suchoff's table 'the composition is based on themes which imitate genuine folk tunes'. Tunes such as this are the foundation of works by composers as diverse as Seóirse Bodley, Shaun Davey and Rachel Holstead.

The following examples demonstrate how Davey's tunes tend to follow basic melodic structures, without venturing into developments regarding note flexibility that characterised the traditional tune compositions of twentieth century composers like Paddy Fahey and Ed Reavy.

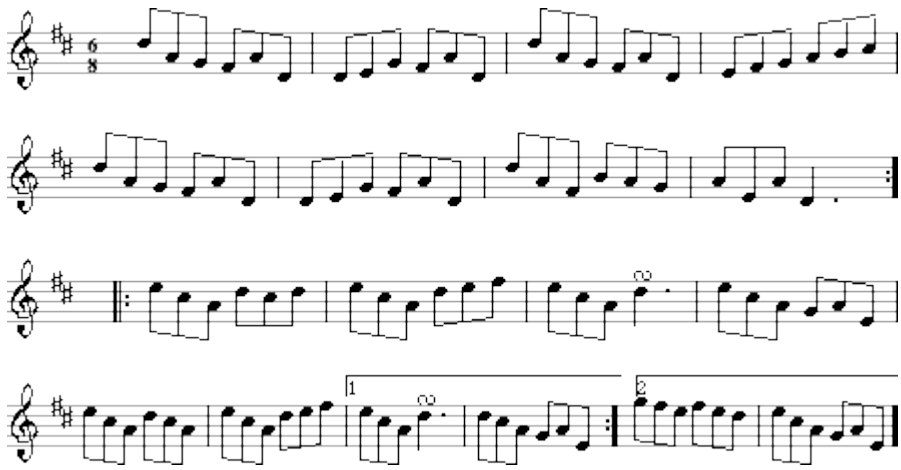


Figure 3.185 Davey, 'Water Under the Keel' from *The Brendan Voyage.* [94]

'Water Under the Keel' is a *jig* which stays within the mode of D Ionian (D major) and its melodic structure is such that it might seamlessly fit into a tune collection from the late nineteenth century. Much the same could be said of Davey's general melodic style when he composes using traditional Irish forms, such as the following example from the his *Concerto for Uilleann Pipes and Orchestra* (1986).

[94] Davey, Shaun: "Water Under the Keel Transcription." *The Session.* http://www.thesession.org/recordings/display/1344 (accessed August 26, 2010).

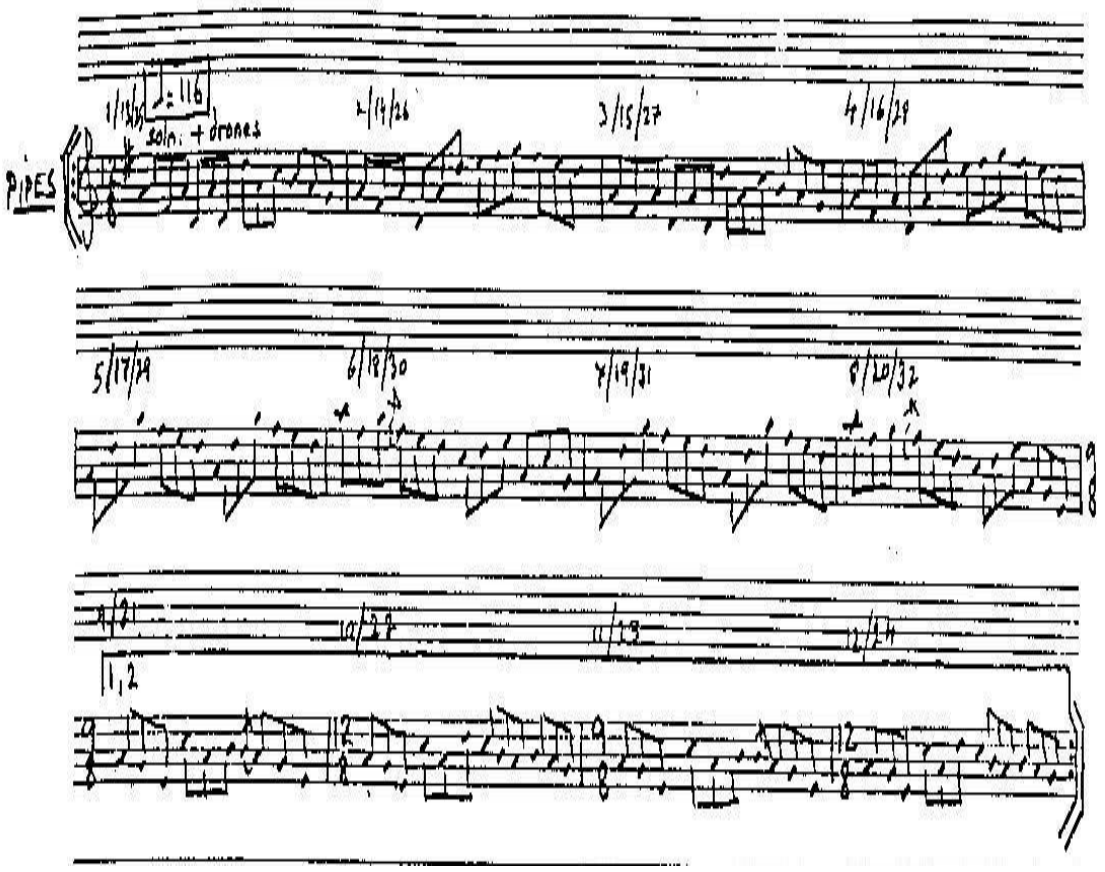


Figure 3.186 Davey, *Concerto for Uilleann Pipes and Orchestra*, Uilleann pipes part excerpt.[95]

This example is in the D Mixolydian mode, there are no notes used outside of this mode. Many of Fahey and Reavy's tunes would be based around the Mixolydian mode, however they would often move temporarily outside this mode through the use of note flexibility. So Davey's melodic voice is not particularly innovative in the context of twentieth century developments in traditional tune composition. His rhythmic voice is perhaps more notable, the metrical changes from 9/8 to 12/8 at the end of this example do distinguish this tune from most examples found in older tune collections.

Seóirse Bodley has composed many melodies in imitative styles which he places in his works. This aspect of his piano works has been discussed in detail by Ó Cuinneagáin (1992). I previously presented the following example to illustrate Bodley's

[95] Davey, Shaun: *Concerto for Uilleann Pipes and Orchestra.* Dublin: Tara Publications, 1986.

notational methods; it also gives a strong example of his imitative tune writing in the context of his orchestral music.

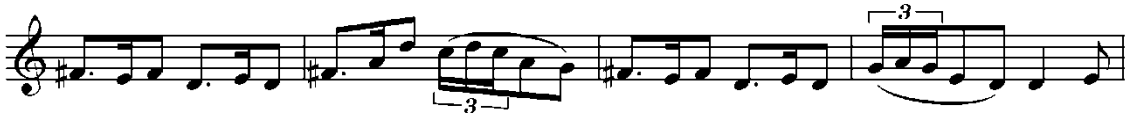


Figure 3.187 Bodley, *A Small White Cloud Drifts Over Ireland,* violin part excerpt.

This melody, in D Mixolydian, is similar to the opening of the standard traditional *jig* 'The Rolling Wave'.

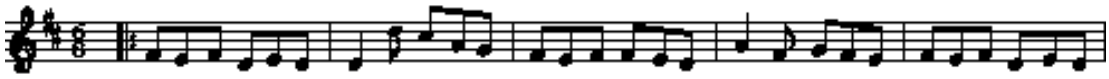


Figure 3.188 Opening of 'The Rolling Wave.'

It is not clear whether Bodley actually based this tune on 'The Rolling Wave', whether he did or not it is very much an imitative style of writing.

The melody which opens Bodley's *The Narrow Road to the Deep North* is also in an imitative style. It is in the mode of G Mixolydian and it is melodically characteristic of *Sean-nós* singing, albeit without the microtonal inflections.

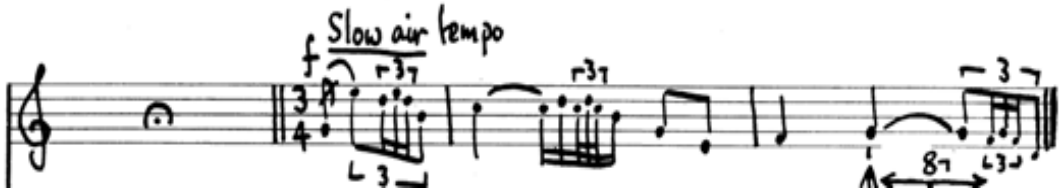


Figure 3.189 Bodley, *The Narrow Road to the Deep North,* 1-4.

The contour of the melody follows the general principles of traditional melodies which Bodley himself recognised as a significant feature of his music.

> It is not just a matter of the modal nature of the melody, but one of the direction of the melodic movement within the mode. While I may have taken some liberties here and there, that's a basic principle.
>
> (Bodley quoted in Ó Cuinneagáin, 1992:78).

The most obvious feature of the melody which relates to the direction of the melodic movement is the downward movement at the end of the second bar which then moves

upwards from *E* to *F*, the 7th of the G Mixolydian mode. This is a very characteristic feature of traditional music.

Rachel Holstead varies her approach from imitative tune writing to more original writing styles. The *hornpipe*/*set-dance* that is found towards the end of *Thar an bhfarraige gheal* is imitative in its melodic style, yet it is not obviously reminiscent of any pre-existent tune I know of. It could sit very comfortably in the standard repertoire as it does not stray from standard melodic patterns in the context of traditional music.

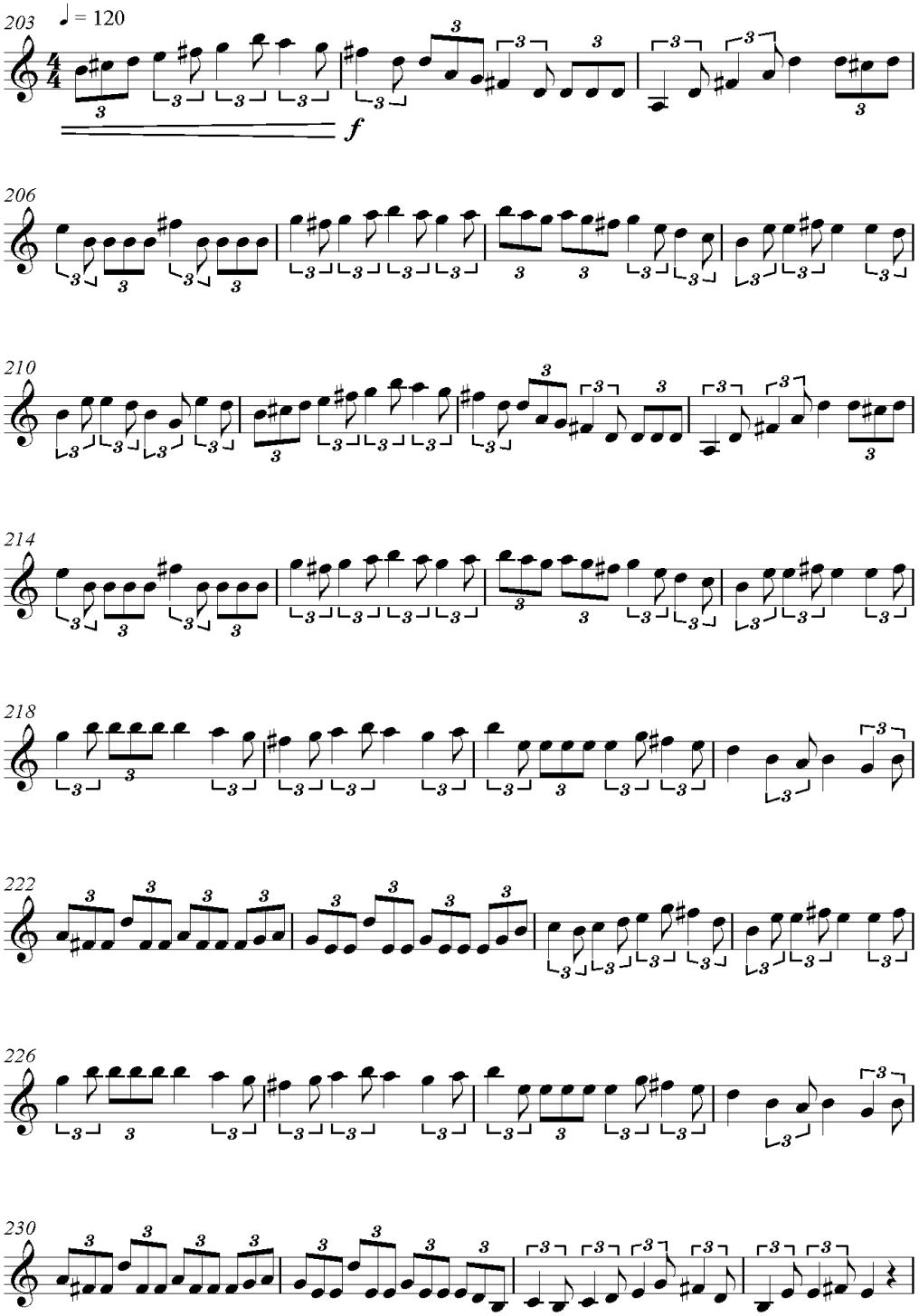


Figure 3.190 Holstead, *Thar an bhfarraige gheal*, 203-233, fiddle part.

I tend to compose melodies in an original style which draw on the developments of composers like Fahey and Reavy. Occasionally my tunes follow more conventional melodic lines. This is particularly true of the tunes in *Stories from the Old World* which generally stay within the common piping modes. These tunes are discussed in more detail in Chapter 4.5.4.

3.3.5.5 Newly composed melodies in an original melodic language

Some composers have used the basic rhythmic and melodic aspects of traditional style tunes whilst composing melodies which stray from conventional modal parameters.

The *jig* in Roger Doyle's *Ceol Sidhe* contains unconventional melodic movement in the context of *uilleann* piping. The way Doyle used the notes *F* and *F-sharp* was new to Peter Browne (who originally played it) and demonstrates that this is a melodic style uncharacteristic of traditional music. 'It was technically very interesting you know *F E D*, *F-sharp E D*. That was interesting when you're trying to move outside what you normally try to do,' (Browne interview).

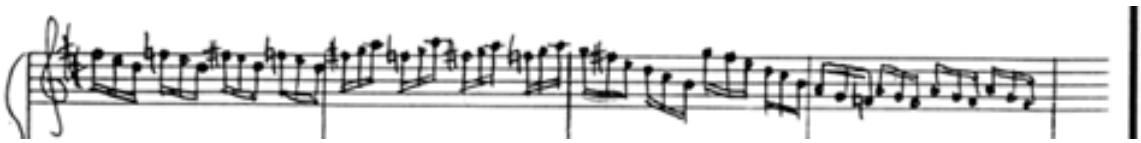


Figure 3.191 Doyle, *Ceol Sidhe,* excerpt, (no bar numbers in score).

Some of Seóirse Bodley's melodies follow a general pattern within one mode but then stray slightly by the use of notes foreign to that mode and indeed foreign to the usual melodic content of traditional music. This is an aspect of Bodley's works previously discussed by Ó Cuinneagáin (1992:72-74), so it is not necessary to duplicate his examples here. An example Ó Cuinneagáin did not use is the following one from *Aislingí V.*

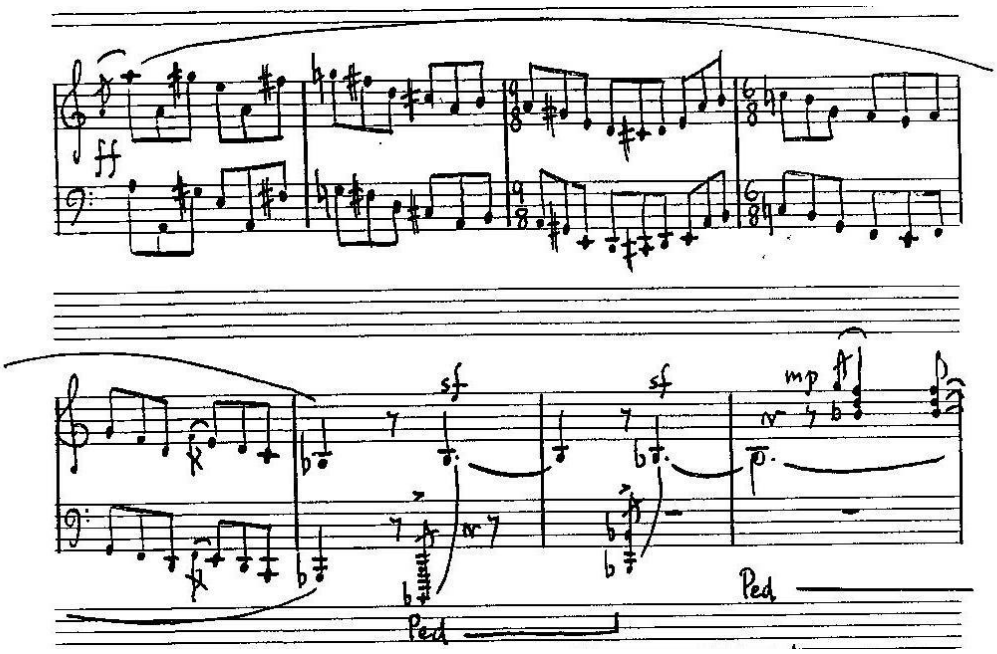


Figure 3.192 Bodley, *Aislingí*, V, 15-22.

The *jig* style melody from bars 15-20 contains considerable use of flexible notes. The notes *G, G-sharp, B, B-flat, C, C-sharp, F* and *F-sharp* are all utilised within this short, meandering melody.

In the context of Rachel Holstead's traditional music influenced works, *Ardee Dances* is the piece which strays most significantly from standard traditional melodic structures.

> A lot of the harmonic material in that piece comes from very specific research into temperaments and tunings and so what I was interested in doing was infusing the traditionally influenced material with these slightly different harmonic flavours.
>
> (Holstead interview).

Whilst Holstead refers to harmonic flavours, her approach had a very definite effect on the melodic material, which is highly chromatic at times. Movement III begins with an angular, atonal melody in a slow *jig* style, utilising chromatic movement that would be uncharacteristic of traditional music.

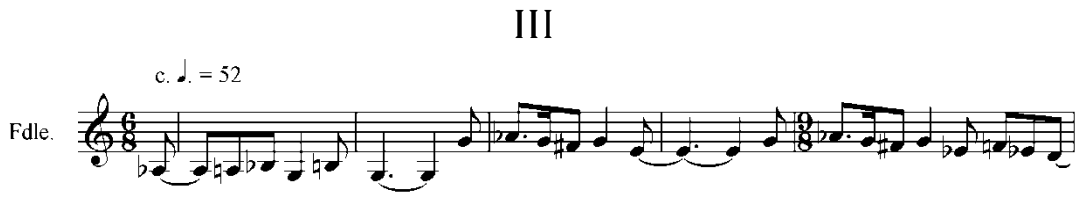


Figure 3.193 Holstead, *Ardee Dances,* III, 1-5.

The fiddle tune which opens Movement II is not so chromatic, but it is more angular than conventional traditional tunes and not particularly idiomatic of traditional music.

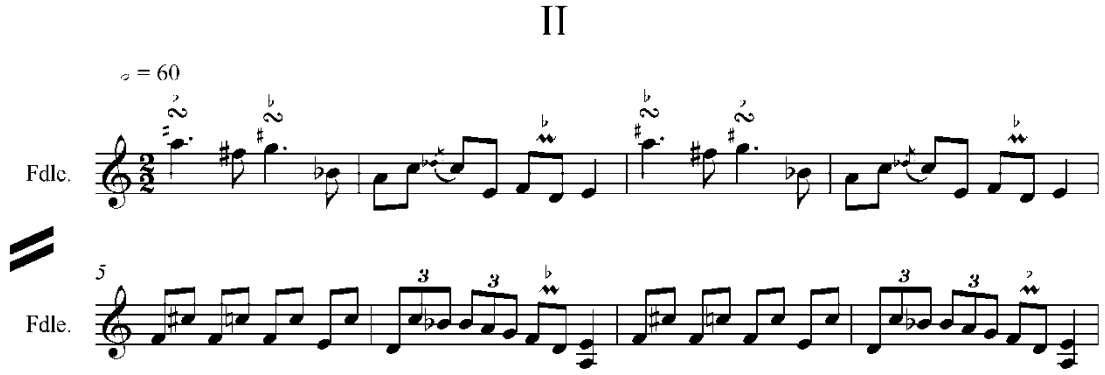


Figure 3.194 Holstead, *Ardee Dances,* II, 1-8.

A number of the traditional style melodies in my own works follow an ambiguous modal structure. This aspect of my work is discussed in Chapter 4, particularly in relation to *Aontacht*, *The Longest Reel* and *Tar Éis an Caoineadh*.

I have previously applied melodic principles from contemporary classical music to traditional music forms, most particularly in *Between the Jigs and the Reels* (2004). In this work I have, rather jokingly, applied the principles of the twelve-tone composition method of Arnold Schoenberg (1874-1951) to *jig* and *reel* structures. In the following example, the violin melody is in a swung *reel* style. It uses the twelve-tone principle that each note of the chromatic scale must be used in a row. The ornaments are not counted as melody notes.

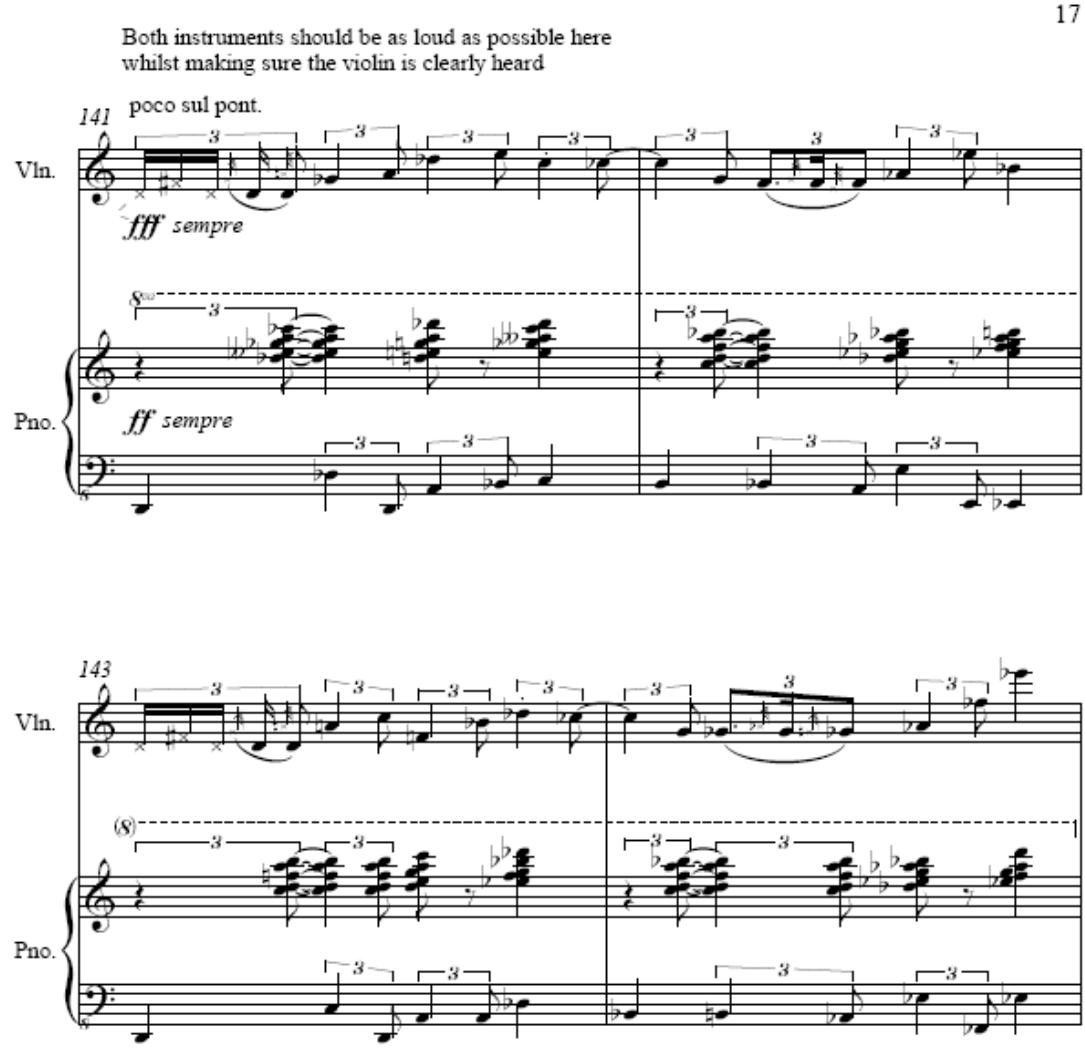


Figure 3.195 Flynn, *Between the Jigs and the Reels*, 141-144.

3.3.5.6 The influence of microtonal aspects of traditional music

There is a strong worldwide trend towards microtonality in contemporary classical music. So it is difficult to say with authority whether any composer has been influenced by the microtonal aspects of traditional music unless they specifically state this influence or if they utilise the microtonal possibilities of traditional instruments.

Any piece which uses the *uilleann* pipes is by definition microtonal due to the just intonation character of the instrument. Roger Doyle has perhaps been the most explicit in exploiting the microtonal aspects of traditional music in this context. *Under the Green Time* and 'Earth to Earth' from *Babel*, respectively utilise the microtonal

possibilities of the pipes and the fiddle. Since there is no score for either piece, one can only refer to recordings to understand this microtonal aspect. *Under the Green Time* exploits the microtonal possibilities of the pipes in a more extensive manner than any other piece I have encountered. Doyle emphasises notes which sound naturally 'out of tune' with equal temperament and he makes considerable use of *glissandi*. 'Earth to Earth' explores similar techniques on the fiddle; along with the use of the microtonal *unison double-stop* technique discussed in Chapter 2.4.2.8.

In Donnacha Dennehy's *Grá agus Bás* the ensemble varies between two tuning systems, equal temperament and the overtone series. The use of the overtone tuning system is directly linked to Dennehy's analysis of Iarla Ó Lionaird's singing.

> What I was really interested in was the way it shifted microtonally as well, the way basically a *Sean-nós* song, if you play it on a harpsichord or something, it's doing it a disservice, there's a lot of sliding in between. This had been in my music for a while, this microtonal shifting, whilst still being in a stable context.
>
> So I analysed the songs in melodyne as well. Within melodyne I could see the exact ornamentations and also how basically Iarla's tuning corresponded much more to the overtone series. So it was a perfect match with the way some of my music was going, say a piece like *Stainless Staining* which is for multi-tracked retuned pianos. It's this huge pulsing exploration of the overtone series. So *Grá agus Bás* is done a lot with these overtones, people playing harmonics and there's electronics that even amplify that as well.
>
> (Dennehy interview).

Dennehy specifies this tuning system very accurately in the performance notes that precede the score.

> The treatment of pitches (and harmony) in this piece oscillates between an equal tempered and a just-tuned *spectral* approach. Basically it is usually equal tempered when it is harmonically mobile, and just tuned when it is harmonically static. Most of the tuning indications are given in exact cents, because in the majority of cases they are specific overtones of a *G* or (more rarely) a *C* fundamental. I've decided to aim high in an optimistic fashion, but will accept approximations of course of these tunings. Nevertheless, many will be quite possible, and especially when they are in close proximity to the correctly tuned natural harmonic. One should endeavour to be at least within an 1/8 tone of the correct pitch. Performances with less than a 1/4 tone accuracy are still do-able but obviously sacrifice much of the colour of getting the right pitches. In any case, there is a deviation in writing it, where if the note is within 6 cents of an equal tempered note, it is considered equal tempered in this context.
>
> (Dennehy, Donnacha: *Performance notes to Grá agus Bás.* Unpublished score housed at the Contemporary Music Centre, 2007).

This aspect was further explored by Dennehy in his spectral setting of *Aisling Gheal* (2007) where the accompaniment is based entirely on the overtones Dennehy discovered in Ó Lionaird's singing.

I have found little reference to the microtonal aspects of traditional music in the context of contemporary concert music, other than in Dennehy and Doyle's work. It is worth noting that the young composer Ryan Molloy is currently pursuing doctoral composition studies in Queens University, Belfast with a particular emphasis on the microtonal aspects of traditional music.

Microtonality is a subtle aspect of my own work which I discuss further in Chapter 4. I have specifically notated microtonal inflections which are derived from fiddle playing in *String Quartet No.3 – The Keening* and *Tar Éis An Caoineadh*. It is also an un-notated aspect of most of the works of mine which feature traditional musicians, particularly *The Forest of Ornaments*.

3.3.5.7 The influence of modal aspects of traditional music

Many composers have used the characteristic Ionian, Mixolydian, Dorian and Aeolian modes in their works. Almost all the works I have referenced so far which utilise traditional instruments and melodies can be seen to have this influence. It is something of a minefield to attempt to analyse other works which do not use these instruments, melodies or imitative style writing in this context.

Seán Ó Riada's *Nomos No. 1 - Hercules Dux Ferrariae* (1957), for example, has many references to the mode of D Dorian, particularly in its main theme. D Dorian is a very characteristic mode in traditional music, yet it is also characteristic of early church music. Bodley (1981:36) dismissed the possibility of an influence from traditional music on the work when he wrote of the *Hercules Dux* theme that 'the type of modal melodic style it represents is not an Irish one.' Bodley goes on to suggest Ó Riada's interest in traditional music was minimal at the time he composed this work. Yet who is

to say that Ó Riada's choice of the mode of D Dorian was not directly influenced by the traditional music he heard and played in his youth? He did after all compose *The Banks of Sullane* just one year previously and it is based on a traditional tune.

Overall I feel any attempt to so ascribe the general use of modality to an influence from traditional music is purely speculative.

3.3.5.8 Abstract traditional music influences

In my contacts with various composers I asked some of them whether they felt traditional music had influenced them in a more abstract way. The following responses indicated some composers do feel a certain influence in this regard.

John Buckley

> I don't want to unduly stress the significance of the tradition in my own compositions. I have rarely used modal themes for example, though the use of devices such as perpetuum mobile with subtle variations and above all a consistently high level of ornamentation and melisma, I relate directly to traditional origins. Combined as they are however, with an entirely chromatic use of pitch (though very rarely serial) and varied textures, the result is not particularly 'Irish' sounding. The sources are more hidden than overt.
>
> (John Buckley, email correspondence, March 3, 2009).

Frank Corcoran

> I get the "colour" or "sheen " or "whine" of the pipes in eg. my computer-painted "TRADURRE - TRADIRE" , commissioned by Deutschlandfunk in 2004 . And elsewhere. Several lines in several disparate Corcoran orchestral works seem to call for accented grace notes and ornaments coming from "*crans*" and "*rolls*". And in "Quasi Un Lamento " for chamber orchestra in a few places is a long cry on an isolated accordion tone , pure sorrow. The spirit of Irish mourning and the "neá" are certainly detectable in several works where I don't even know myself that they're there - see the choral " Medieval Irish Epigrammes", for instance.
>
> (Corcoran interview).

Donnacha Dennehy

> *The Weathering* is based on a mediaeval Irish poem and there's a type of approach to the ornamentation in the vocal part, the centre, which is my initial kind of playing around with some Irish (sounds), but it sounds very, very different, but it is taken from that and then also some of the almost mediaeval sounding things at the start and at the end are taken from a droney idea of Irish music as well. So there's a few things in *The Weathering* which are done in a kind of unsystematic, 'by the way' in certain things but they're in it. And then *Stamp*, I was wanting to base it on mediaeval Irish polyphony if I could find it and I researched this and there isn't much. There's one scrap that I found which had this weird second thing in it. So I took that.
>
> (Dennehy interview).

Roger Doyle

> *Budawanny* just... sounds like but isn't'...in any way a trad melody. The keynote *F* stands right in the middle of the melody and not at its bottom. It would be unplayable by a trad musician I'd say. Can't think of any others.
>
> (Doyle interview).

Rachel Holstead

> I think in some ways every piece has a little bit of it (trad influence) in there. I'm a linear composer rather than a harmonic composer for sure and I'm sure that that comes from my traditional music background.
>
> (Holstead interview).

Benedict Schlepper-Connolly

> The playing of *slow air*s had a direct influence on the version of *Ekstase I* that you heard in the Chapel, Trinity, since the opening section of that piece was an air in itself. However, I have since cut that section of the piece and I don't think there's anything else in my music that makes such a direct connection.
>
> However, that is not to say that Irish traditional music has not been without impact on my musical language. I certainly have a deep affection for this tradition, and yet I have never made a conscious decision to use elements of this tradition. I have certainly never done so as any kind of political statement. But it is inevitable that the characteristics have made their way in through osmosis, as with the many other musical cultures I have been exposed to.
>
> If you were to isolate elements of Irish traditional music in my own work, I would focus on tempo, tuning and modality. As for tempo, I have always had a soft spot for *slow air*s, for their ecstatic intensity, and since much of my music to this point has been quite slow and meditative, it follows that some of the dramatic rhythmic characteristics of Irish traditional music will be evident. Regarding tuning, I am no longer so involved with microtonality, but in the times where I was preoccupied with this, I listened to much of *Sean-nós* singing and pipering for its microtonal qualities. As for modality: much of my music now can be said to be modal in some way, which is an obvious shared characteristic with Irish traditional music. However, as with all the above, this could be related to as many other musical traditions – for example, early chant singing in the European church music tradition.
>
> So there is no simple answer; like anyone else I am the product of a complex of experiences, many of which overlap. The origins of an idea or a technique may at times lie in an Irish tradition, but never consciously, and never from any ideological standpoint.
>
> (Benedict Schlepper-Connolly email correspondence, September 8, 2010).

3.3.5.9 Summary

The pitch aspects of traditional music have proved quite influential to a number of contemporary composers. There are six main methods by which this influence manifests itself and they are related to the use of and influence of traditional melodies; note flexibility; and the modal and microtonal aspects of traditional music. I have drawn on all these elements in my compositions.

4 COMPOSITIONS AT THE END OF THE PATH

> The composer has to forfeit, at some point, control over how the piece of music is going to exist in the world and it becomes an individual piece every time somebody lays their hands on it and replays them. Especially with Irish music, it's particularly so.
>
> Martin Hayes[1]

4.1 Introduction

The works I present with this dissertation represent a wide range of different styles of pieces, all of which were strongly influenced by traditional music. Some of the pieces are written exclusively for traditional musicians, some are written exclusively for classical musicians and some are written for a combination of traditional and classical musicians.

Most of the works also engage strongly with contemporary classical and experimental music developments, from minimalism to microtonal music and electro-acoustic music. Some of the works are melody based, with particular emphasis on the use of the modality and note flexibility common to traditional music. Other works are more abstract, with an emphasis on timbre, harmony, articulation and texture.

These works present an overview of the music I have composed since 2007 which has been strongly influenced by the research into traditional music that I have undertaken for this dissertation.

I have composed a number of other works during this period which were also influenced by traditional music. I have omitted them for reasons of space and their unsuitability for inclusion in the overall context of the dissertation. These excluded works are *Errigal Suite* (2007) for traditional Irish musician and two guitars, *Taibhreamh Ó Riada* (2007) for traditional music ensemble, *Toccata for Obama* (2009) for violin and guitar and *Hyper-Reel* (2010) for solo percussion.

[1] Hayes interview.

Detailed commentaries on the works I have included follow. In these commentaries I have taken varied approaches. In some instances I concentrate on the technical details of the compositions, with a particular emphasis on how the elements of traditional music which I described in Chapter 3 have influenced the music. In other instances I present a less technical approach, concentrating instead on the process behind the compositions, from consultations with the performers to rehearsal and revision processes and the utilisation of my ideas in relation to notation.

I have divided the works into four categories in relation to the way they are notated.

- Skeletally notated compositions
- Notationally detailed compositions
- Hybrid compositions.
- Compositions with no score

4.1.1 Skeletally Notated Compositions

These works were written entirely for traditional musicians who are used to learning music by ear and/or through skeletal notation. The detail in the notation is limited mainly to skeleton notation to allow the performers freedom to play the music as they would perform traditional music. Works in this category are *The Valley of the Lunatics, The Longest Reel, Five Études for Uilleann Pipes* and *Le Chéile is in Aonar.*

4.1.2 Notationally Detailed Compositions

These works were composed entirely for classically trained musicians who are used to learning music from the score. They are quite detailed in relation to ornamentation, phrasing and other aspects. Works in this category are *Tar Éis an Caoineadh* and *String Quartet No. 3 – The Keening*.

4.1.3 Hybrid Compositions

These works were composed for a combination of traditional and classical musicians. In most cases the notations for the traditional musicians are skeletal, whereas the notations for the classical musicians are more detailed. They are not as notationally detailed as the works written solely for classical musicians because an essential part of these works is that the classical musicians will listen to the traditional musician and they will vary the music according to how the traditional musician does. Works in this category are *Aontacht* and *Stories from the Old World*.

4.1.4 Compositions with No Score

The Forest of Ornaments does not have a score because it was composed through recording, editing, improvising and mixing techniques.

4.1.5 Recordings

Due to time and budgetary constraints none of the recordings I provide are definitive studio recordings. *The Forest of Ornaments* is the closest to a finalised studio recording. It remains to be mixed and mastered properly. *Le Chéile is in Aonar* is a demo recording which has not been professionally mixed, edited or mastered. The recordings of *Aontacht, String Quartet No. 3 – The Keening* and *Tar Éis an Caoineadh* are taken from the live premieres. I provide a MIDI recording (with real narration and my own singing) of *Stories from the Old World* for reference purposes only. The MIDI cannot possibly replicate the variations traditional musicians apply to music. This fact needs to be taken into consideration when listening to *Stories from the Old World* and *Uilleann Pipes Études No.2, 3 and 5*. The recordings of Études 1 and 4 were done by Mick O'Brien. The recordings of *The Longest Reel* and *The Valley of the Lunatics* were performed by me on the fiddle. My fiddle playing has its limitations, so these are by no means definitive recordings!

4.2 *Tar Éis an Caoineadh* (2007) and *The Longest Reel* (2009)

Two contrasting pieces for solo violin/fiddle

The Longest Reel was composed for the traditional fiddler Siobhán Peoples with her personal style in mind. *Tar Éis an Caoineadh* was composed for the classical violinist Ioana Petcu-Colan but it was not composed specifically for her playing style. It was composed in a style highly influenced by four traditional fiddlers; James Byrne, Con Cassidy, Danny Meehan (b.1940) and Caoimhín Ó Raghallaigh. In this work, I ask the performer to somewhat imitate each of these musician's styles. Each work is a substantial solo piece that challenges the performer to move outside of their usual performance practices. This is a comparative study of the pieces with reference to the different methods required to perform them.

4.2.1 Notational Aspects

The differences in my approach to notating music composed for traditional and classical musicians are most clearly demonstrated in these works. *The Longest Reel* is almost entirely notated in skeleton notation to allow the performer the freedom to vary and ornament as they normally would.

There are two main sections where there is more detailed notation. In these sections I have indicated specific forms of ornamentation, *glissandi*, double-stops and dotted rhythms. The opening of the piece is the most prominent example of this approach, where all these elements are present.

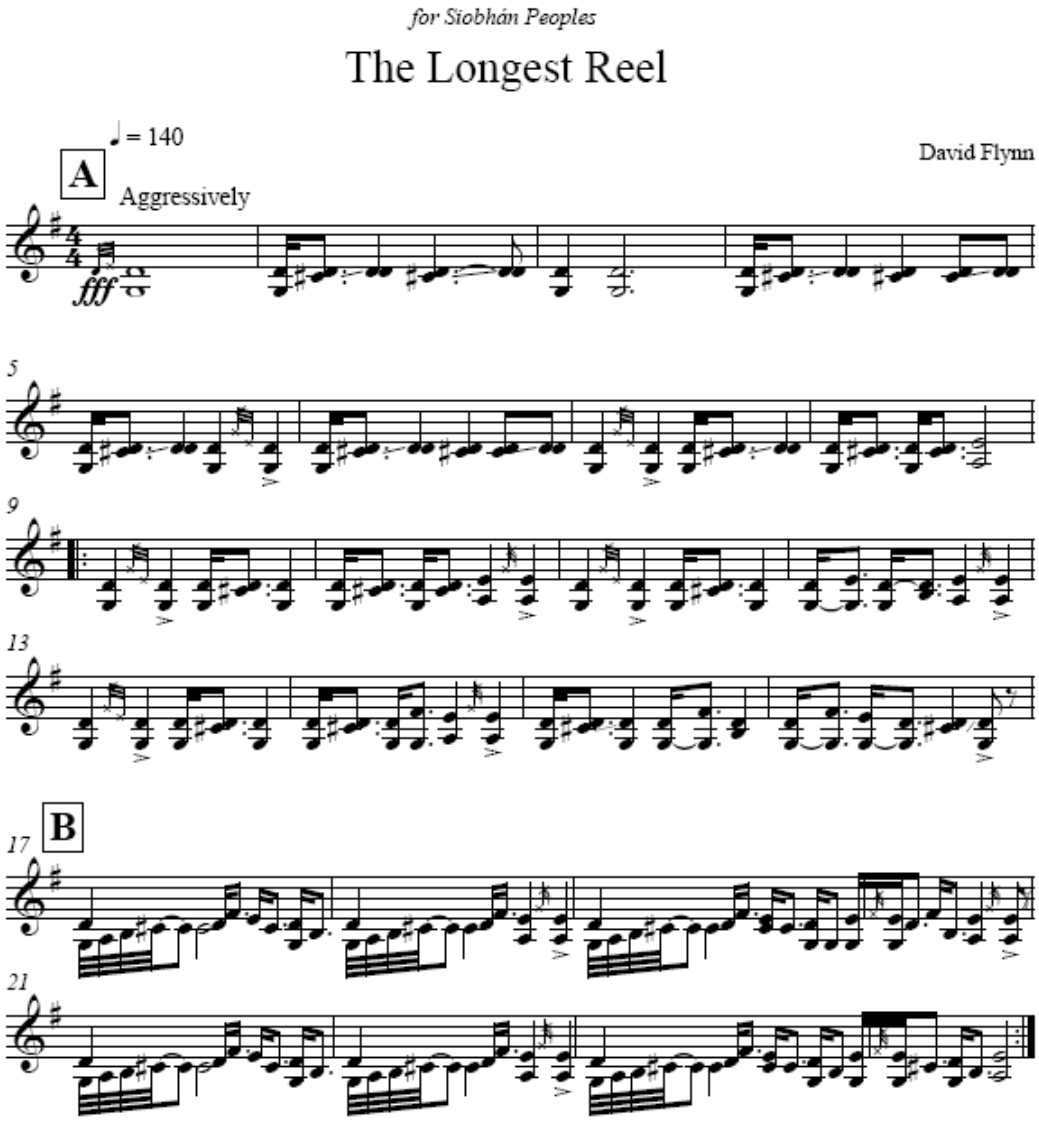


Figure 4.1 Flynn, *The Longest Reel,* 1-24.

There is a shorter section in the piece where I have notated *microtonal double-stops*, *cuts* and *trebles*.

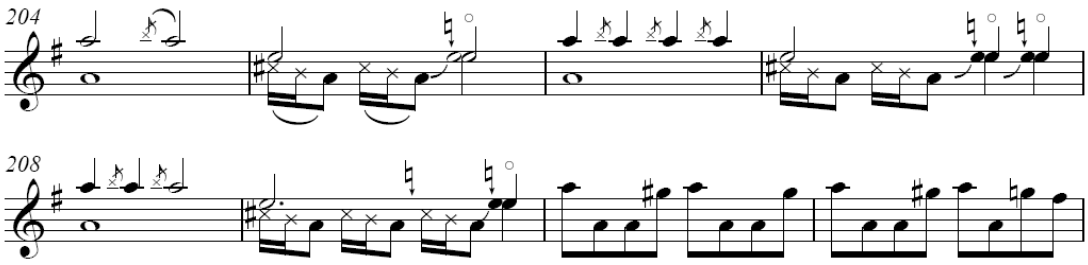


Figure 4.2 Flynn, *The Longest Reel,* 204-211.

This contrasts with much of the rest of the piece, such as section D, where it is just skeleton notation. The performer is expected to vary this music according to traditional music practices.

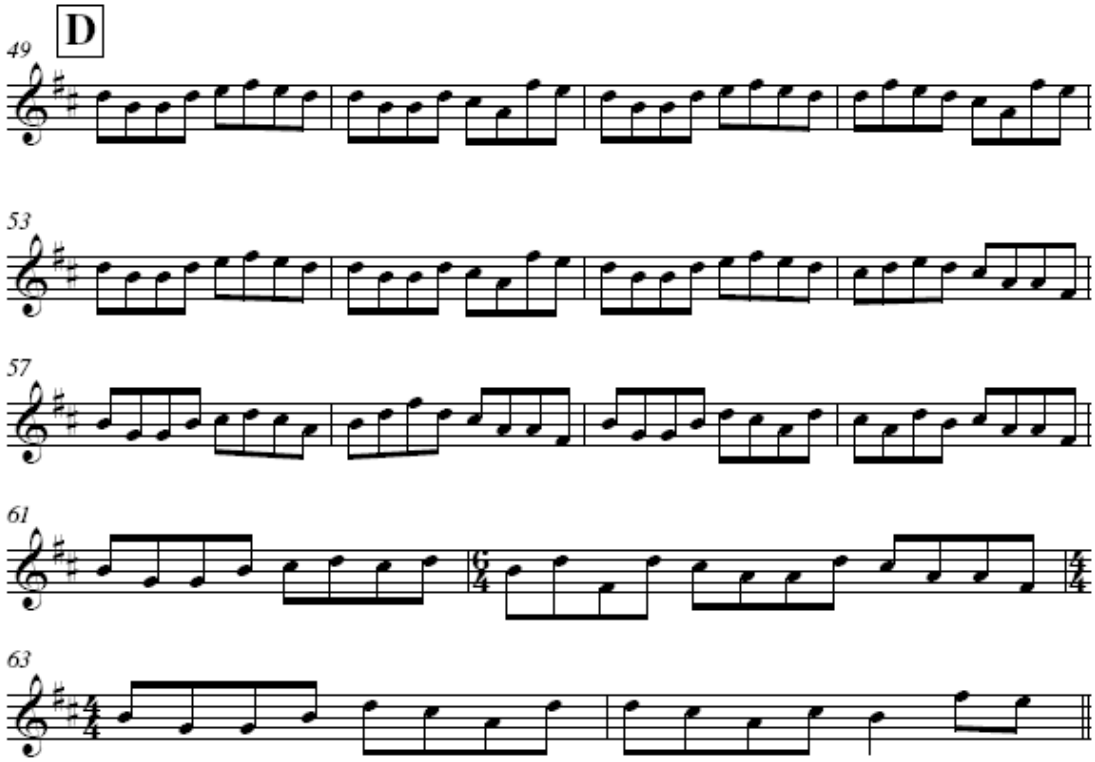


Figure 4.3 Flynn, *The Longest Reel*, 49-64.

This section is in the style of a *reel*. In *Tar Éis an Caoineadh* there is a section in the style of a *reel* where the notation is much more detailed than the previous example from *The Longest Reel*.

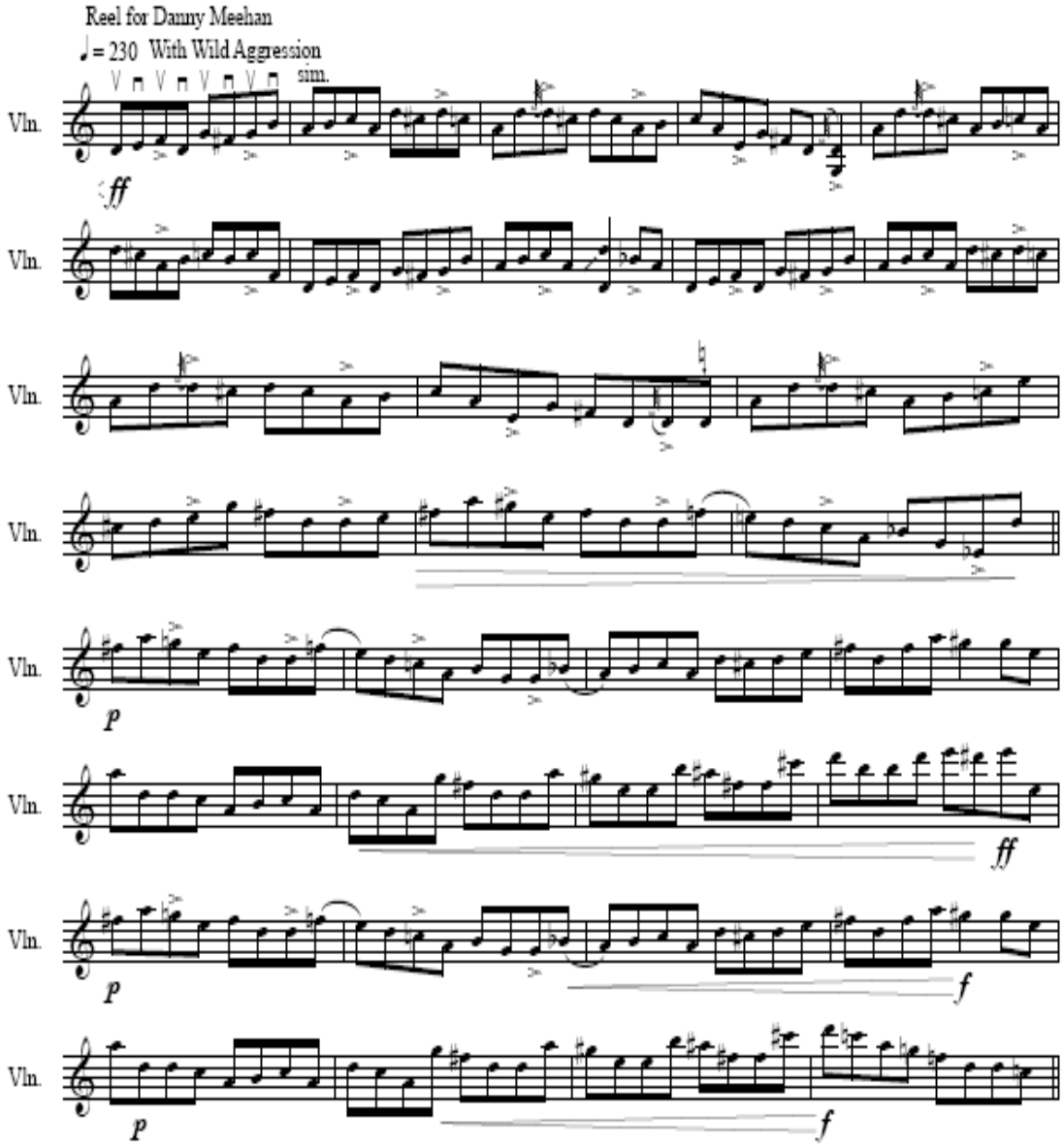


Figure 4.4 Flynn, 'Reel for Danny Meehan' from *Tar Éis an Caoineadh*.

I have notated bowing, ornamentation, dynamics, articulation, microtones, melodic variation etc. The main reason for notating all these aspects is to give a musician with no training in traditional music some of the information they need to replicate (to some extent) the traditional fiddle styles I mention in the piece. I do not expect the performers to perfectly imitate Danny Meehan's fiddle style, rather the notation is intended to allow the performer to somewhat echo Meehan's style, yet maintain their own voice whilst performing a piece of contemporary classical music.

4.2.2 The Learning Process

Tar Éis an Caoineadh has been performed twice to date by Ioana Petcu-Colan.[2] She learnt it with the assistance of recordings I gave her of the fiddlers who inspired the piece. She found these recordings essential to the learning process.

> The notation makes it easier but I find the only way to try to recreate it at all successfully is to listen a lot and try to parrot until it gets under the fingers rather than learning from music over and over.
>
> (Petcu-Colan interview).

Aural demonstration of some of the techniques used in the piece was essential in assisting Petcu-Colan to recreate some of the sounds I have notated in the score. When I sent her the score, I also sent her recordings of Caoimhín Ó Raghallaigh, Con Cassidy, Danny Meehan and James Byrne. By referring to these recordings she was able to replicate traditional fiddle styles in a manner which I have not heard from any other musician who has not performed traditional music to a significant extent. Her training is entirely in the classical tradition; however she has an excellent ear and a very willing attitude when it comes to experimenting with techniques which are unconventional to her. Her experience working with Martin Hayes and Dennis Cahill on *Music for the Departed* undoubtedly helped her in approaching *Tar Éis an Caoineadh*:

> I think it (*Music for the Departed*) opened my eyes and ears to trad and gave me a new appreciation of the genre. Every new collaboration helps my playing, just meeting new people and seeing how they work and approach music is a revelation but to do so through a relatively unfamiliar medium was even more interesting.
>
> (Petcu-Colan interview).

In Chapter 3.1.1.2 I discussed the differences between fiddle and violin techniques. The classical violinists I have worked with find it very challenging to change their technique to something similar to the techniques traditional fiddlers use. Petcu-Colan was required to bow on the string almost constantly for twelve minutes without a pause. This is something classical musicians would rarely do. Standard violin technique usually

[2] These performances took place in The Printing House, Trinity College Dublin: May 29, 2008 and the Gheorghe Dima Academy, Cluj, Romania: March 17, 2009.

involves variation between on and off string bowing. I also asked her to play without *vibrato* and *rubato* and to stay in the first position using open strings as much as possible. The ornamentation techniques in the piece are also very different from ornamentation techniques usually used in classical music. These technical requirements combine to make *Tar Éis an Caoineadh* a very challenging piece.

The Longest Reel provided some contrasting challenges for Siobhán Peoples. Perhaps the most difficult aspect of it is the process of learning an extended piece of new music which has never been performed by another musician before. Few of the elements in the score would be difficult for a traditional musician to perform in isolation, or within the boundaries of a short tune. The real challenge lies in learning the piece as a whole, indeed Peoples expressed to me how she would need considerable mental preparation before attempting to learn the piece. Traditional musicians are used to learning relatively short pieces one at a time and by ear. With this piece, the musician is required to learn a piece of approximately eight minutes duration with sheet-music as the main reference point. I did provide Peoples with a MIDI recording of the piece; however she expressed a desire to learn it from the sheet-music. This is perhaps reflective of the fact that she gained good music reading skills by undertaking the dual traditional/classical music degree course at *University College Cork*. In future, I am sure the recording she is going to make will be the main reference point for other traditional musicians who may wish to learn the piece.[3]

[3] This piece has yet to be performed or recorded by Siobhán Peoples' at the time of submitting this dissertation. I provide a recording of myself performing the piece for reference purposes. My fiddle playing skills are very limited compared to Siobhán Peoples'!

4.2.3 Use of Traditional Dance Music Styles

Both of these pieces are almost entirely based on traditional Irish dance music styles. *Tar Éis an Caoineadh* has four main sections which are based on traditional dance forms: a *polka*, *highland*, *reel* and *jig*. *The Longest Reel* is almost entirely based on *reel* rhythms, with the exception of the opening which is based on the *highland* rhythm. The *highland* rhythm is characterised by the 'Scotch snap' rhythm of a semiquaver followed by a dotted quaver, as found at the beginning of section C in *The Longest Reel*.

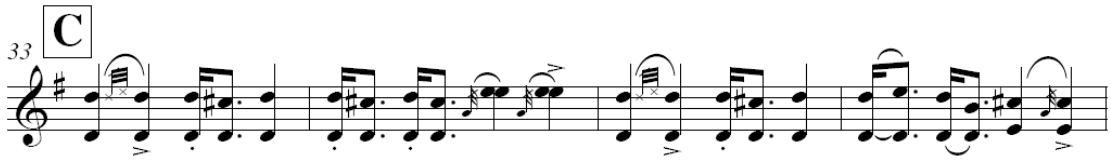


Figure 4.5 Flynn, *The Longest Reel*, 33-36.

One section of *Tar Éis on Caoineadh* is also based on the *highland* rhythm.

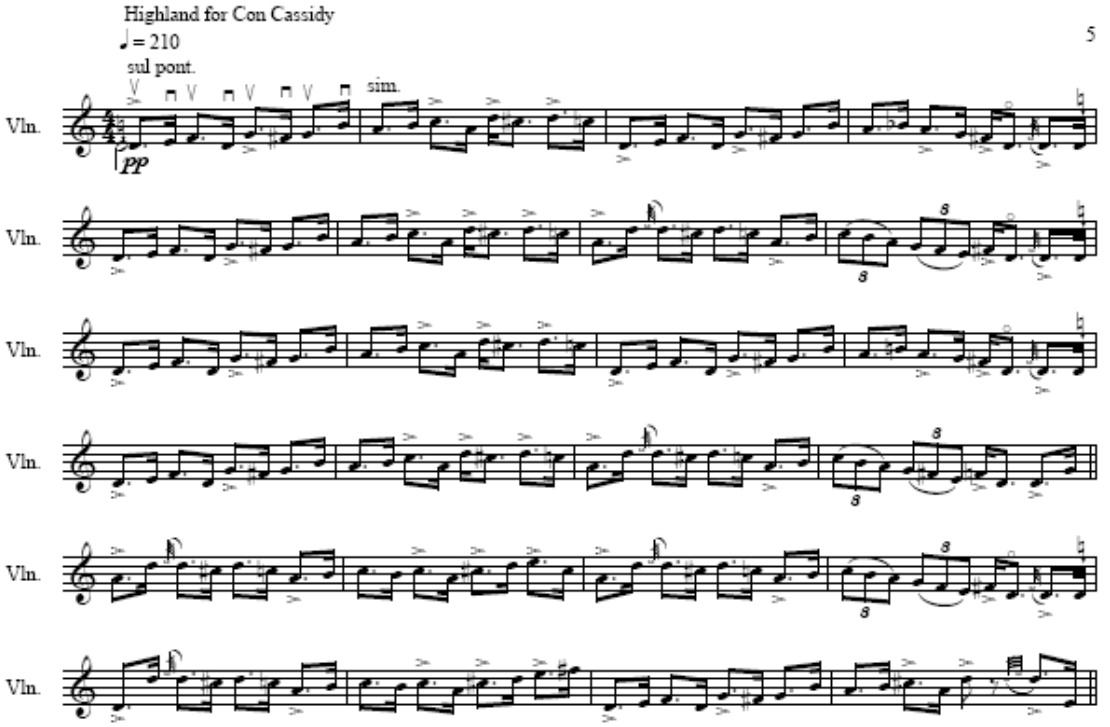


Figure 4.6 Flynn, 'Highland for Con Cassidy' from *Tar Éis an Caoineadh.*

This *highland* section eventually morphs into 'Reel for Danny Meehan'.

Reel rhythms dominate the rest of *The Longest Reel*. There is some deviation from the usually notated 4/4 metre of *reels* in this piece. The 4/4 notation is used because traditional musicians who read music are used to seeing *reels* notated in 4/4. Sometimes the 4/4 bars are more related to the 8/8 division of 3+3+2, as in bar 157.

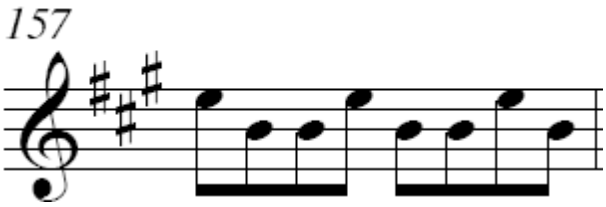


Figure 4.7 Flynn, *The Longest Reel*, 157.

I chose not to beam the stems in a 3+3+2 division as I felt this would cause undue confusion for a traditional musician, since most traditional musicians who read music are usually used to seeing *reels* notated in groups of two or four quavers. The nature of traditional fiddle bowing techniques means the 3+3+2 rhythm will come out naturally in bars such as this. The use of the open E string also enhances this effect.

The opening of *Tar Éis an Caoineadh* is dominated by *polka* rhythms. I notated very specific bowing and phrasing instructions in order to assist the performer in interpreting the *polka* section.

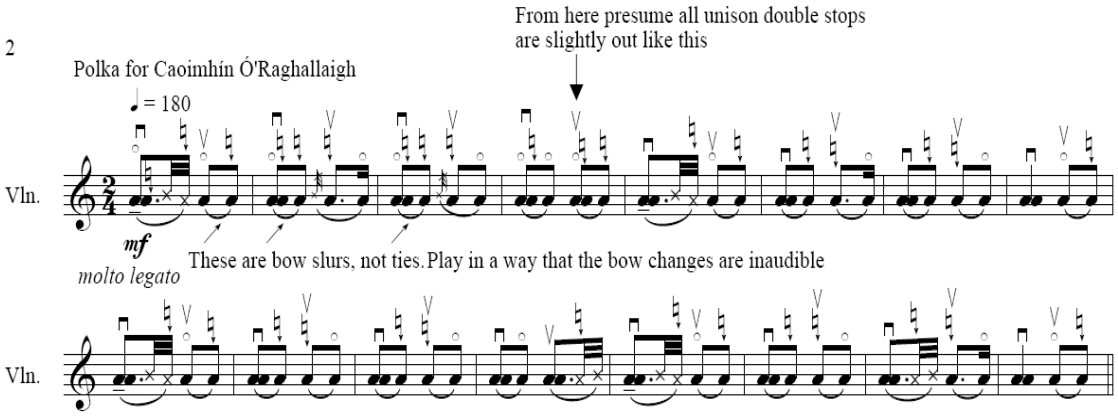


Figure 4.8 Flynn, Beginning of 'Polka for Caoimhín Ó Raghallaigh' from *Tar Éis an Caoineadh.*

One aspect which I did not originally indicate in the score was the undulating dynamics common to Kerry *polka* playing. I demonstrated this to Ioana Petcu-Colan in rehearsal and through recordings. I have since revised the score to indicate these undulating

dynamics. The final section of *Tar Éis an Caoineadh* is based on *jig* rhythms. This section is discussed further on in relation to its pitch aspects.

4.2.4 Extra Beat Insertion

Extra beat insertion (discussed in Chapter 3.3.3.) is found in *The Longest Reel* on a number of occasions. The first instance is at bar 62, where it occurs due to a repetition of the four note phrase starting on the fourth quaver in the bar.

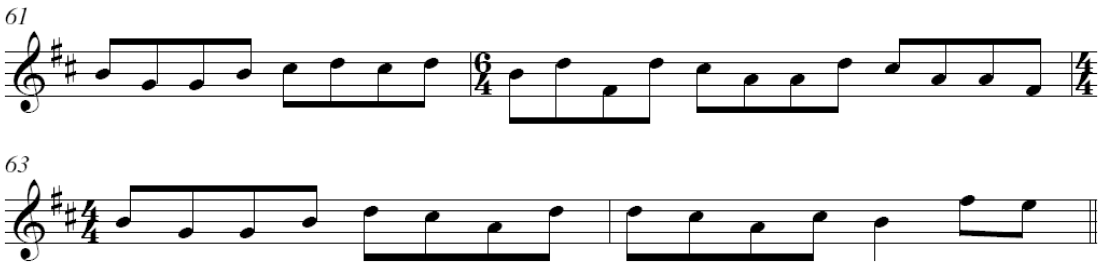


Figure 4.9 Flynn, *The Longest Reel,* 61-64.

Extra beat insertion is a major aspect of the section marked **I**, where a repeating phrase is elaborated upon by the insertion of extra bars in 2/4.

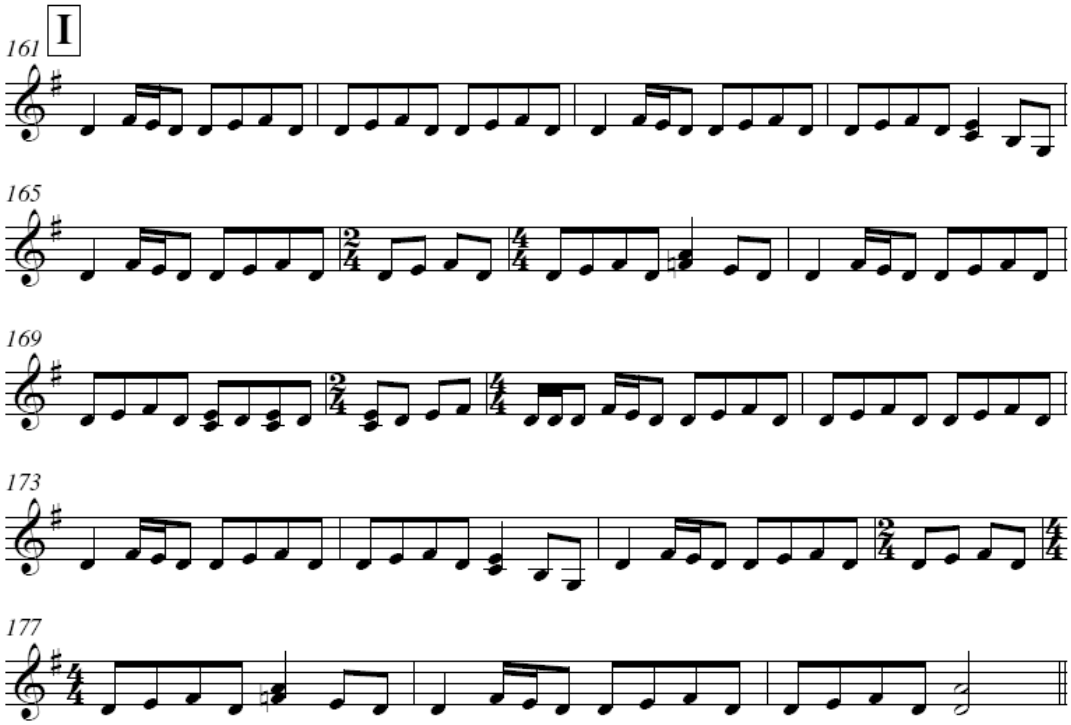


Figure 4.10 Flynn, *The Longest Reel,* 161-179.

Extra beat insertion occurs in the *jig* section of *Tar Éis an Caoineadh* where occasional 3/8 bars interrupt the regular 6/8 metre.

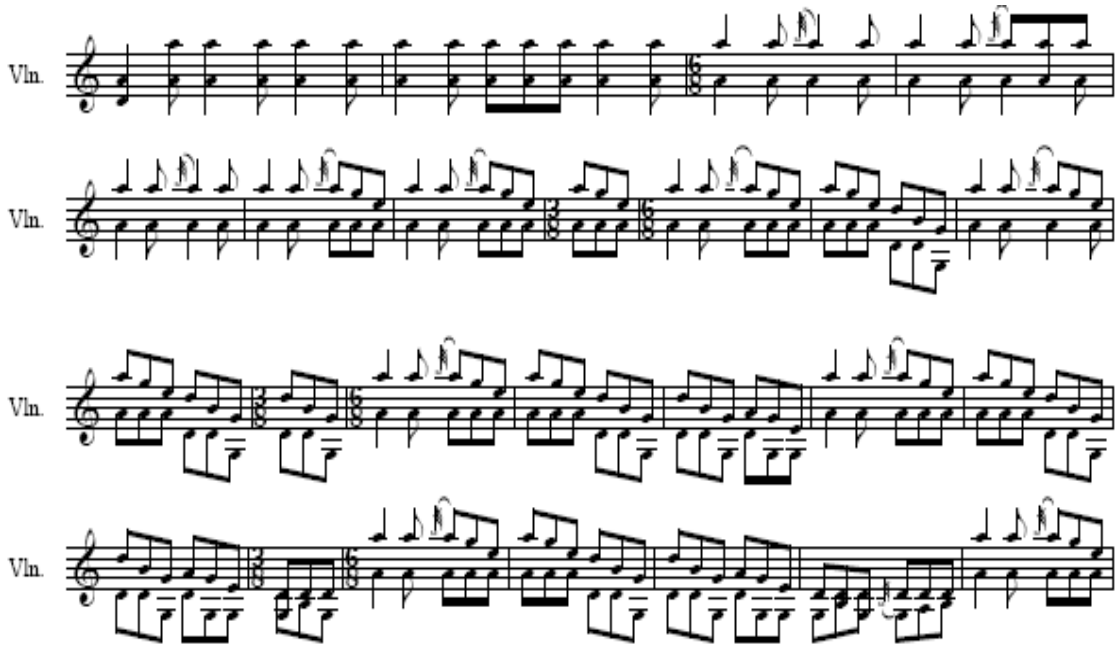


Figure 4.11 Extra beat insertion in *Tar Éis an Caoineadh*, page 8.

4.2.5 Ornamentation

Ornamentation is a vital part of both pieces; however it is only detailed in the notation of *Tar Éis an Caoineadh*. In *The Longest Reel* all the sections of the piece would be subjected to ornamentation techniques in performance, because it is natural for a traditional fiddler to do so. I strongly encourage any performer of this piece to ornament it freely.

Ornamentation is notated in great detail in *Tar Éis an Caoineadh* because it is written for a classical violinist. Only a select number of violinists who have classical and traditional training could perform *Tar Éis an Caoineadh* completely authentically. Musicians such as these would not need such detailed notation as they could spontaneously add their own ornamentation to the piece. I felt it was necessary to write in ornamentation since Ioana Petcu-Colan and indeed most violinists do not have this level of traditional music training. This written in ornamentation is at its most detailed

state on page 7 of the score during the section labelled ‘Reel for Danny Meehan’. Numerous ornaments are notated here, including various forms of *rolls*, *trebles*, *cuts* and *glissandi*.

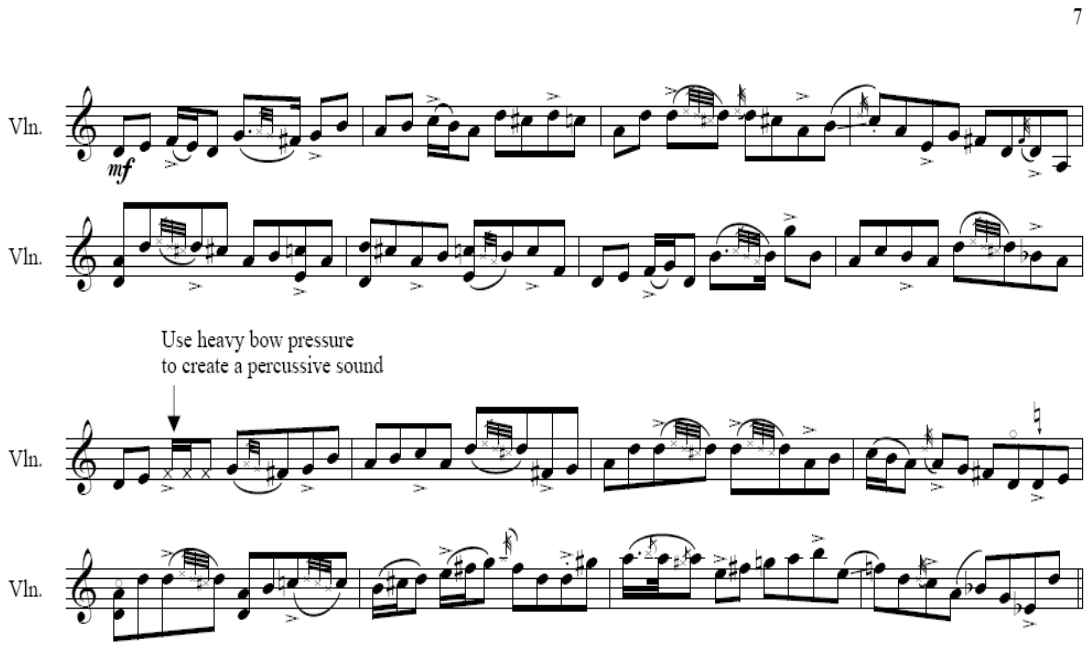


Figure 4.12 Flynn, *Tar Éis an Caoineadh,* detailed ornamentation on page 7.

4.2.6 Pitch Aspects

Both of these pieces draw considerably on pitch aspects derived from traditional music such as double-stops, modality, note flexibility, microtones and newly composed melodies in traditional rhythms.

Tar Éis an Caoineadh is mainly influenced by Kerry and Donegal fiddle styles and there is a large amount of double-stopping in the piece as a result of this, particularly in the *polka* and *jig* sections which both contain almost constant double-stopping.

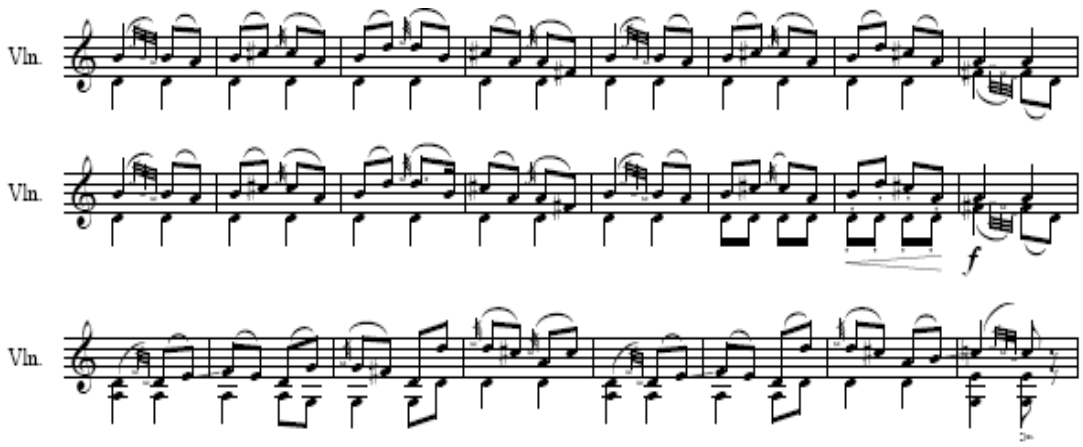


Figure 4.13 Flynn, *Tar Éis an Caoineadh,* Polka section example.

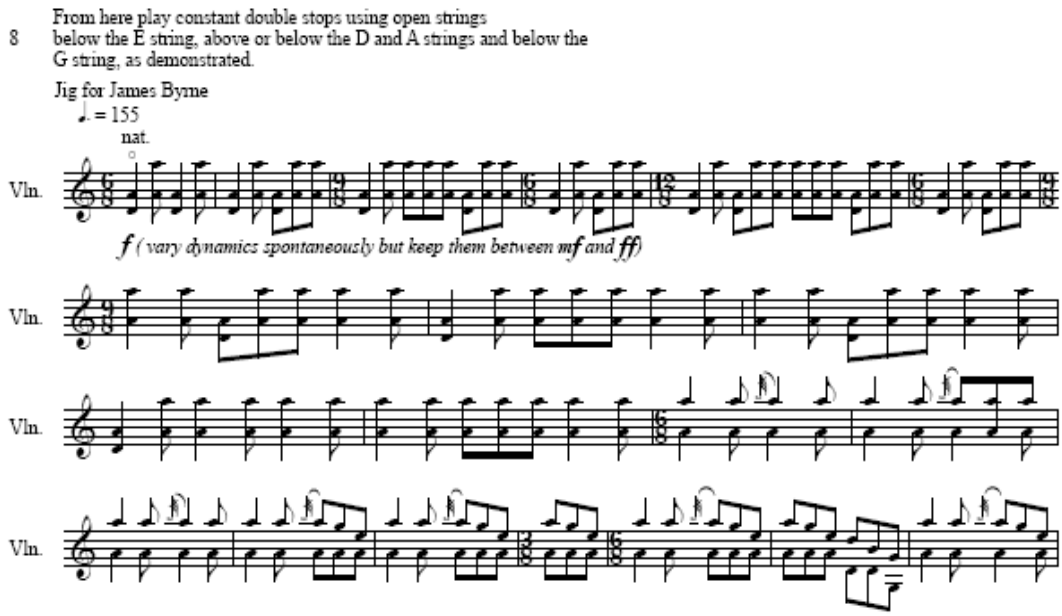


Figure 4.14 Flynn, *Tar Éis an Caoineadh,* Jig section example.

In *The Longest Reel* I have indicated double-stops where I feel the double-stop sound would have a good effect, particularly in section **N** which is influenced by two factors. Siobhán Peoples only has full use of her first two left-hand fingers, so these double-stops are all easily playable using the first and second fingers only. The double-stops are also influenced by the fiddle playing of Thady Casey (d.1971). Casey often played double-stops in runs of fifths. It is quite an unusual sound in the context of traditional music, perhaps because the movement of parallel fifths does not relate to what might be considered 'correct' in conventional harmonic terms.

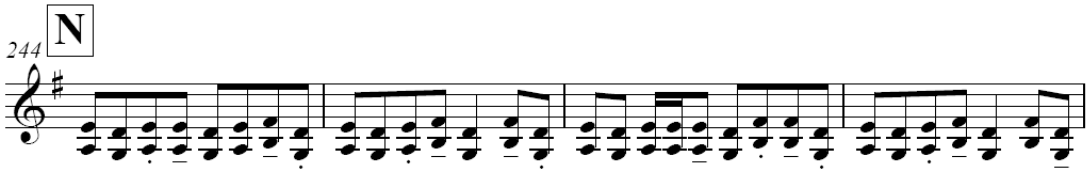


Figure 4.15 Flynn, *The Longest Reel*, 244-247.

Modality is a key feature of these works. *Tar Éis an Caoineadh* is primarily based around three modal centres, E, A and D. The opening of the piece varies between colourings of the open E, A and D strings. This anticipates the general modal centres of the piece. The following example demonstrates how these notes are the only ones used in this opening, apart from the ornamenting notes.

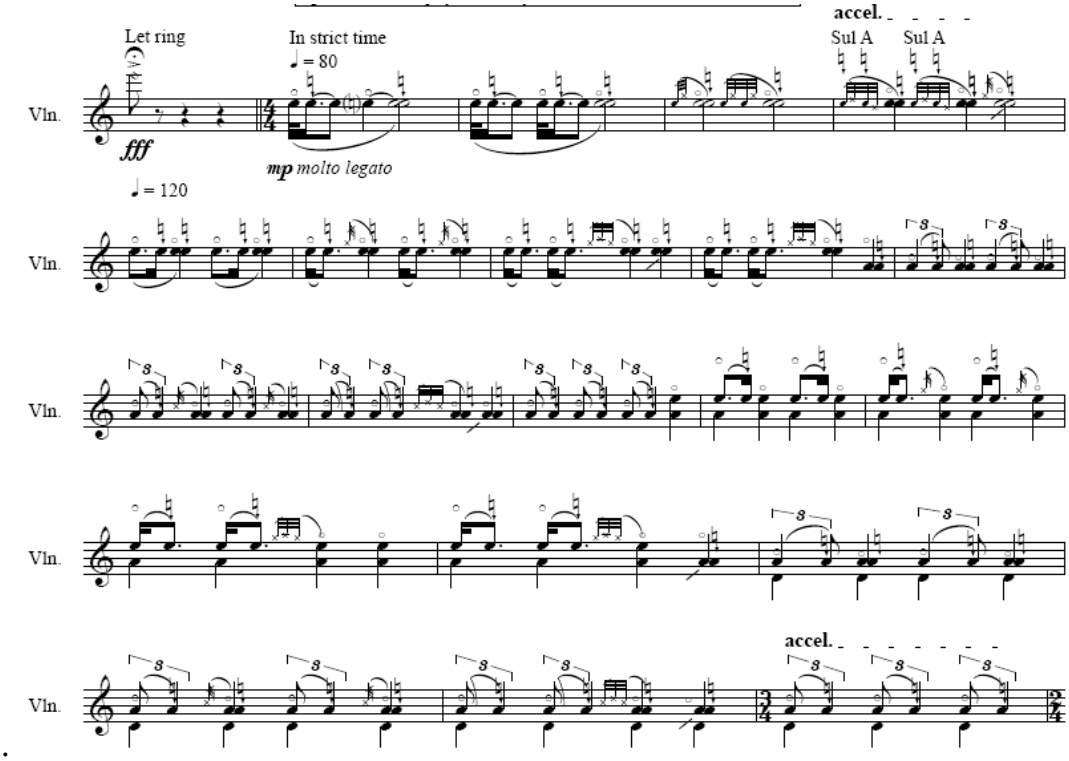


Figure 4.16 Flynn, *Tar Éis an Caoineadh*, 26-46.

The *polka* section is based upon a three part *polka* I composed. Each part is in a different mode. The first part is in G Lydian. The open D string drone that accompanies it might initially suggest D Ionian, however removing this drone demonstrates the melody is in G Lydian, beginning on the 3rd of that mode.

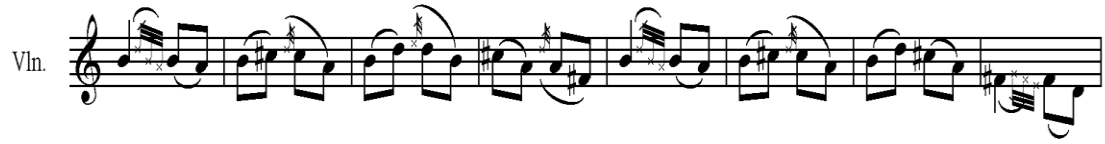


Figure 4.17 Use of G Lydian mode in *Tar Éis an Caoineadh.*

The second part of the *polka* uses the flexible 'Irish' mode rooted on *D* where the notes *F, F-sharp, C* and *C-sharp* are all used.

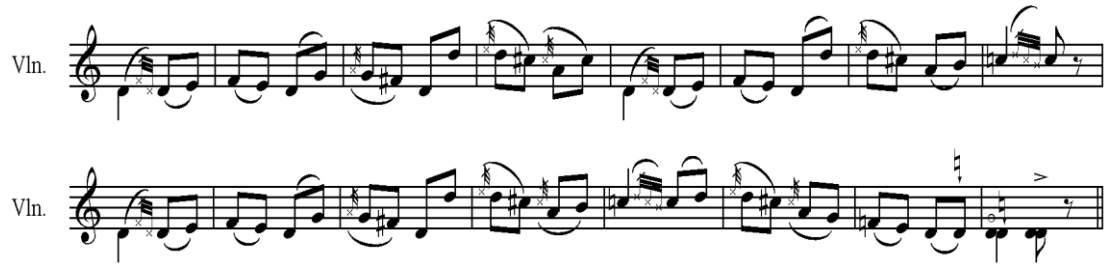


Figure 4.18 Use of D Irish flexible mode in *Tar Éis an Caoineadh.*

The third part of the *polka* is in D Lydian.

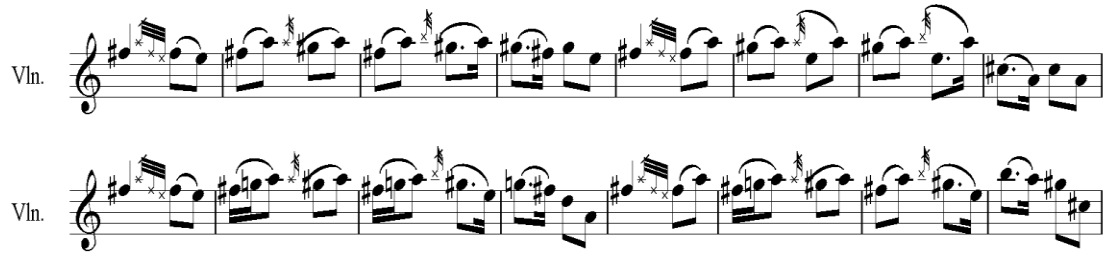


Figure 4.19 Use of D Lydian scale in *Tar Éis an Caoineadh.*

Towards the end of this melody the *G-sharp* is changed to *G-natural*. This change is only brief and does not really signify a change to D Ionian. It is more reflective of the note flexibility of traditional music.

The *highland* and *reel* in *Tar Éis an Caoineadh* are rooted in D and strongly based upon note flexibility. This is particularly apparent in the following section where all twelve notes of the chromatic scale are used. The way they are used is drawn from

the Irish tradition in that there are no passages where there are three or more notes played in chromatic succession.[4]

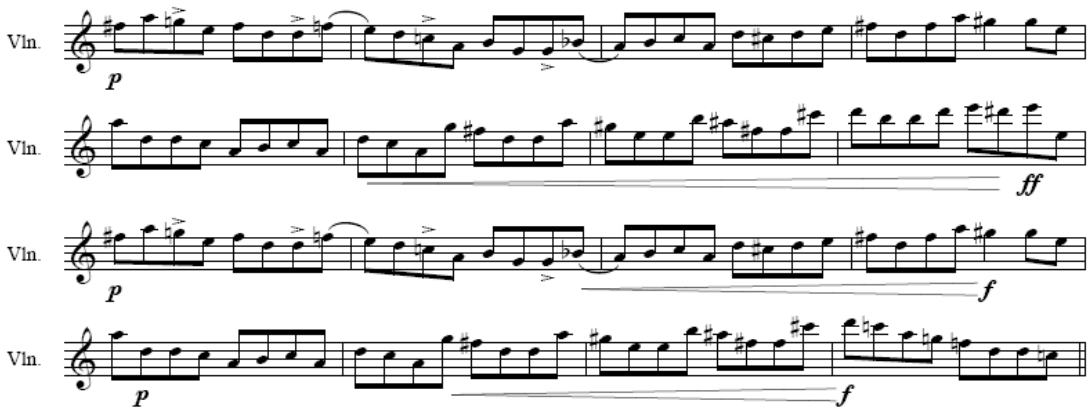


Figure 4.20 Note Flexibility in Flynn, *Tar Éis An Caoineadh.*

Note flexibility also occurs in *The Longest Reel*. In the following example there is flexibility around the note *G*.

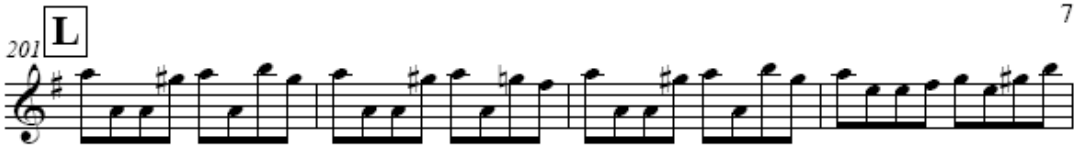


Figure 4.21 Flynn, *The Longest Reel,* 201-204.

The following example contains flexibility around the notes *F, C* and *G*.

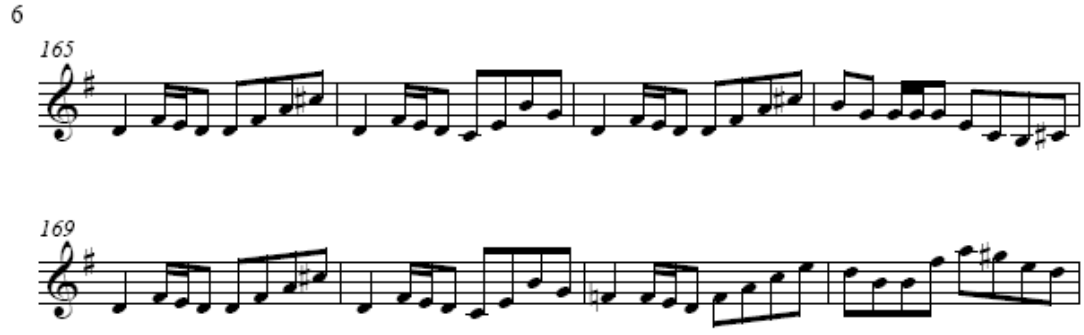


Figure 4.22 Flynn, *The Longest Reel*, 165-172.

I have notated microtones in just one section of *The Longest Reel*, (Figure 4.2). In performance it is highly likely that Siobhán Peoples, or indeed any accomplished traditional fiddler, would use microtones elsewhere in the piece. 3rds and 7ths are most

[4] Chromaticism is rarely used in traditional Irish music.

likely to be treated in this way according to the principles of the intonation aspects of traditional music which I described in Chapter 3.3.1.

In *Tar Éis an Caoineadh* the slightly flat microtonal note used in the ornament I call a *unison double-stop* occurs in many sections, including a large part of the opening.

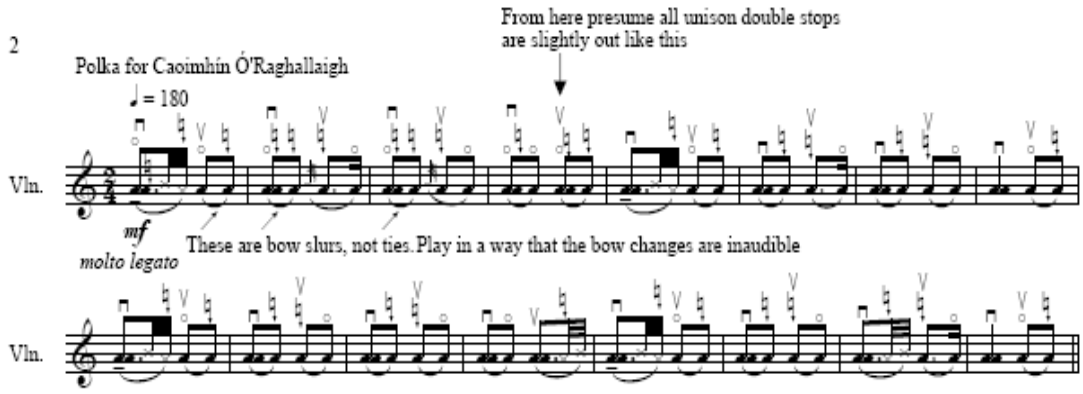


Figure 4.23 Unison double-stop microtones in *Tar Éis an Caoineadh*, page 2.

These microtonal ornaments occur in all the subsequent sections of the piece, right up to the final bars.

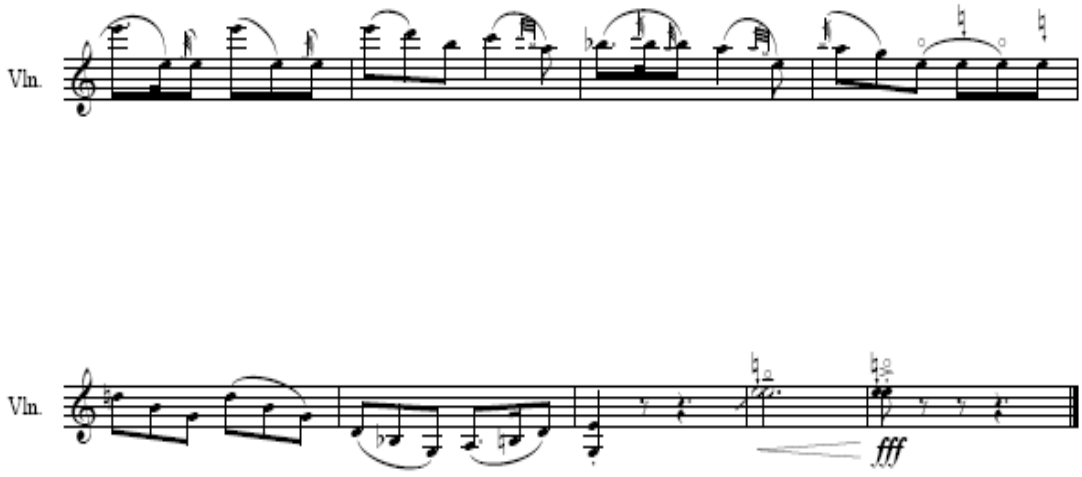


Figure 4.24 Microtonality at the end of *Tar Éis an Caoineadh*.

In both these works I use a melodic language which develops the technique of temporary modal modulations through note flexibility. I have used the technique in tandem with traditional dance rhythms to create newly composed melodies that vary between imitative style writing and more original material.

The final *jig* section of *Tar Éis an Caoineadh* is based upon a minimalist additive process, whereby fragments of a newly composed *jig* are gradually fused together through a process of playing the first few notes of the *jig*, then repeating these notes and adding another few, then repeating all those notes and adding more until the point where the complete *jig* is played.

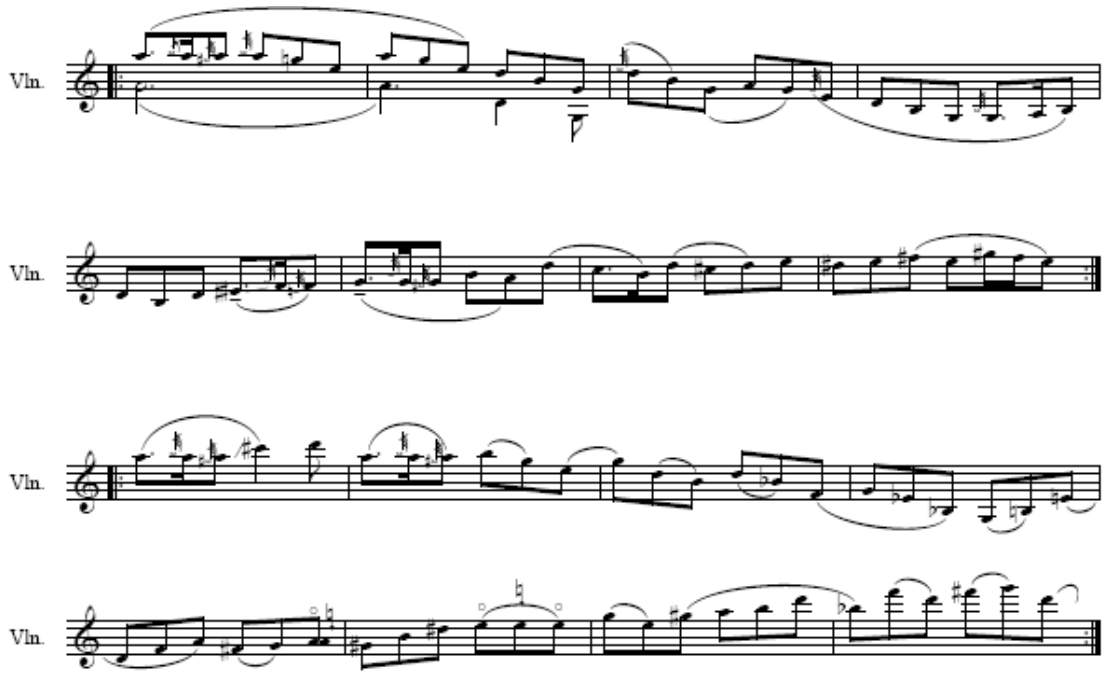


Figure 4.25 Jig at the end of *Tar Éis an Caoineadh*.

Fragments of this *jig* could be seen as imitative in style, particularly the opening two bars. Taken as a whole, the tune is an example of original melodic writing in *jig* form, as it uses almost the full range of the violin alongside a gradual descending and ascending structure and considerable use of note flexibility.

The Longest Reel does not go to such extremes of range and note flexibility. Yet, there are many instances in the piece of melodic writing in traditional rhythmic forms which goes outside the usual melodic boundaries of traditional music. Section **O** is one such example. This section is primarily based on major 7th arpeggios. This melodic movement is not characteristic of traditional music, nor is the implied harmonic

progression from E major to F major7 to G major7 to A major7 that occurs between bars 253-254 and 260-263.

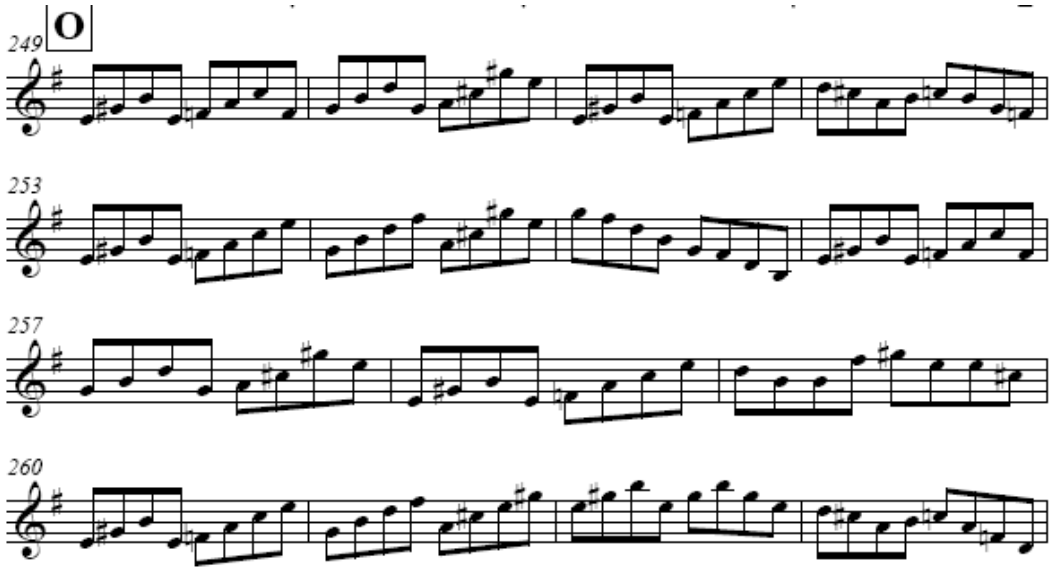


Figure 4.26 Major 7th arpeggios in Flynn, The Longest Reel, 249-263.

This section maintains its links to a traditional melodic language due to the motif at bar 252 and 263 which is an adaptation of the common motif which I labelled 'The modulating linking motif' in Chapter 3.3.3.2.2.

A pitch related aspect of *The Longest Reel* which provides a challenge for a traditional fiddler is the sections where the pitches used mean the player must go out of first position. This only occurs in two sections of the piece, so it would just be a matter of practice before most accomplished fiddlers could reach these notes with ease. The high *D-sharp* and *E* between bars 94 and 95 are outside first position, however the use of open *E* strings ensures the positional change is not too challenging.

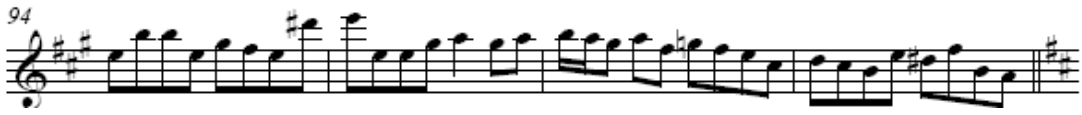


Figure 4.27 Flynn, *The Longest Reel,* 94-97.

Towards the end of *The Longest Reel* there is a build up of arpeggiated patterns which are not particularly characteristic of traditional music. The patterns gradually ascend to

high *C-sharp*'s and *D* in bars 330-331. This is perhaps the most technically challenging part of the piece.

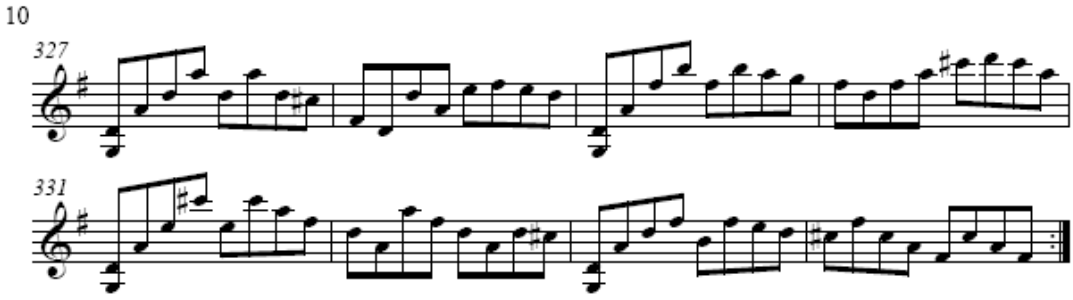


Figure 4.28 Flynn, *The Longest Reel,* 327-334.

4.2.7 Summary

These works share many common traits. They are built on rhythm and pitch-based aspects of traditional music, yet they stretch these aspects more than would be usual for traditional music. The length of the pieces and the level of note flexibility in particular make these works fit more in the realms of contemporary concert music than traditional music. This is particularly true of *Tar Éis an Caoineadh* as it is written for a classical violinist. Few traditional fiddlers would be capable of performing this piece. *The Longest Reel* is more in keeping with traditional music practices, as it is composed for a traditional musician and most accomplished fiddlers would be able to play it. Few classical violinists would be able to perform it, as many of the techniques required to perform the piece are not notated in the score and are outside the common language of classical musicians. The melodic language of the piece is at times quite removed from traditional music, particularly through the use of melodic movement based on major 7th arpeggios.

4.3 *String Quartet No. 3 - The Keening* (2007)

String Quartet No.3 - The Keening was composed for a classical string quartet; two violins, viola and cello. It is an example of a notationally detailed composition. The piece contains musical and literary influences from traditional Irish culture.

4.3.1 Literary Influences

Breandán Ó Madagáin's book *Caointe agus Seancheolta Eile - Keening and other Old Irish Musics* strongly influenced this piece.[5] The book is about music, so to say it is a non-musical influence is strictly not true, but what I mean is that it is Ó Madagáin's written text that was inspirational rather than any actual music I have heard.

Ó Madagáin describes the ancient Irish singing style called *Caoineadh* (*Keening*). According to Ó Madagáin's description there is a lot more to keening than the piercing cries it is often associated with. He describes three main stages to the *keen* and I have taken these descriptions as inspiration for the three movements of the string quartet.

I. Ag Monabhar/Murmuring

> The mourner commences by some deep murmuring, repeating over and over the name of the deceased, such as 'Thomas, Thomas, my sorrow and my loss.
>
> (*Ibid.*).

Just as the mourner commencing 'by some deep murmuring', the piece opens with the cello playing low pitched music from the 'Table of Murmurs'. The table of murmurs is a series of short phrases based on open string drones and slight dissonances created by playing a note slightly flatter than the open string on the string below the open string, either with or just before/after the open string. As an example, letter G from the 'Table of Murmurs' follows.

[5] Ó Madagáin, Breandán: *Caointe agus Seancheolta Eile - Keening and other Old Irish Musics.* Connemara: Cló Iar-Chonnachta, 2005.

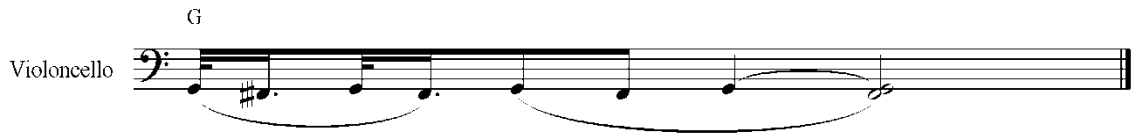


Figure 4.29 Flynn, *String Quartet No.3 – The Keening.* Cello part of the Table of Murmurs, letter G.

This is an adaptation of the microtonal *unison double-stop* ornament. All these 'murmurs' are variations on the phrase above, so the combination of a hushed dynamic with the playing of the table of murmurs echoes the text.

II. Reacaireacht/Dirge

> The lone keener (more usually a woman) sang her verse to old reacaireacht music, chant like, many syllables on the same note, with little ornamentation and ending on a falling cadence.
>
> (*Ibid.*).

The viola is given the role of the lone keener in this movement. I have created a gradually unfolding melody rooted around the note *A*. Most of the viola part is on this single *A* note, in this case a natural harmonic. There is little ornamentation of this note, as per the text. Other notes are used so as to ensure the viola part is not too monotonous, but they never go outside the following pitches.

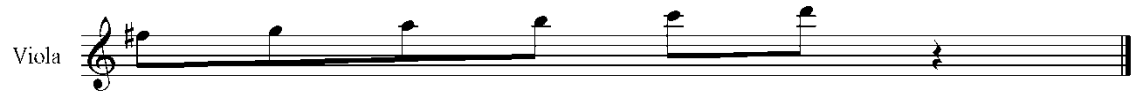


Figure 4.30 Pitches played by the viola in Movement II of *String Quartet No.3 – The Keening.*

The overall effect I wanted to create was a dirge-like quality, as befits the title of the movement: therefore dramatic melodic leaps were out of the question. The movement ends with a falling cadence as the text suggests, but the inclusion of the notes *G* and *F-sharp* in the final chord ensure it is an unresolved cadence.

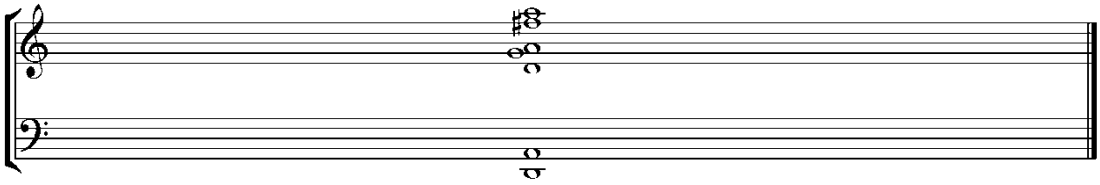


Figure 4.31 Final chord of Movement II of *String Quartet No.3 – The Keening.*

This unresolved harmony is characteristic of *uilleann* piping. The harmonies the violins and cello play with the viola melody are all based on such harmony.

III. Gol/Cry

> The gol...was the third stage of the round of keening - probably the culmination.....The music of the gol, in contrast to that of the preceding verse, was explosive and highly ornamented.
>
> (*Ibid.*).

The final movement is in sharp contrast the slow, quiet nature of the previous movements. It is 'explosive and highly ornamented', in keeping with the text. There is a clear change in mood from the beginning of Movement III, with all the instruments increasing in register, tempo, rhythmic movement and dynamic.

I was also inspired by the following quotation:

> One stood near the head of the bed or table on which the corpse was laid, one at the feet, who was charged with the care of the candles, and one or more at each side; the family and immediate friends of the deceased sat around near the table. The mourner at the head opened the dirge with the first note or part of the cry; she was followed by the one at the foot with a note or part of equal length, then the long or double part was sung by the two side mourners, after which the members of the family and friends of the deceased joined in the common chorus at the end of each stanza of the funeral ode or dirge, following as closely as they could the air or tune adopted by the professional mourners. Sometimes one or more, or even all the principal singers, were men.
>
> (Ó Súilleabháin, Seán: *Irish Wake Amusements.* Dublin: Mercier Press, 1972:136).

Perhaps the most interesting aspect of this account is that it involves a quartet of keeners. This makes the string quartet an apt way of expressing the sentiments of the *keen*. The piece opens in a similar way as this text describes. As one keener begins to be followed by the next, the string quartet opens with the cello, followed by the viola, the second violin and finally first violin. This format is repeated during the section called 'The Murmuring Lament' where the cello first plays the lament, then the viola and then the two violins join.

Another part of this text is echoed in the final movement. In the text, the second keener follows the first keener with a part of equal length, this would suggest canonic movement. The third and fourth keeners follow with notes of double this length. At the beginning of Movement III the second violin plays in canon to violin I. The viola and

cello, although not playing notes of exactly double the length of the violin, do play notes of longer duration.

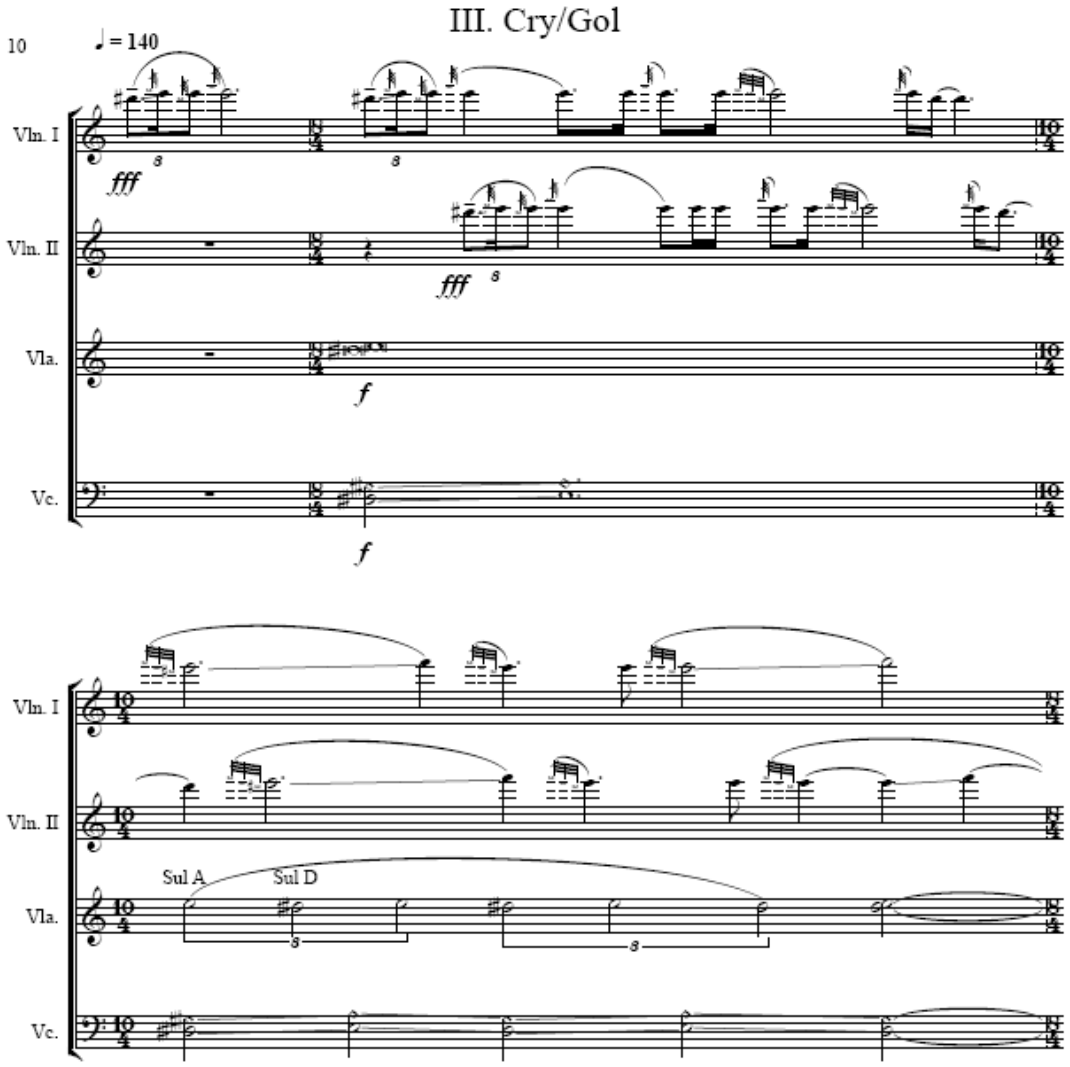


Figure 4.32 Flynn, *String Quartet No.3 - The Keening*, III, 1-3.

These are the main ways in which the texts have influenced the piece. This is the first time I have used written text as an inspiration for a non-vocal piece. I have heard snippets of keening in the *Irish Traditional Music Archive* but chose not to listen to any in detail because I did not want to create a direct imitation of keening. Instead I have used the texts as an inspiration to create the music, so any similarity to actual keening is merely the result of the accuracy of the descriptions and my interpretations of them.

4.3.2 Musical Influences

The main musical influences come from *Sean-nós* singing and the many Irish musicians I have heard performing *slow air*s. Certain Irish fiddle techniques are used in the piece but at no time is an existing traditional melody used. There are a few newly composed air-like melodies in the piece. The first movement contains an air I call 'The Murmuring Lament', the second movement is based around an improvisatory air rooted around the note *A* and the final movement contains fragments of ornamented air-like melodies such as this:

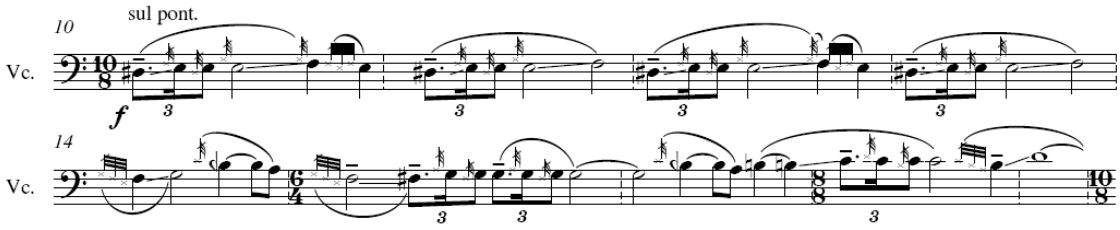


Figure 4.33 Flynn, *String Quartet No.3 - The Keening,* III, 10-18, cello part.

Other 'Irish' sounds which I incorporated into this piece are:

- Irish fiddle tone
- Irish ornamental techniques
- Harmonies derived from *uilleann* piping
- Rhythmic and melodic phrasing commonly found in Irish airs
- The use of notes outside of the tempered scale

4.3.2.1 Irish fiddle tone

The *non vibrato*, 'rough' sound I described in Chapter 3.1.1.2 is a sound I have asked for in this piece. It may seem contradictory to say a classical tone is inappropriate for Irish traditional music whilst asking a classical string quartet to play with an 'Irish' fiddle tone, however contemporary classical musicians are asked to use so many different and unusual techniques that to ask them to play with a rough, *vibrato* free tone is simply one of many compositional choices contemporary composers are able to

employ.

4.3.2.2 Irish ornamental techniques

In Movements I and III the players are frequently asked to perform Irish ornamentation techniques such as *rolls* and *cuts*. I have also incorporated many *glissandi* in the piece. These are in imitation of the *glissandi* techniques used by traditional musicians.

4.3.2.3 Harmonies derived from uilleann piping

In Movement II the violins and cello provide harmony to the viola melody which are highly influenced by the principles of *uilleann* piping harmony I discussed in Chapter 3.1.3. Some of the pipes influenced harmonies used in Movement II are detailed below.

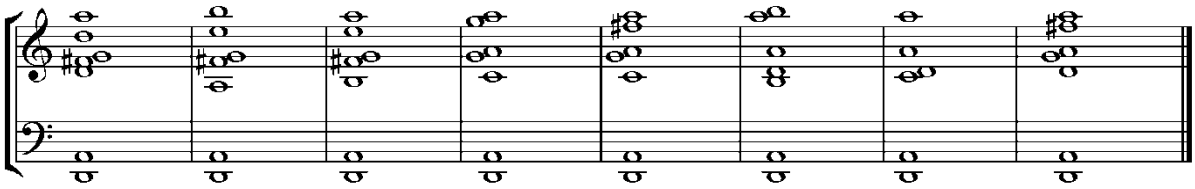


Figure 4.34 Piping influenced harmonies in *String Quartet No.3 - The Keening*, II.

4.3.2.4 Rhythmic and melodic phrasing commonly found in Irish airs

There is a phrase pattern dictated by the rhythm of the Irish language which is common to some *Sean-nós* songs. It can go from staccato quavers to triplet semiquavers to semiquavers and so on. I use such rhythms in this piece, particularly in Movement II where variations of this rhythm are found throughout the viola part.

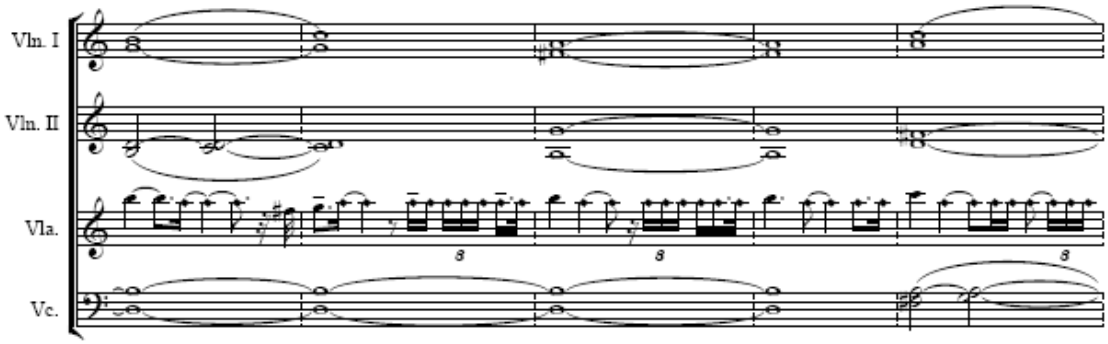


Figure 4.35 Flynn, *String Quartet No.3 - The Keening*, II. 29-33.

4.3.2.5 The use of notes outside of the tempered scale

I introduced microtonal aspects of traditional Irish music to my compositions for the first time in this piece. I had yet to research this area in detail at the time of composition but I added some microtones, most particularly on the note *B-flat* which I have changed to *B* a quarter-tone flat in certain parts of the piece. In addition, I experimented with the flexible notes by creating melodic material which uses sharps, flats and naturals of the notes *F*, *C* and *B*. Such aspects are mostly found in Movement I, but occasionally in Movement II. The following example comes from the 'murmuring lament' in Movement I.

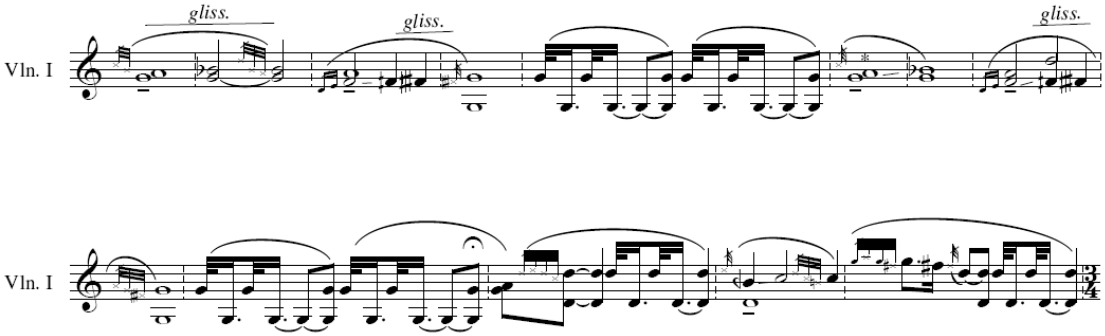


Figure 4.36 Flynn, *String Quartet No.3 - The Keening,* I, 45-57, first violin part.

4.3.3 Non-Irish Musical Influences

Whilst influences from Irish traditional music dominate this piece, it is still very much a piece of contemporary music for string quartet and as such I utilised some techniques derived from the western classical tradition.

- Artificial and natural harmonics are used extensively in the piece. Harmonics are generally not used by Irish traditional musicians.
- Aleatory techniques are found in the controlled improvisational sections, such as the opening 'murmuring'.
- The String Quartet itself and the transmission of the music through sheet-music are derived from the classical tradition.

- There are some metres found in this piece one is unlikely to encounter in Irish traditional music notation, such as 10/4. In addition Movement III contains some regular bar by bar metre changes.
- Movement III has little relation to any specific Irish tune form. Canons, polyrhythms, Bartók *pizzicatos*, *tremolandi* and white noise effects are employed. None of these techniques are generally found in traditional music. Similarly the use of *sul ponticello* and *sul tasto* effects is rare in traditional music.
- The general dynamic approach in Movement III is much closer to the classical tradition than the Irish tradition where the use of sudden dynamic changes is rare. I do use rhythmic and melodic repetition in the movement which is a particular characteristic of Irish traditional music, as it is in some classical music styles such as Baroque music and minimalism. There are no drastic or regular harmonic changes in the piece, rhythmic material is relatively simple. Some material is repeated with subtle variation.

4.3.4 Modality

Movement I stays rooted around the note *G* utilising the Dorian and Mixolydian modes. Most of the movement is based around the melody of the 'Murmuring Lament'. Movement II is rooted around the note *A* utilising the Dorian mode. Movement III is rooted around the notes *E* and *A*, with no particular modes used. Microtonal dissonance, *glissandi* and ornamentation are the main ingredients of this movement.

4.3.5 The Rehearsal Process

This piece was written for the ConTempo Quartet following a commission from Music for Galway in 2007. I had the opportunity to meet with the ConTempo Quartet twice before it was completed and once for a final rehearsal. The first meeting took place at

the beginning of the writing process and I used this opportunity to find ways of translating Irish rhythms and fiddle techniques into notational forms classical musicians might understand. I brought Liz Coleman, an accomplished Irish fiddler, with me to assist this process. I sent ConTempo my notated versions of various techniques before the workshop.

The quartet's understanding of the techniques from reading the music was not entirely accurate; such is the inadequacy of notation as a means for transmitting Irish fiddle techniques. I have since revised the notations but I would still think it important to have someone there to demonstrate the various effects to the musicians. I found the combination of sheet-music and aural learning to be quite effective.

When the second and third rehearsals came a number of months later I found myself having to demonstrate some of the techniques again for the musicians. This was not just confined to those effects derived from Irish fiddle playing. At the very end of the piece there is a special *tremolo* effect I created, quite independently from Irish fiddle playing, and only by demonstrating it to the musicians could it be accurately recreated.

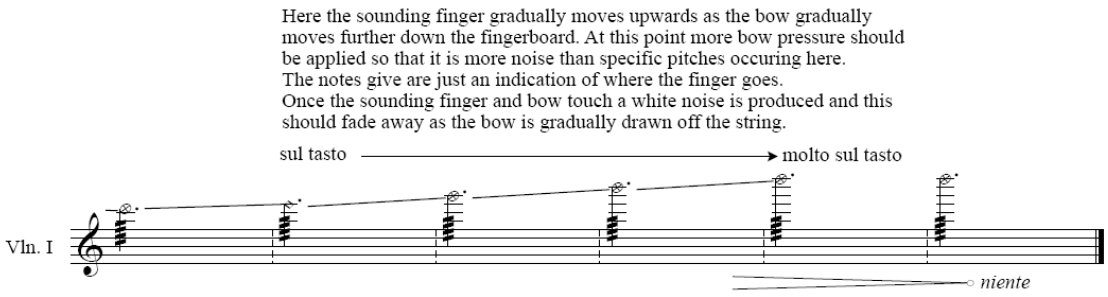


Figure 4.37 Flynn, *String Quartet No.3 - The Keening,* III, 84-89.

The piece has since been performed twice by ConTempo. The recording presented with this dissertation is from the world premiere at the Hugh Lane Gallery, Dublin. (December 2, 2007).

I felt ConTempo played the piece very well given the circumstances that it was the first performance. I would not consider this to be a definitive version though. Some of the ornamentations and phrasing are not how I would like them. They do not sound

like how a traditional musician or singer would phrase them and this is ultimately what I am seeking. Much of the work I have done since this premiere has revolved around discovering ways in which these aspects can be better translated to classical musicians. Ultimately I would say the piece would work best if it were performed from memory by a group of musicians who have a thorough understanding of traditional music.

Nevertheless I do not wish to criticise ConTempo, they performed the piece excellently according to the indications in the score. I feel they, or indeed any accomplished string quartet would eventually be able to phrase the music in a style closer to traditional music if a considerable amount of time was given to rehearsal and preparation.

4.3.6 Summary

String Quartet No. 3 – The Keening is a piece for string quartet in which most of the musical material is inspired by traditional Irish music performance techniques, pitch and rhythmic aspects. It is also inspired by written accounts of the tradition of funeral keening. I have adapted various techniques from traditional music and placed them into a notated music context designed for classical musicians. These aspects include ornamentation techniques, *uilleann* pipes harmony techniques, rhythmic and melodic contours of *slow air*s, microtonal pitches and flexible notes.

The notation method I have developed for this piece in relation to ornamentation has proved a definite improvement on other notation systems which I had previously used. Ultimately, like any notation system, it still has its limitations which mean a fully accurate performance of this work by musicians with little or no knowledge of traditional music would require considerable rehearsal and preparation time. Musicians with a strong knowledge of traditional music and the technical abilities of a classical string quartet would likely produce the most satisfying performance of this piece.

4.4 *Aontacht* - A Concerto for Traditional Musician and Orchestra (2008)

4.4.1 Genesis

Aontacht was conceived as a fiddle *concerto* for Martin Hayes, following a commission from the RTÉ Concert Orchestra. I decided to forgo four ideas central to most *concerto*s.

- That the *concerto* is a "contest" between the soloist and orchestra.
- That the piece can only be performed on one specific instrument.
- That the soloist's part should be incredibly virtuosic.
- That the piece be in three separate movements.

I decided a "contest" type *concerto* would defeat my intention to bring ideas from traditional Irish music and contemporary classical music together. Instead I chose to develop a piece where the orchestra would support the soloist. This goes back to the original definition of what *concerto* means.

> Concerto first had the "Italian" meaning of "join, bind together" and later in the sixteenth century acquired the "Latin" meaning of "strive, contend with".
>
> (Hall Jr., Robert A: "Italian "Concerto" ("Conserto") and "Concertare"." *Italica* (American Association of Teachers of Italian) 35, no. 3 (September 1958): 188-191, 188).

The idea for the orchestral part came mainly from the fact that Dennis Cahill's use of drones, rhythms and chiming harmonies reminds me of different sections of the contemporary orchestra. I aimed to somewhat recreate this accompaniment style in an orchestral setting.

An aspect of traditional music that separates it from classical music is that the traditional music repertoire has no defined arrangements or instrumentation beyond the fact that some instruments are more commonly used. Therefore I thought it logical to create a soloist's part which could conceivably be performed by any traditional musician of a high standard. It can be played on fiddle, accordion, concertina, banjo,

mandolin, guitar, flute and, with some imaginative combinations, it could be performed by one player using *uilleann* pipes and variously pitched whistles.

In order for this idea of open instrumentation to work, the soloist's part needed to be relatively simple in technical terms compared to most classical *concerto*s. Therefore the soloist's part is basically confined to six newly composed tunes in traditional Irish forms. There are four *reels*, a *jig* and a *slow air* and these are basically what the soloist has to work with, aside from some short deviations. The score would deceive analysts unfamiliar with traditional Irish music as the soloist's part shows these tunes in skeleton notation, played exactly the same way each time they are repeated. In traditional Irish music the virtuosity of the performer is demonstrated more by his or her ability to inhabit the music, bring his or her own personality and emotion to the piece and to improvise variations on the main melody, rather than a technical ability to play every conceivable note on the instrument at blinding speed! In this respect only a performer with a deep knowledge of traditional Irish music could perform the soloist's part.

So while the piece is not virtuosic in how classical musicians may understand and define virtuosity, it is virtuosic in how a traditional musician might define virtuosity because aside from the aforementioned requirements, the tunes sometimes span beyond the usual note range and modes traditional musicians would be used to. At the same time, I was careful not to write anything too far removed from what traditional musicians would be familiar with, as doing so would limit the amount of musicians able to play it.

Most *concerto*s have three movements or more and the movements are normally separated from each other. This piece differs in that it is a continuous piece. It is in three movements which are marked on the score but these 'movements' are fused together. Martin Hayes and Dennis Cahill often take a similar approach when arranging

traditional Irish music, creating extended thirty minute suites which move through different moods organically without pausing.[6]

Aontacht is simultaneously in suite form, three movement *concerto* form and organic symphonic fantasia form, with a soloist's part which can be played on a number of different instruments but only by a seasoned performer of traditional Irish music. So it is an unusual format for a *concerto*.

4.4.2 Orchestration

The piece is scored for traditional music soloist, two flutes (one doubles piccolo), two oboes, two *B-flat* clarinets, two bassoons, four French horns, three *B-flat* trumpets, two tenor trombones, bass trombone, harp, timpani, strings and two percussionists playing marimba, vibraphone, crotales, two suspended cymbals, bass drum, hi-hats, congas, snare drum and two woodblocks.

The orchestration is mainly inspired by aspects from traditional music. The opening of the work takes its musical inspiration from the *uilleann* pipes. The drifting suspended harmonies in the opening section are all derived from harmonies created by the drones and regulators of the pipes. I challenged myself to recreate that sound in a contemporary orchestral setting.

In order to do this I utilised orchestral instruments which have timbres most closely matched to the *uilleann* pipes. The pipes' reeds are closest to oboe reeds, so that was an obvious choice. I also hear similarities between the sound of the clarinet, French horn and trumpet to the sound of the regulators. The low range of the bassoon, French horn, and trombone lend themselves to creating a sound like the drones of the pipes.

[6] The only commercially recorded example of this common feature of their live shows is Track 2 on their album *Live in Seattle.* GLCD 1195. 1999.

In *String Quartet No.2 - The Cranning*, I explored how a string quartet can create a sound similar to the pipes by holding long *vibrato*-free drones and harmonies common to the regulators. The last movement ends with an extended section exploring this idea.

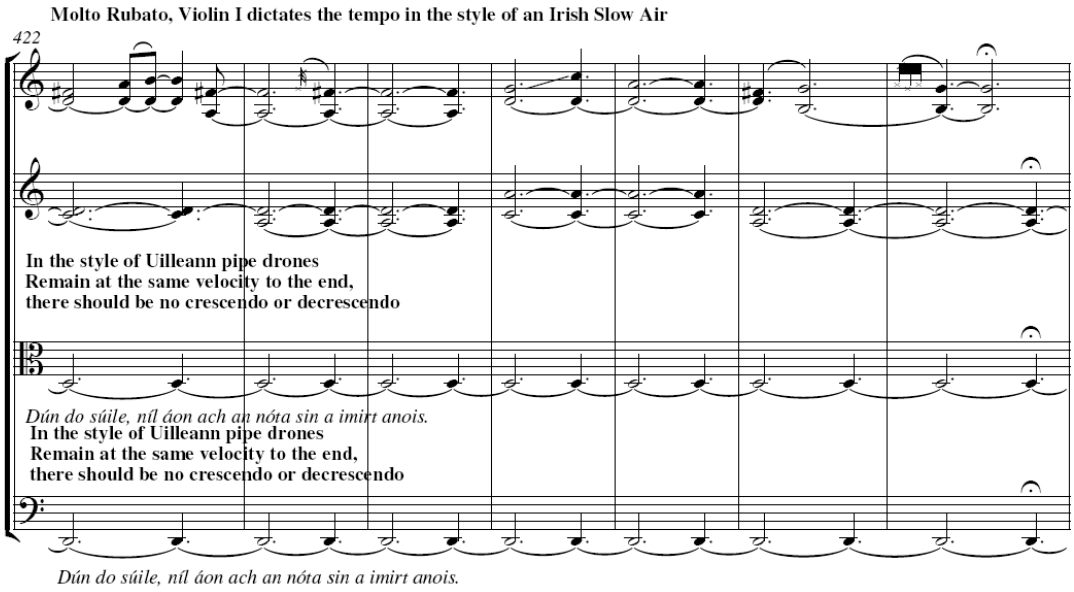


Figure 4.38 Flynn, *String Quartet No.2- The Cranning,* 422-428.

I found the sound created in this string quartet to be very satisfying, so I have applied it in this piece also. The combination of *vibrato* free winds, brass and strings using piping style harmonies creates a sound like a gigantic set of *uilleann* pipes. The following example illustrates the characteristic drones and regulator style harmony found in this opening and indeed in other sections of the piece. In this extract, for trombones and trumpets, the *F* drone in the trombone represents the drones of the pipes with the trumpets playing regulator style harmonies. This harmonic progression is notable for the clash of 2nds in bar 5 where the notes *B-flat*, *C* and *D* sound simultaneously. This is an example of a type of dissonance that is a common feature of *uilleann* piping.

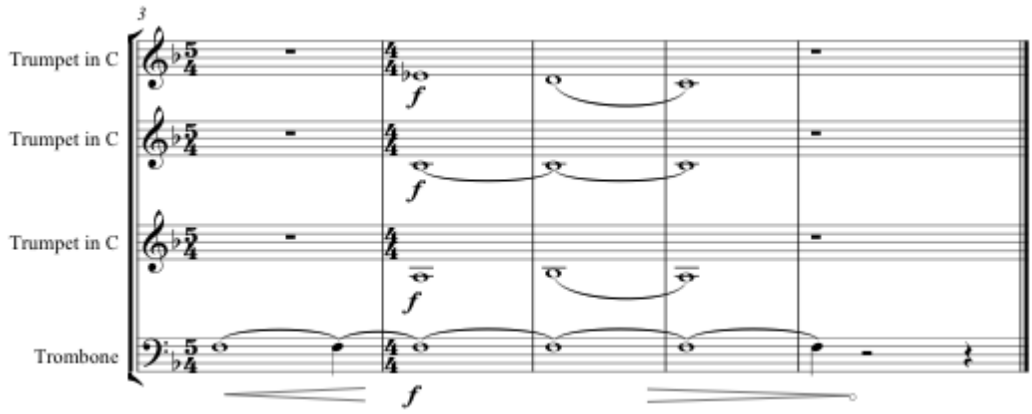


Figure 4.39 Flynn, Aontacht, 3-7, trumpets and trombone 1.

The entire opening section is based on this idea, with the gradual addition of instruments and additional notes to the basic harmony.

The stately pace of the opening might fool the listener into anticipating a big slow movement. The fiddle briefly suggests this with its opening motif, which could be the beginning of a *slow air*.

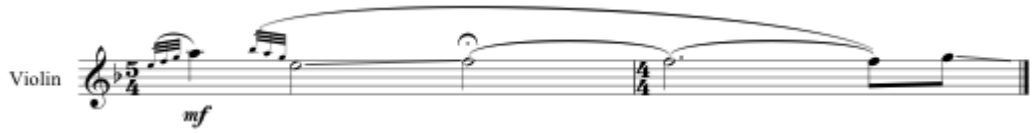


Figure 4.40 Flynn, *Aontacht*, 25-26, fiddle part.

Hayes' trademark opening for one of his long suites is to begin with a *slow air*. So this opening is a trick on those who are familiar with his music. Then, with the entry of the harp, the first *reel* begins.

In my programme note I describe the opening movement as being 'a bit like the *Tulla Céilí Band* in another dimension'. This movement also contains the only deliberate reference in any of my works to traditional Irish piano accompaniment. This reference is a bit of musical joke and also an essential musical cue. It occurs in the harp at bar 26.

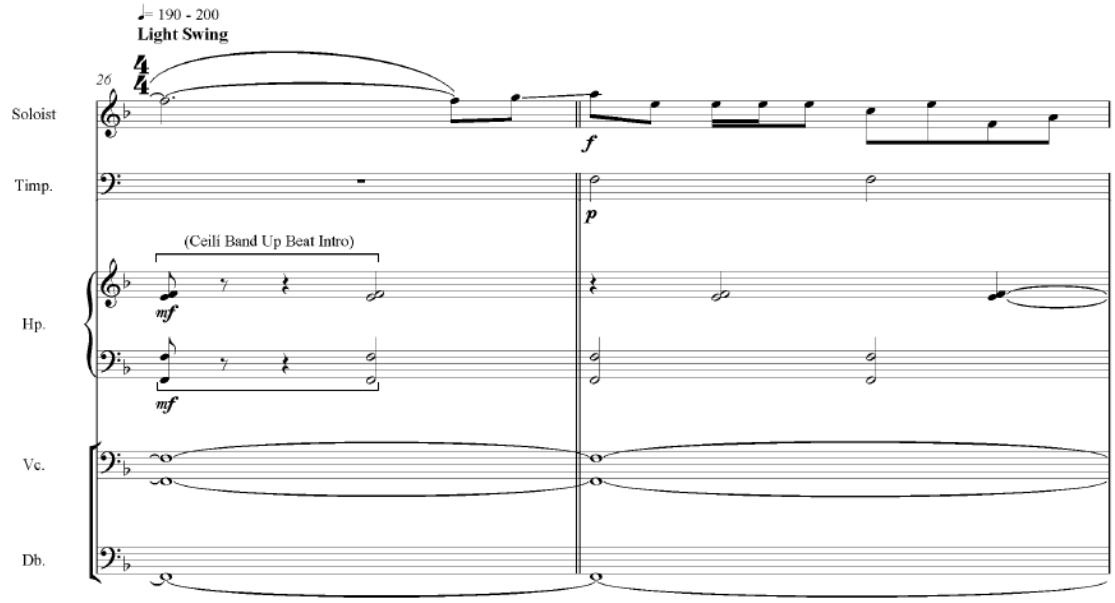


Figure 4.41 Flynn, *Aontacht*, 26-27.

This '*Céilí Band* Up Beat Intro' is rhythmically similar to how pianists 'cue in' their *Céilí Band* colleagues. Its use in *Aontacht* is a nod towards Hayes' heritage with the *Tulla Céilí Band* as well as being a cue for a traditional musician who is unaccustomed to playing with an orchestra. It means the soloist will not have to look at the conductor to get a cue for when to begin the *reel* which follows.

The harp part and much of the orchestral accompaniment which follows is in a similar 'oom pah' rhythm as used by many pianists who accompany traditional music. This accompaniment style is common to many forms of music. I really was not thinking about imitating this piano style when creating this piece. The *Céilí Band* cue was an afterthought which came to me after I had composed most of the rest of the piece.

In many respects I have treated the orchestra like it is a large version of Dennis Cahill's guitar. *Music for the Departed* (2006) has a guitar part which was written specifically with Cahill's style in mind. His style is notable for its sparseness and use of mildly dissonant harmonies. The excerpt below from *Music for the Departed* gives an example of this spare, mildly dissonant style.

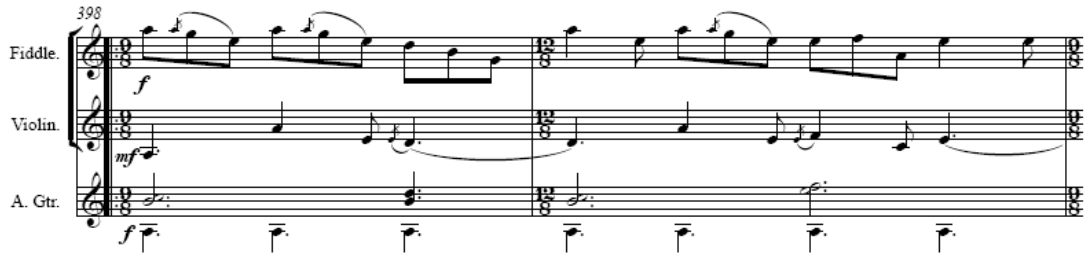


Figure 4.42 Flynn, *Music for the Departed,* 398-399.

The style is characterised by pulsing bass drones and major and minor 2nd clashes. In *Aontacht* I have transferred aspects of this style to the orchestra, particularly in the parts for harp and mallet percussion.

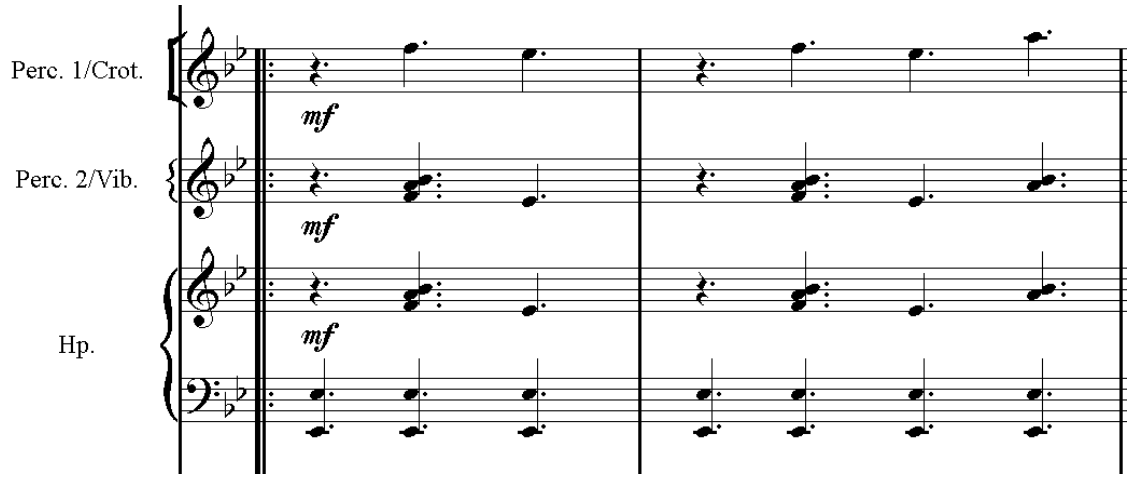


Figure 4.43 Flynn, *Aontacht,* 608-609, harp and mallet percussion parts.

Another aspect of Cahill's style which I transferred to the orchestra is the minimal pulsing chordal style he commonly uses when accompanying *reels*. An example of this style from *Music for the Departed* follows.

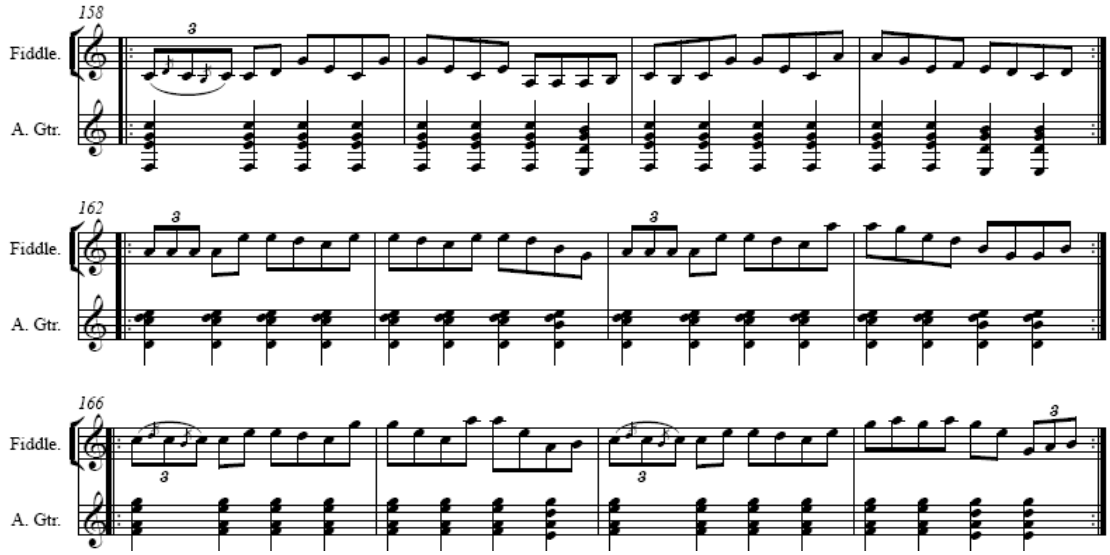


Figure 4.44 Flynn, *Music for the Departed*, 158-169.

This guitar part is very much like a skeleton notation. Cahill would vary the rhythm and dynamics to match Hayes' playing. When I transferred this style to the orchestra in *Aontacht* I had to programme a certain amount of this variation into the parts because an orchestra is unlikely to be able to react as spontaneously to Hayes' playing as Cahill does. Articulation markings are used to vary the rhythmic attack in the following example.

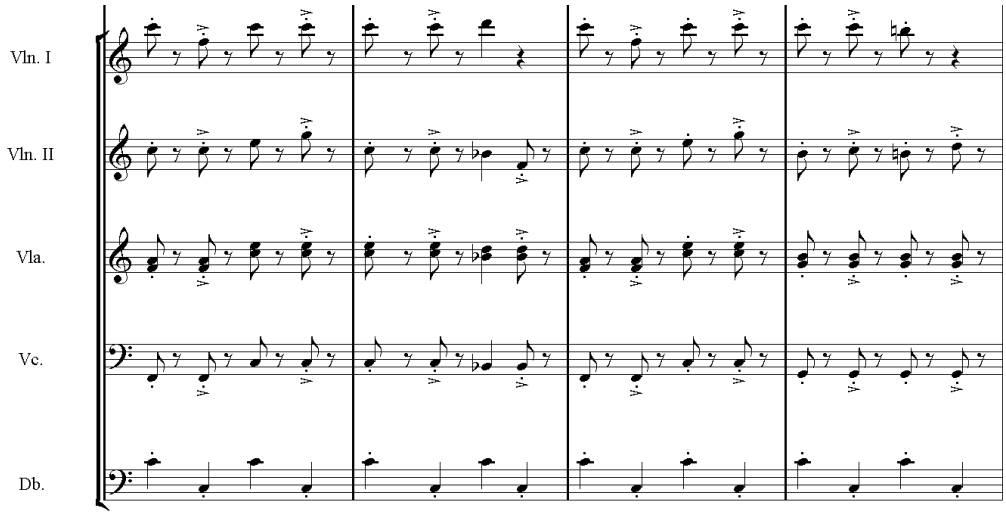


Figure 4.45 Flynn, *Aontacht*, 178-182, string section parts.

In the orchestration I have emphasised points in some of the soloist's melodies where open strings or naturally occurring accents would create metamusic. I emphasise these points by using instruments in the orchestra to play where the metamusic occurs.

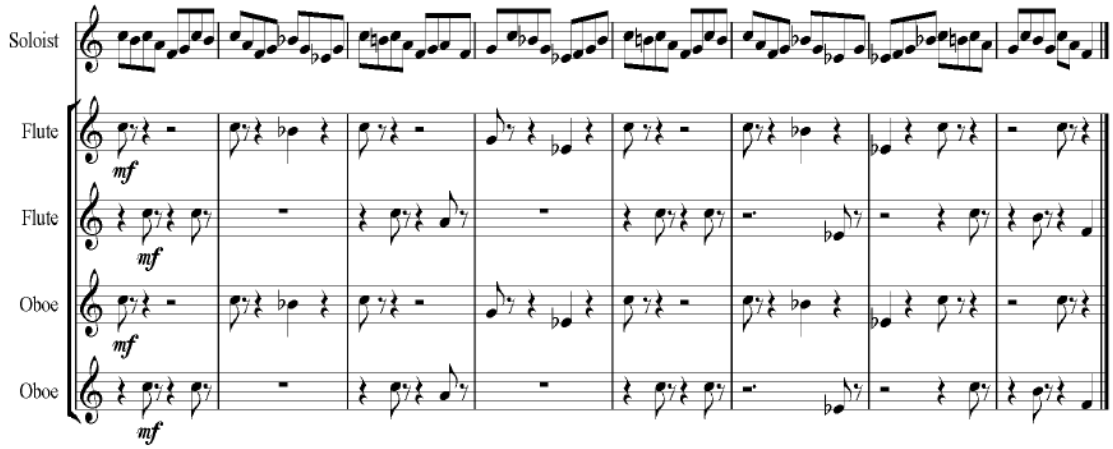


Figure 4.46 Metamusic in Flynn, *Aontacht.*

The separate rhythm and melody resulting from the metamusic is revealed by condensing the flute and oboe parts into one staff.

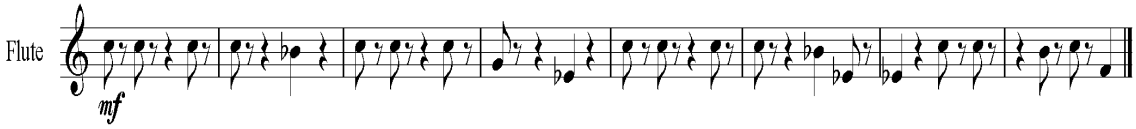


Figure 4.47 Metamusic in Flynn, *Aontacht,* condensed into one staff.

4.4.3 Pitch and Rhythmic Aspects

Aontacht is based around six tunes in traditional music forms. There are four *reels*, a *slip-slide jig* and a long *slow air*. Analysis of the pitch and rhythmic aspects of each tune reveals much about the entire work.

4.4.3.1 Reel No. 1

After the slow orchestral introduction, the soloist begins an unusual *reel*.

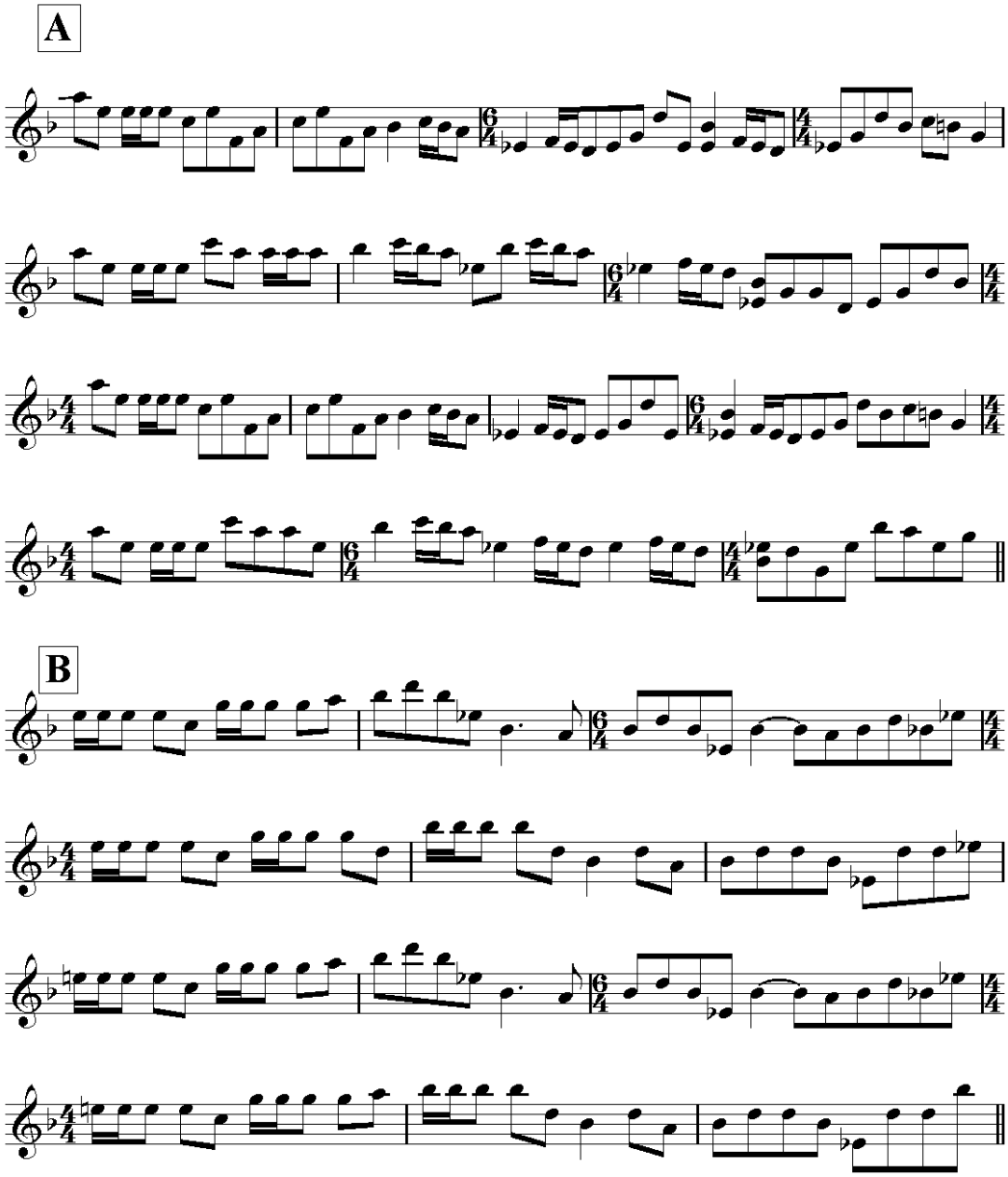


Figure 4.48 Flynn, *Aontacht*, first reel.

The first two notes used in this *reel*, *A* and *E*, might suggest the tune is rooted on *A*, however the lowest note in the opening bars is an *F*. From this viewpoint, the melody could be rooted in *F* and this is how I conceived it. The clash between the root and the major 7th is a regular feature in this tune, the piece as a whole and indeed many of my works. The emphasis on the 7th gives the opening *reel* an unusual sound compared to most traditional tunes. Whilst many traditional tunes contain the interval of the 7th, it is normally as a passing note. In this *reel* the 7ths (in this case the notes *E* in relation to the F-rooted part and *D* in relation to the E-flat-rooted part) do not act as passing notes. The

E is sounded six times in the opening two bars, thus giving the tune an unresolved sound.

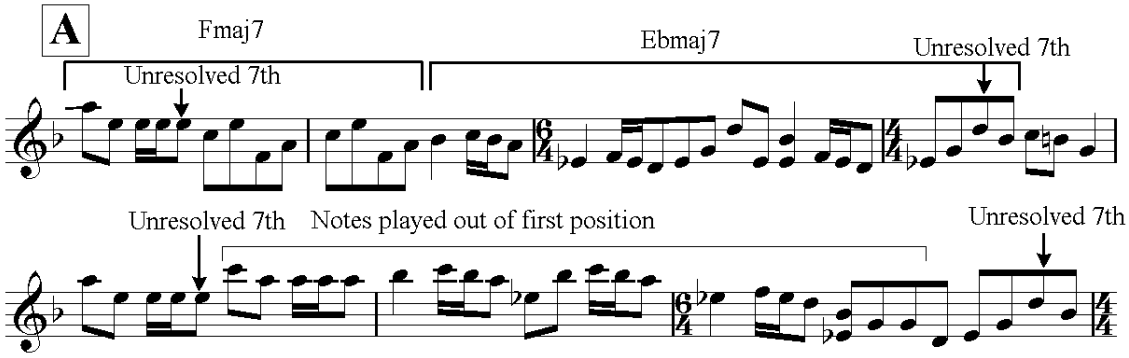


Figure 4.49 Pitch aspects of the first reel in Flynn, *Aontacht*.

Another notable feature of this tune is the fact that the fiddler needs to move out of first position a number of times, such as the section marked in the example above. This makes it quite a challenging *reel* to play and it is the one which Martin Hayes focused primarily on from a technical point of view. He had to try various combinations before settling on a way to play it. I composed the tune with the aid of a mandolin, which has the same tuning as a fiddle. So I conceived it as a tune where positional changes were necessary.

The melody is primarily based on melodic movement between two chords, F major7 and E-flat major7. This follows the typical implied harmony of many Mixolydian and Dorian tunes where material based on the root note moves down a step. The harp part reveals that the initial harmonic movement is quite slow, with a constant *F* drone in the bass.

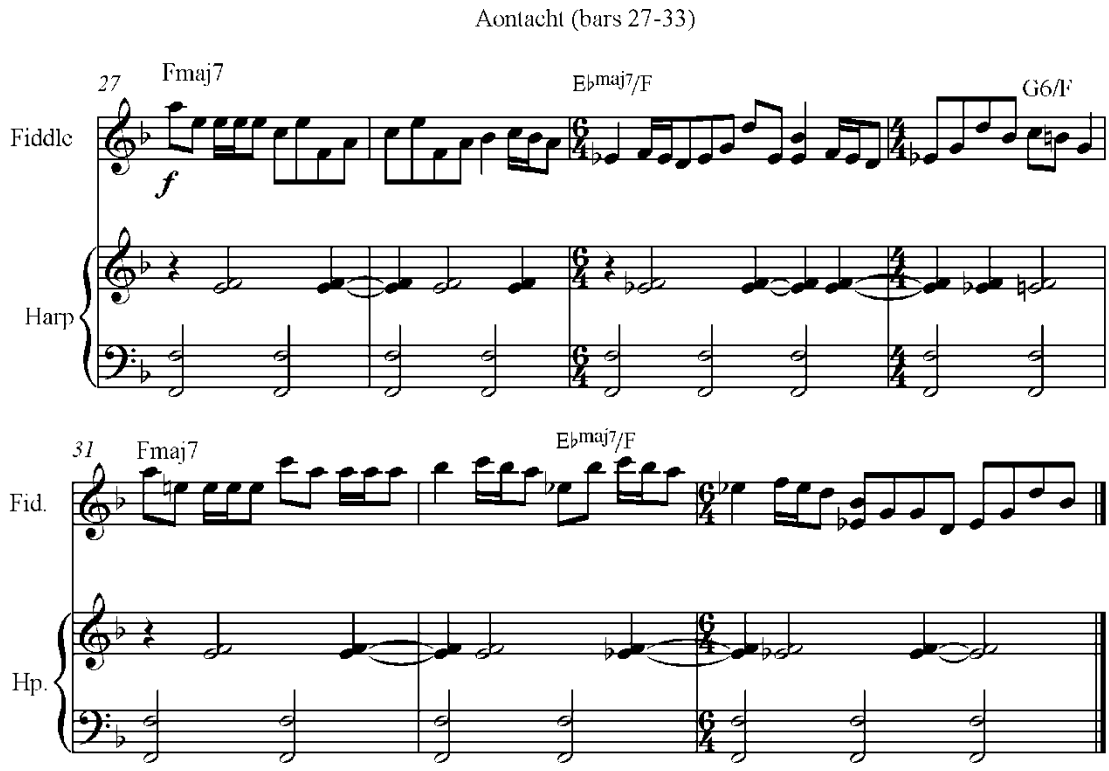


Figure 4.50 Flynn, *Aontacht*, 27-33, harp and soloist parts.

The melody implies a number of harmonic possibilities and I initially emphasise the 7ths to create mild dissonance. The melody naturally implies the harmonies I have chosen to place above the *F* drone.

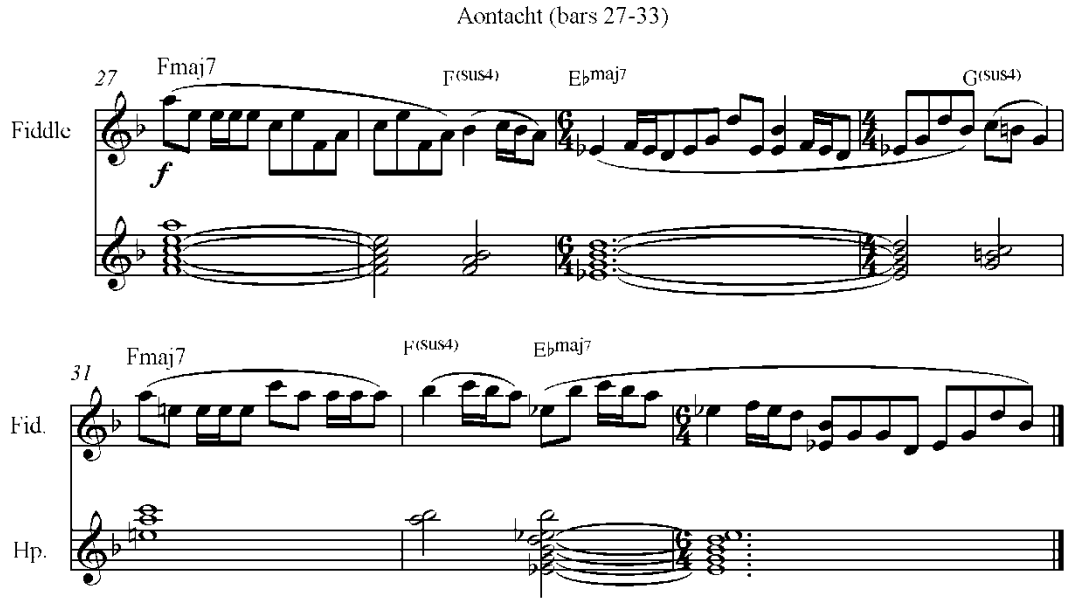


Figure 4.51 Flynn, *Aontacht*, 27-33, implied harmony.

My natural inclination towards utilising the sound of the major 7th has led to this tune being melodically quite different to any standard Irish *reel*. I used chord substitution

principles on the last repetition of this tune to give the music increased harmonic movement.

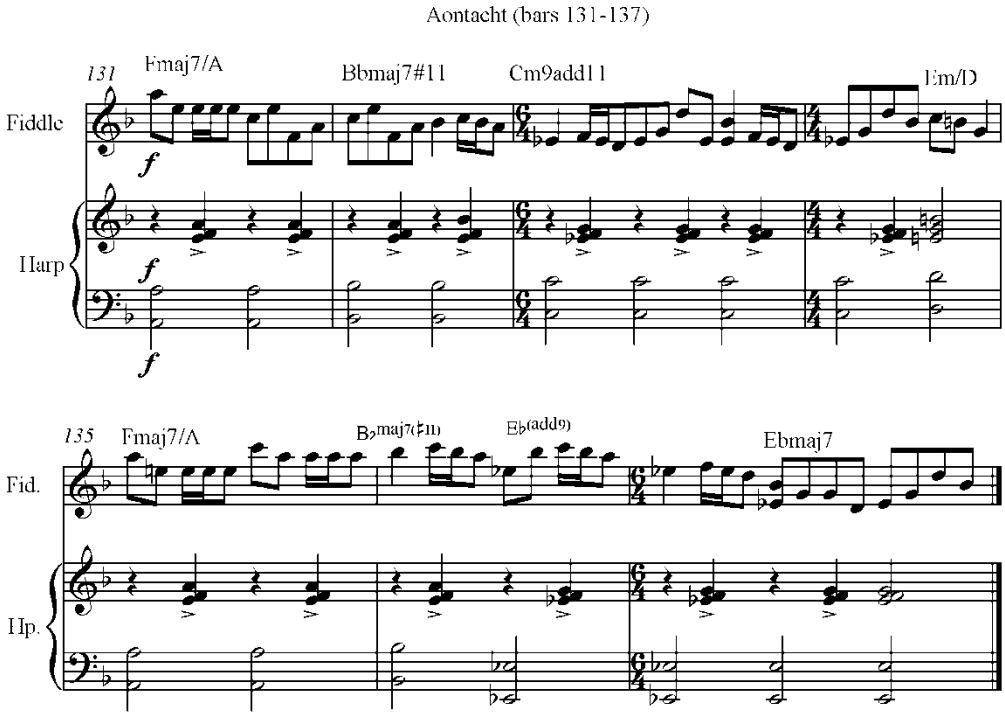


Figure 4.52 Flynn, *Aontacht*, 131-137, harp and soloist's parts.

The treble clef of the harp part is only slightly harmonically different to the equivalent part in bars 27-33. The real cause of harmonic change is the bass line. Up to this point the bass was a constant *F* drone, so the new bass-line, beginning at bar 131, gives harmonic and rhythmic movement. The harmonies that are created would not be out of place in a modern jazz composition, yet to me they perfectly compliment the melody. The dissonances in these harmonies accentuate a dark quality to the melody that more predictable harmonies would not. So with this tune and the orchestration of it, I have amalgamated melodic, harmonic and rhythmic principles taken from traditional music with a contemporary approach to melody, harmony and orchestration.

Another aspect of this opening *reel* which makes it different to most *reels* is the regular change of metre between 6/4 and 4/4. This was influenced by the technique of extra beat insertion.

4.4.3.2 Reel No. 2

The second *reel* is a three part tune which is modally ambiguous. The first half is rooted in *F* and the movement between *F* and *E-flat* suggests the F Mixolydian mode.

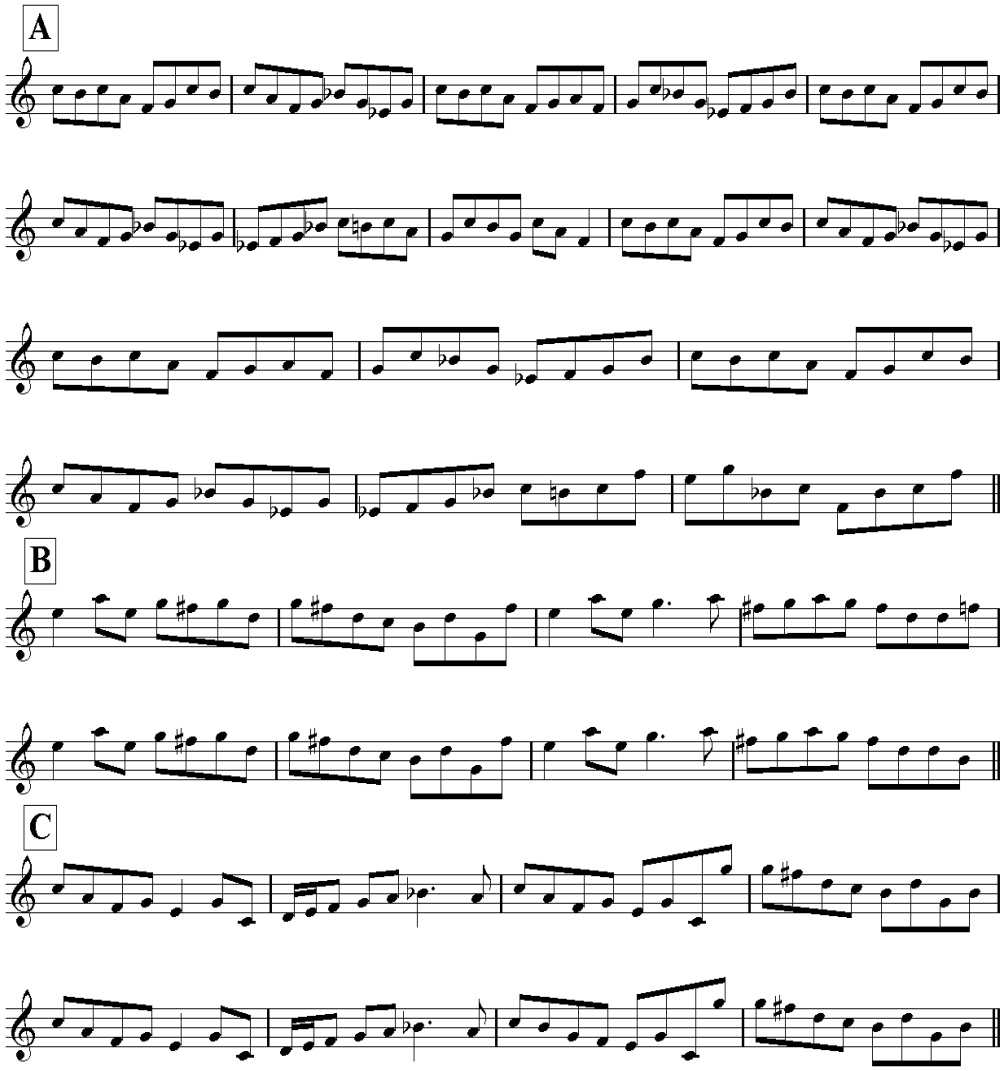


Figure 4.53 Flynn, *Aontacht*, second reel.

The B part relates most closely to the mode of A Dorian as it contains all the notes of that mode. The opening notes are *E*, the 5th and *A*, the root. It could alternatively be viewed of in G Ionian since most of the melody seems to revolve around the note G.

The C part presents similar analytical difficulties. It begins with notes which outline an F major triad, but then it moves to notes which outline the mode of C Mixolydian, followed by a C Ionian section and then a G Ionian section.

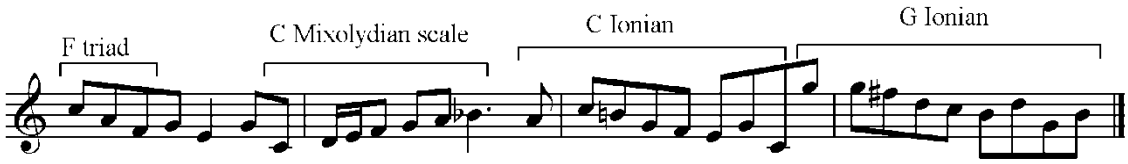


Figure 4.54 Modal aspects of the third part of the second reel in Flynn, *Aontacht*.

This *reel* forms the basis of the only section of the piece where the orchestra breaks free from the soloist. I have labelled this section *Sebene* because the composition techniques in this section relate to the Congolese music style of that name.

> In the sebene, there are at least three or four contrapuntal guitar lines which repeat against each other with slight variations – strummed chords are rare. After repeating one section of contrapuntal ostinati a number of times, new sections are introduced and the instrumental timbre thickens until powerful antiphonal phrases are exchanged between trumpets, trombones and saxophones, bringing the sebene to an exhilarating climax.
>
> (Musanga, Kasongo: "After Franco." *The Journal of Music*. Edited by Toner Quinn. February/March 2010. http://journalofmusic.com/article/1133 [accessed September 15, 2010]).

The section from bar 286-382 follows this exact structure. The melodic lines at the beginning of the section derive from the C part of the previous *reel*.

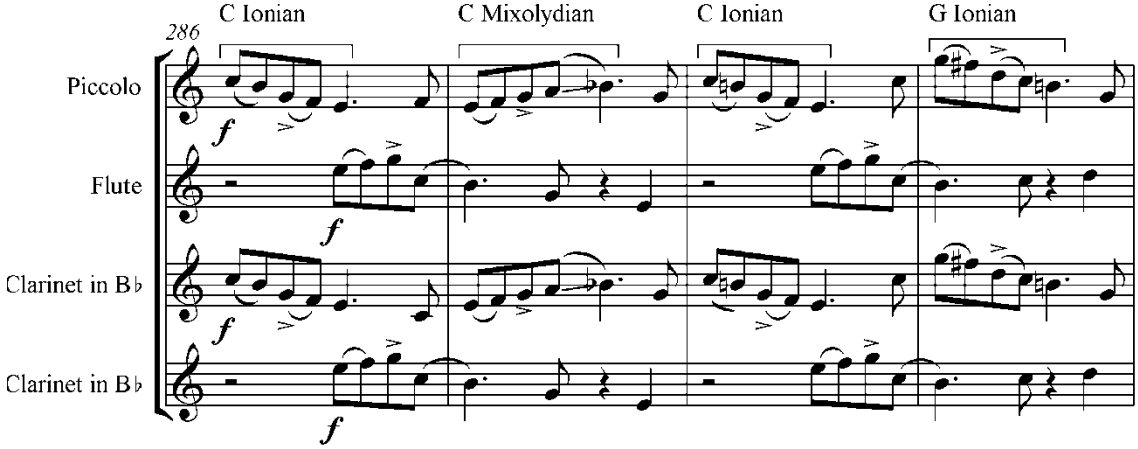


Figure 4.55 Flynn, *Aontacht*, 286-289, partial woodwind section.

4.4.3.3 Reel No. 3

The third *reel* is a *single reel* rooted in A. The *G-sharp* at the beginning of the melody seems to contradict this assertion; however this is another example of my emphasis of the 7th. The lowest note between bars 1 and 2 is an *A*, which is the root. In the fourth bar the melody moves down in 3rds from *F-sharp* to *G*. This gives a harmonic

implication of movement between an A-rooted and G-rooted section. I have indicated the harmonic implications of the melody as I perceive them.

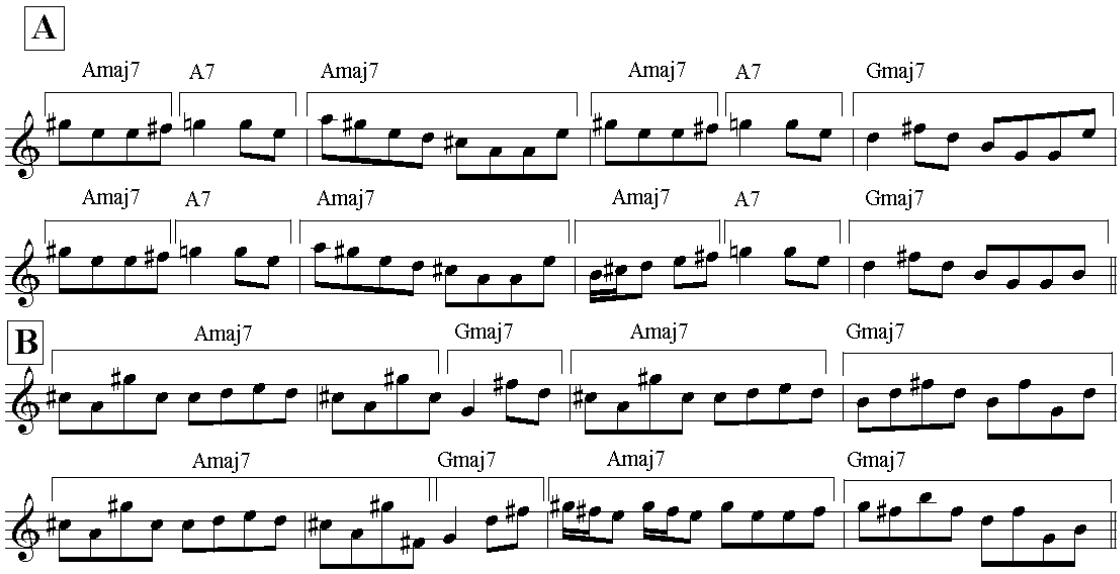


Figure 4.56 Flynn, *Aontacht,* third reel with harmonic implications.

4.4.3.4 Slow air

The centre-piece of the *concerto* is a four part air. The soloist initially plays it without any accompaniment and this is what I consider the *cadenza*.

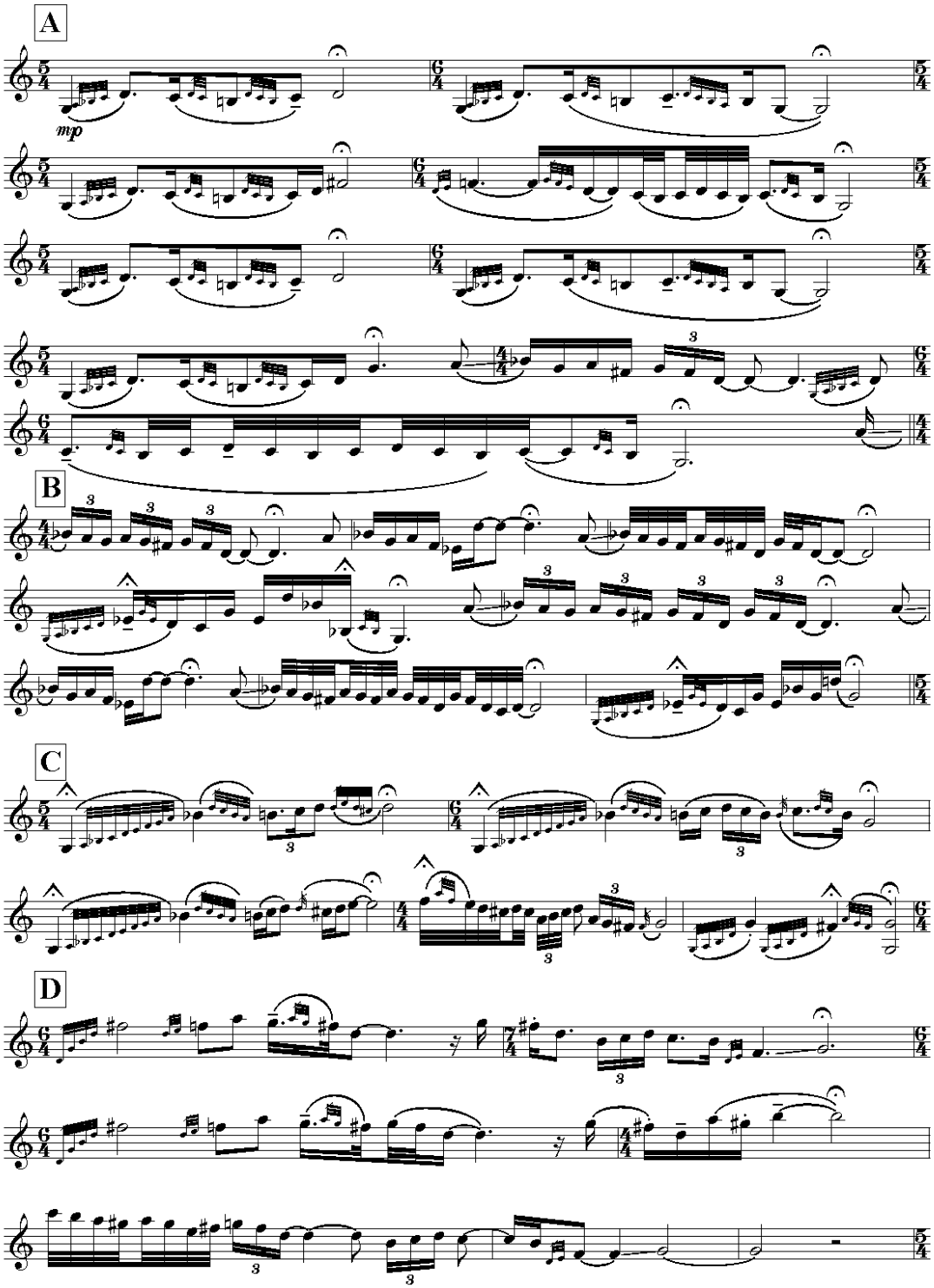


Figure 4.57 Flynn, *Aontacht*, Slow air.

The notation makes this look like a very complex air, but that is mainly because I have written the ornamentation in. If the ornamentation is stripped away it looks less complex, yet not exactly simple either!

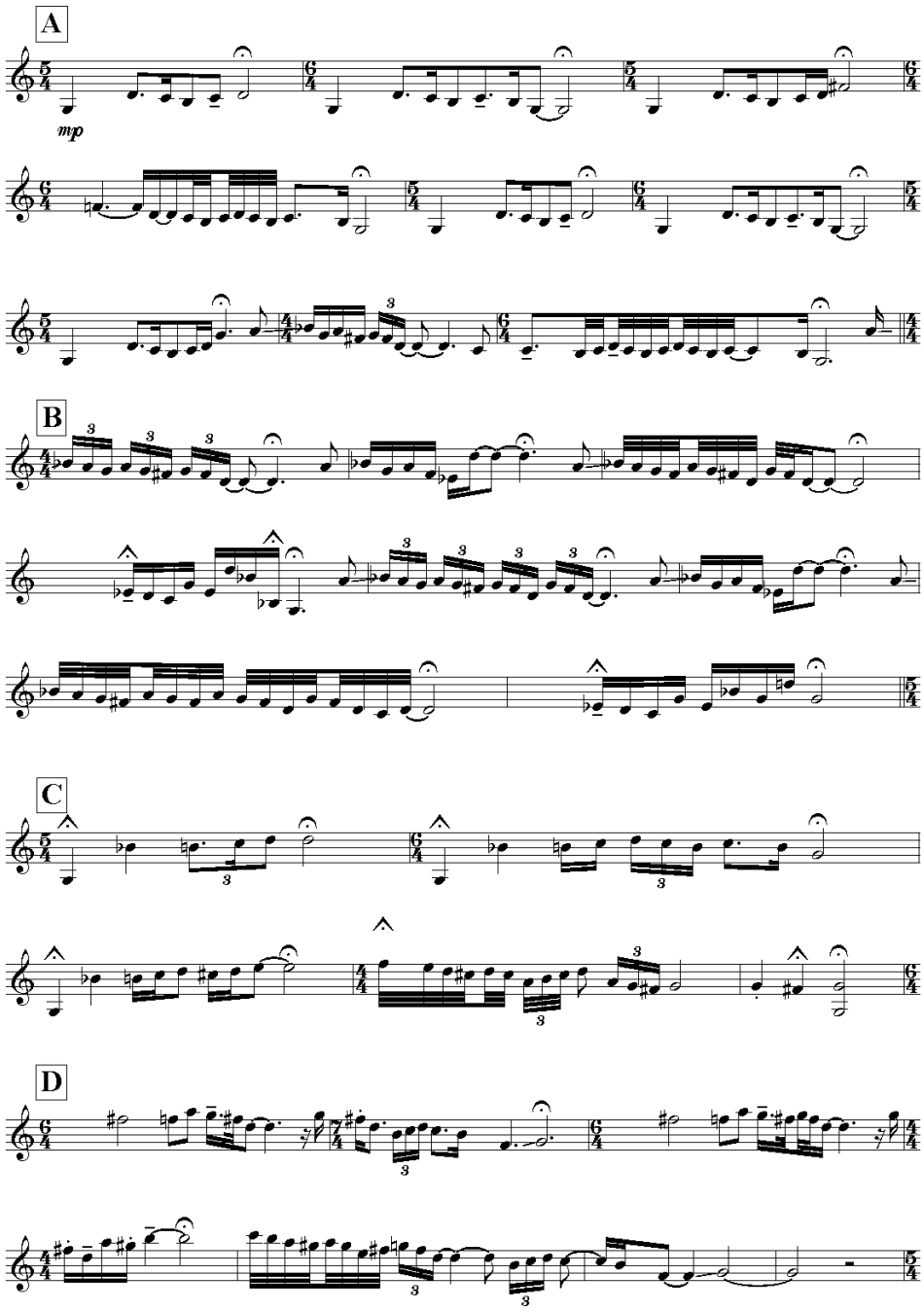


Figure 4.58 Flynn, *Aontacht,* Slow air without ornamentation.

This air covers the full standard fiddle range from the lowest open *G* to a *C* a sixth above the open *E* string. It is played three and half times in total. The third time around, the first two parts of the tune are played up an octave. This brings the range of the tune up even higher, as far as the *G* an octave above the the first *G* on the *E* string. This note would very rarely be used in Irish fiddle playing.

This air is, like most of the tunes in the piece, modally ambiguous. It is certainly rooted in *G* though. There is considerable use of note flexibility with all twelve notes of the chromatic scale featuring in a non-chromatic way.

There are many metrical changes in this air. The soloist does not have to follow these metres metronomically. I have indicated fermata marks at the end of most bars to indicate the rhythmic freedom the soloist has. The metrical changes only reflect the basic phrasing of the melody and in performance I would expect that the soloist will rarely stick exactly to these rhythms.

4.4.3.5 Slip-slide jig

The term *slip-slide jig* is not in common use. I have composed a number of tunes which mix 9/8 and 12/8 metres. I decided *slip-slide* would be an apt term. I subsequently learnt that the accordionist Johnny O'Leary (1923-2004) used this term when describing a tune called 'The Bicycle Slide' which also mixed the rhythms of a *slip jig* and a *slide*. For *Aontacht* I composed a *jig* style tune which varies between 9/8, 12/8, 15/8 and 6/8.

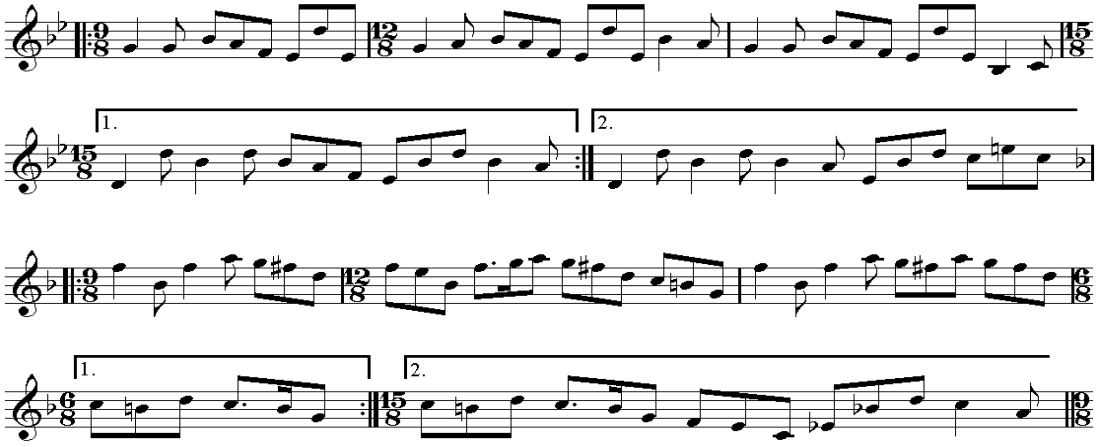


Figure 4.59 Flynn, *Aontacht,* Slow air without ornamentation.

This tune begins in G Aeolian and changes in the B part to an ambiguous mode containing the notes *B-flat, B-natural, C, D, E, F, F-sharp, G* and *A.* The *E-flat* in the last bar of the tune signals the return to the beginning of the tune.

4.4.3.6 Final Reel

The final *reel* is a seven part *reel* that brings the *concerto* to a close. It changes mode with each part and, rather like the *slow air*, it climbs gradually from the low *G* up as far as the first *D* available on the *E* string, which causes the soloist to move out of first position again. The pitch structure of each part of the tune is as follows:

A – Rooted in G using the notes of G flexible mode no.1. (*G, A, B-flat, B, C, D, E, F, F-sharp*).

B – Rooted in B-flat using the notes of B-flat Ionian. (*B-flat, C, D, E-flat, F, G, A*).

C – Rooted in E-flat using the notes of E-flat Lydian (*E-flat, F, G, A, B-flat, C, D*).

D – Rooted in F using the notes of an F Pentatonic scale (*F, G, A, C, E*).

E – Rooted in B-flat using the notes of a B-flat Pentatonic scale (*B-flat, C, F, G, A*).

F – Rooted in A using the notes of A Lydian (*A, B, C-sharp, D-sharp, E, F-sharp, G-sharp*).

G – Rooted in B-flat using the notes of a B-flat Hexatonic scale (*B-flat, C, D, E-flat, F, A*).

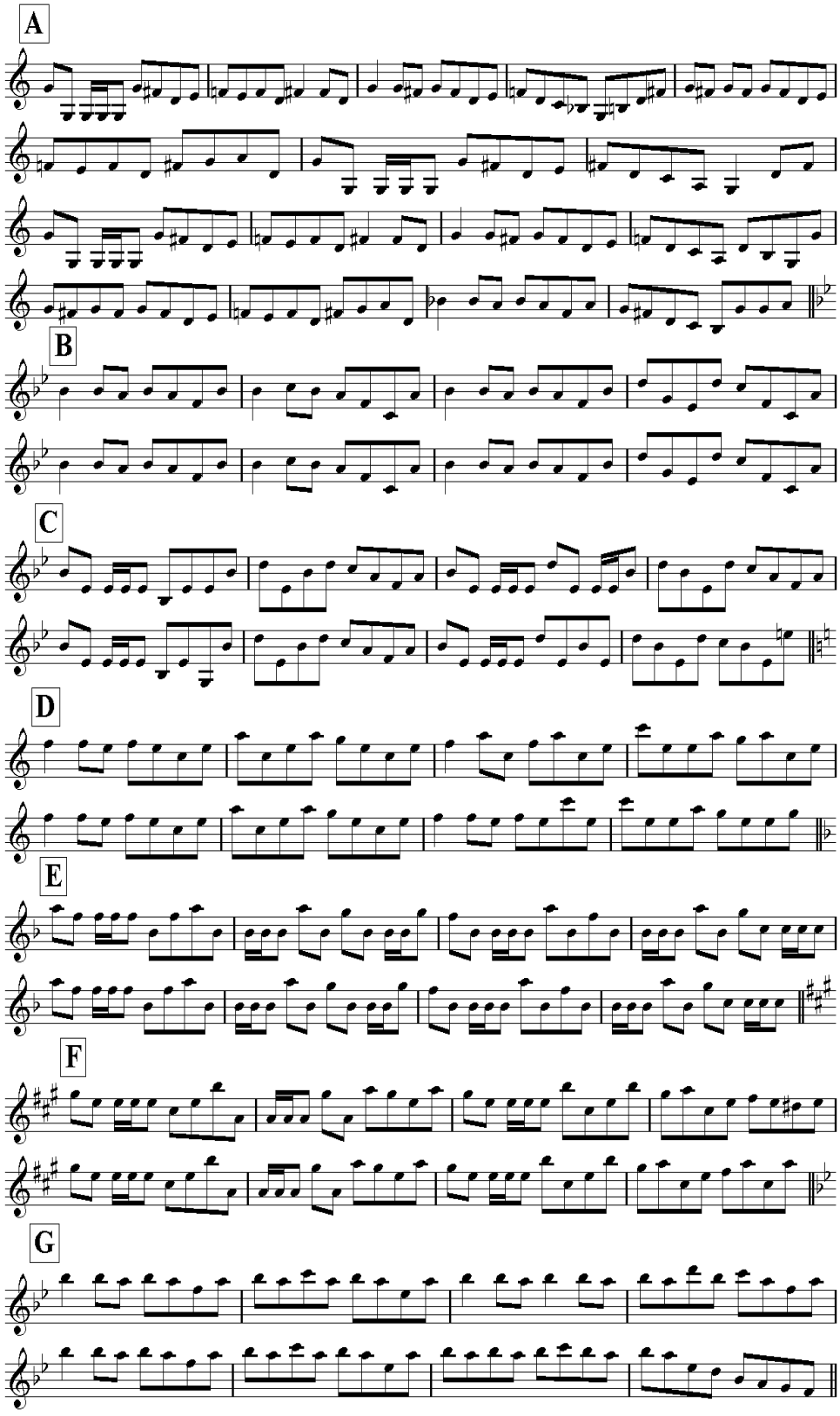


Figure 4.60 Flynn, *Aontacht*, final reel.

This tune is notated in 4/4; however there are several repeated phrases in the piece which cross bar lines. This provides rhythmic syncopation. In the example which follows, I have used phrase marks to indicate phrases which give natural syncopation. A musician may phrase this completely differently, but a natural Irish fiddle bowing style might bring out these syncopations.

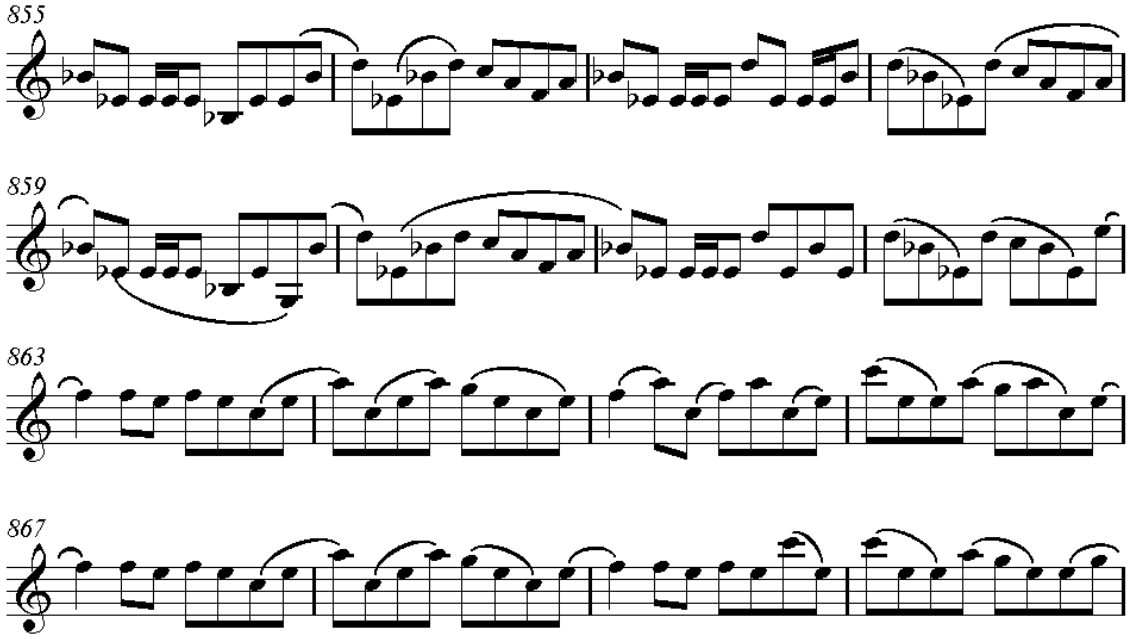


Figure 4.61 Natural syncopation in Flynn, *Aontacht*, final reel.

4.4.4 Composition Process

In writing this piece I always had Martin Hayes' distinct style in mind. The tunes I composed were influenced by the fact that Hayes often favours dark or melancholy tunes in unusual modes for traditional music. This is why there are no sections in some of the most common modes used in traditional music. There are no D-rooted tunes for example. We were both very familiar with each other having worked together on *Music for the Departed*, so the collaboration process was not too involved. He was happy for me to compose the music and once the piece was complete he did not ask for any major changes.

I provided Hayes with a MIDI recording of the piece along with the full score, the soloist's part and recordings I made of each tune performed slowly on fiddle. He mainly referred to the recordings. He has learnt the music off by heart and will perform it from memory in all performance situations, as he did when the work was premiered on 24th November 2010 at the National Concert Hall, Dublin.

4.4.5 Summary

Aontacht is my largest scale orchestral work to date. It brings a traditional musician together with an orchestra utilising contemporary orchestration techniques. The harmonic approach is inspired by *uilleann* piping and modal jazz harmony, with a particular emphasis on 7ths. The melodic style is broadly modal with extensive use of note flexibility. The soloist's part would look eminently playable on paper to a classical violinist, however only a traditional musician of exceptional ability could perform this work, as the soloist's part is only a skeleton notation to allow the soloist freedom to apply traditional music variation techniques in performance.

4.5 *Stories from the Old World* (2008) for Uilleann Pipes, String Quartet, Seán-nós Singer and Narrator

4.5.1 Genesis

Stories from the Old World was commissioned by the Kerry International Chamber Music Festival for the fiftieth anniversary of the death of the Kerry storyteller Peig Sayers (1873-1958) in 2008. The commission involved setting some of the stories told by Sayers to music with narration and song. The original artists who the work was written for were Eoin Duignan (*uilleann* pipes), the *Engegård String Quartet* and the *Annóg Youth Theatre* group directed by Áine Moynihan.

I initially liaised with Juliet Jopling, director of the *Kerry International Chamber Music Festival* and violist with the *Engegård String Quartet*, about ideas for the piece. We agreed that I would travel to the Dingle Peninsula to meet with Eoin Duignan and Áine Moynihan and to research possible stories by Peig that could be used as the basis for the piece.

I first met with Áine Moynihan who brought me to the *Blasket Islands Centre* and assisted me in finding suitable stories. Áine's assistance was vital because I do not speak fluent Irish. I eventually chose six stories based on her synopses.[7] I asked her to translate these stories so I could be clearer on their content and suitability for the project. I wanted to find stories that would paint Sayers in a new light.

Sayers' general reputation in Ireland is completely different to her reputation in Dingle. In Dingle, where the people know all about her colourful past and wonderful storytelling abilities, she is held in high esteem. Outside of Dingle her reputation has been tarnished by the sanitised version of her autobiography, which was a central part of

[7] The stories were sourced from Wagner, Heinrich, and Nollaig Mac Congail: *Oral Literature from Dunquin, Co. Kerry (Studies in Irish Language and Literature).* Belfast: Institute of Irish Studies, Queens University Belfast, 1983.

the Leaving Certificate school exam in Irish for many years.[8] Thousands of Irish people who studied *Peig* for their exams have a poor picture of Sayers because of the difficulty of the book in its sanitised version. The book tells of the hardship of life on the Blasket Islands in the late nineteenth and early twentieth centuries. The sanitised version omits much of the humour that characterised Sayers' story-telling. The unrelenting misery of the 'official' version of the book led to much ridicule, most famously in Brian O'Nolan's (1911-1966) book *An Béal Bocht* (1941), published under the pseudonym Myles Na gCopaleen.[9] Ultimately this has led to Peig Sayers' unfairly tarnished reputation.

The people of Dingle told me a different story about Sayers and the stories I found in the *Blasket Islands Centre* confirmed their views that she was a great storyteller with a wonderful sense of humour. I decided it was important that my piece reflected this. As a result I narrowed down the six shortlisted stories into four stories with which to base the piece on.[10]

4.5.2 Structure

The piece has alternating sections where the string quartet accompany the story-telling and instrumental sections where they accompany the *uilleann* pipes. This results in the following basic structure.

- Story I - *An file agus an spríd*
- *Slide* No.1
- *Reel*
- Story II - *Mas le gigeóg a mhallais í....*
- *Polka*

[8] Sayers, Peig: *Peig: The Autobiography of Peig Sayers of the Great Blasket Island.* Syracuse: Syracuse University Press, 1974.
[9] Na gCopaleen, Myles: *An Béal Bocht*. Dublin: The Mercier Press Limited, 1998.
[10] The stories and their translations are found in Appendix III.

- Story III - *An píobaire agus bean an tábhairne* (song)
- *Slip jig*
- Story IV – *Na Seana-Cailleacha*
- *Slide* No. 2

The string quartet plays throughout each section. The pipes are mainly utilised in the tune sections. Stories I, II and IV contain narration; story III is sung in *Sean-nós* style.

4.5.3 Story Sections

The sections where the stories are narrated or sung are accompanied by string quartet writing which draws on ideas from traditional Irish, Zimbabwean and contemporary classical music. Áine Moynihan and her son Malachaí made recordings of the stories which I then based the pacing of the musical structure upon.[11] I have left it up to the narrator to pace the telling as they wish, so long as it does not overlap into the instrumental sections.

Story I is about a poet and his meeting with a spirit and so I have reflected the ghostly nature of this encounter in the string writing which contains effects like high harmonic *glissandi* and *sul ponticello tremolo* effects. The following excerpt illustrates the general accompaniment to the story where there is *pizzicato ostinati* in the cello and viola which follow a polymetric pattern of 5/4 in the cello against 12/8 in the viola.

[11] These are the recordings which can be heard with the MIDI recording I have submitted with this dissertation.

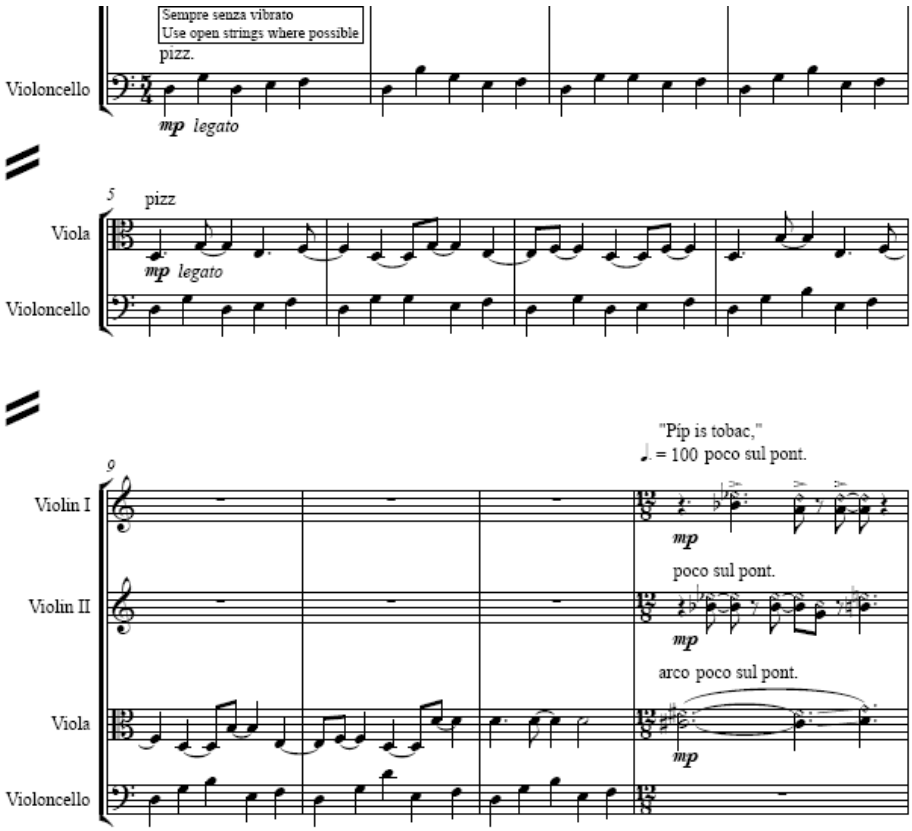


Figure 4.62 Flynn, *Stories from the Old World*, 1-12.

The viola part is notated in 5/4. Close examination of the part reveals it is a pattern in dotted quaver movement which suggests a 12/8 rhythm. This *pizzicato* accompaniment is meant to simulate the rhythm of 'A poor man walking the road' as the poet is described in the opening line.

The only defined entry points for the narrator come at bars 12, 17 and 22 where the narrator assumes the voice of the spirit with the repeating phrase "Píp is tobac agus cuir-se leath-rann as san". The first such entry can be seen at the end of the example above. The music at this point is in the *slide* rhythm of 12/8. The combination of harmonic *glissandi* and *poco sul ponticello* bowing gives this motif a ghost-like quality. Combining the violin and viola parts to show the notes produced by the artificial harmonics demonstrates that this motif is similar to the modulating linking motif that I described in Chapter 3.3.3. The following examples show how the usual flexible note change in a modulating linking motif is from a higher to a lower note (*F-sharp* to *F-*

natural or *C-sharp* to *C-natural*). In the 'Píp is tobac' motif it is from a lower to a higher note (*B-flat* to *B-natural*).

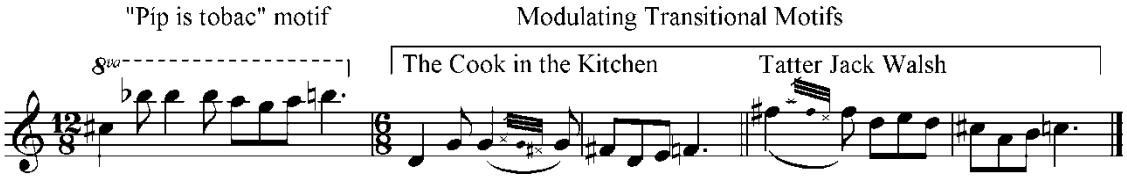


Figure 4.63 Modulating linking motif in Flynn, *Stories from the Old World*.

Also of note in this movement is the use of microtones, chromaticism and dissonance. All these aspects of pitch are used to enhance the ghostly nature of the story and can be seen along with *tremolo* and *glissandi* effects in this short example towards the end of the story.

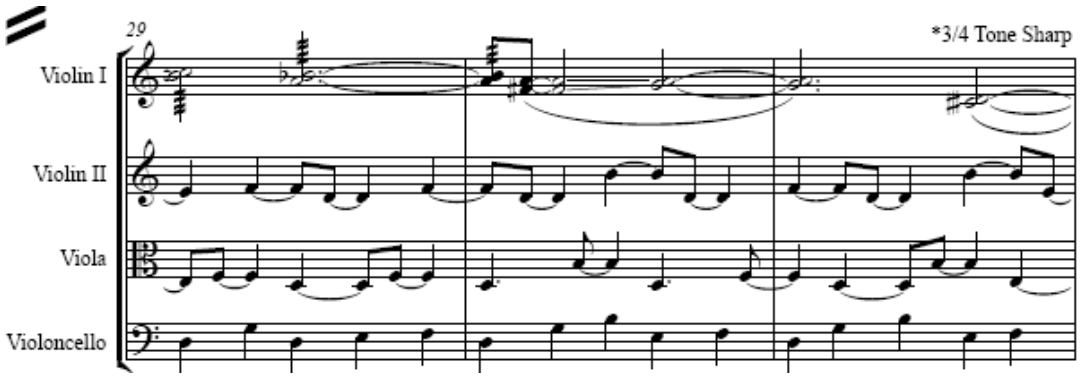


Figure 4.64 Flynn, *Stories from the Old World*, 29-31.

Story II *Mas le gigeóg a mheallas í...* is a humourous story detailing how a young man wins and loses a pretty girl through two farts! I chose a *polka* rhythm for this tune to reflect the fact that the setting for the story is at a Kerry dance, where *polkas* would be popular. The story is narrated over a gradually unfolding section based on *polka* rhythms. It begins with simple melodic material which develops through instruments and extra notes being gradually added to the initial two note motif in the first violin.

II "Más le gigeog a mheallas í...."

("If it was with a fart I won her …")

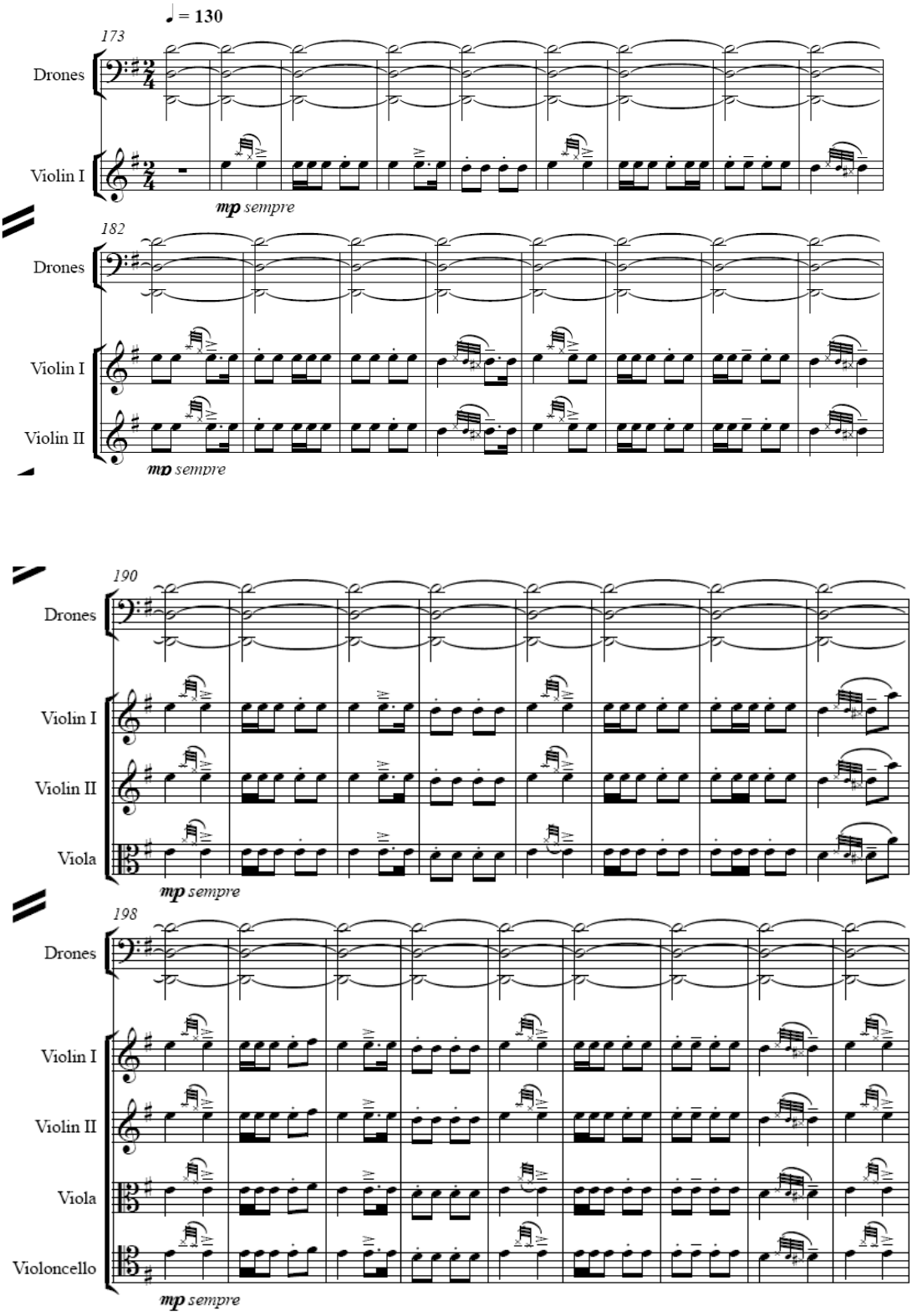


Figure 4.65 Flynn, *Stories from the Old World*, 173-206.

This monodic material develops through the narration into canonic material.

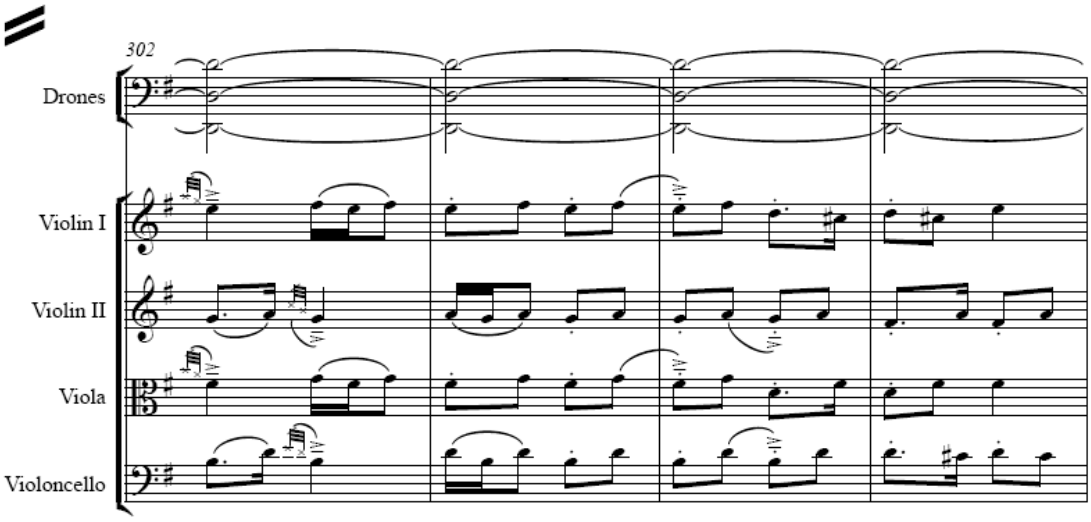
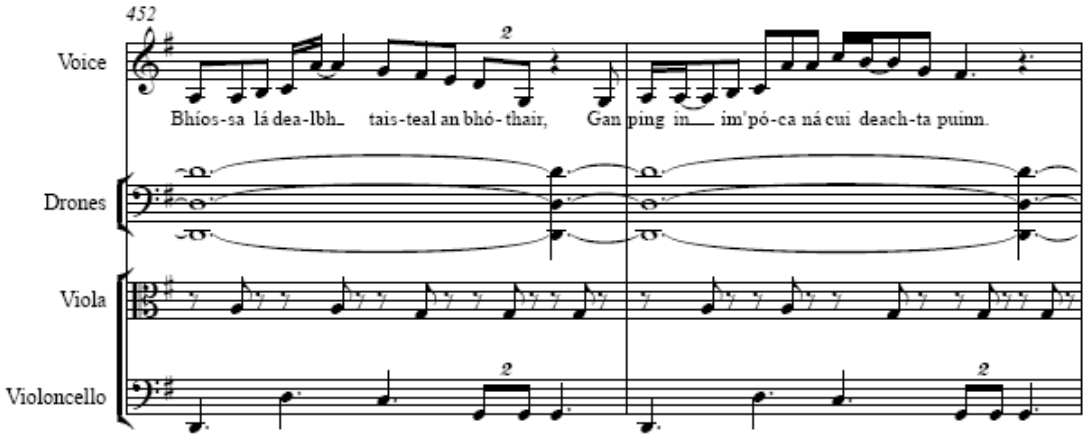


Figure 4.66 Flynn, *Stories from the Old World,* 302-305.

I set Story III *An píobaire agus bean an tábhairne* as a song because the text indicates it was originally a song. The melody to which the song is sung is closely linked to the singing style of West Kerry. It was particularly inspired by the singing of Breanndán Begley, a member of the area's most famous musical family. The rhythm of 15/8 might seem unusual for traditional music; however for breathing purposes some singers extend the final note of a phrase in a *jig*-style song. In notation this results in an extra bar of 3/8. This creates alternating two bar phrases in 6/8 and 9/8 or one bar of 15/8.



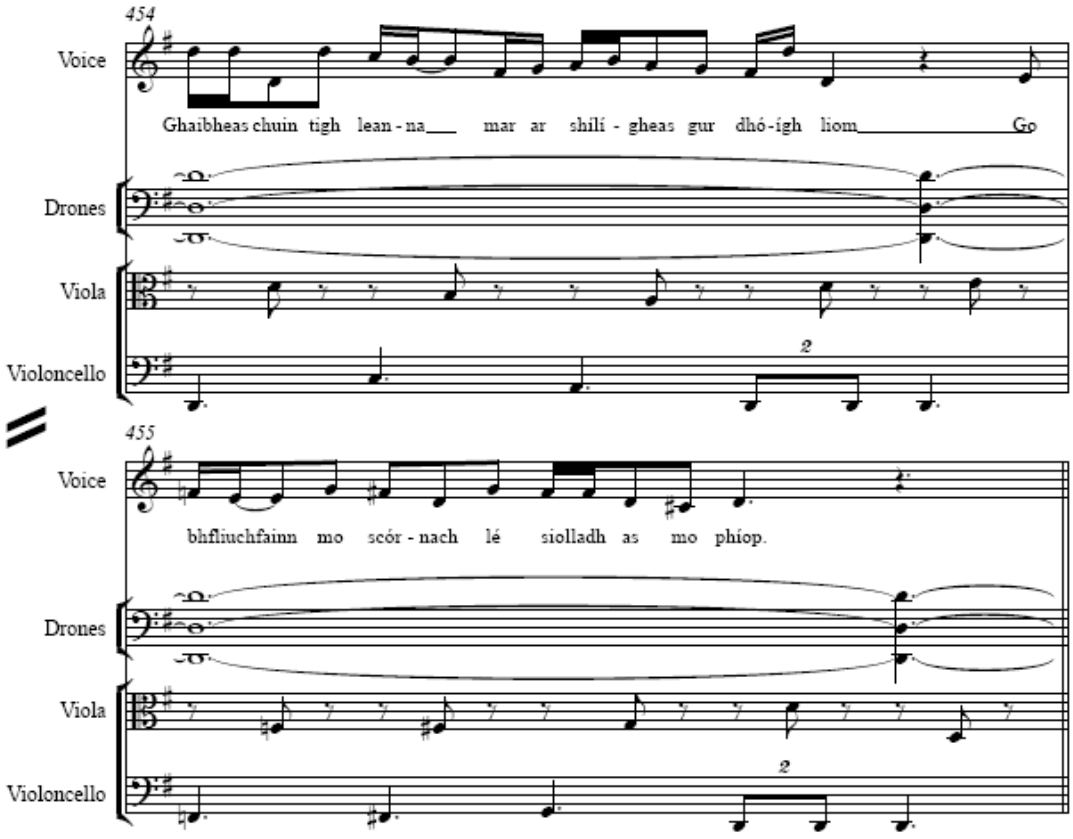


Figure 4.67 Flynn, *Stories from the Old World,* 452-455.

There is use of note flexibility here. In bar 454 the notes *F-sharp* and *C-natural* are used. Bar 455 has an *F-natural*, an *F-sharp* and a *C-sharp*. The basic melody remains the same for the rest of the song, although there are some slight rhythmic and melodic deviations to reflect the natural rhythmic flow of the text.

The string quartet accompaniment to the song contains a mixture of close canonic material, often played *pizzicato* and held harmonies which are influenced by *uilleann* pipes regulator harmonies.

A lilting hocket texture between the cello and viola supports the first verse.

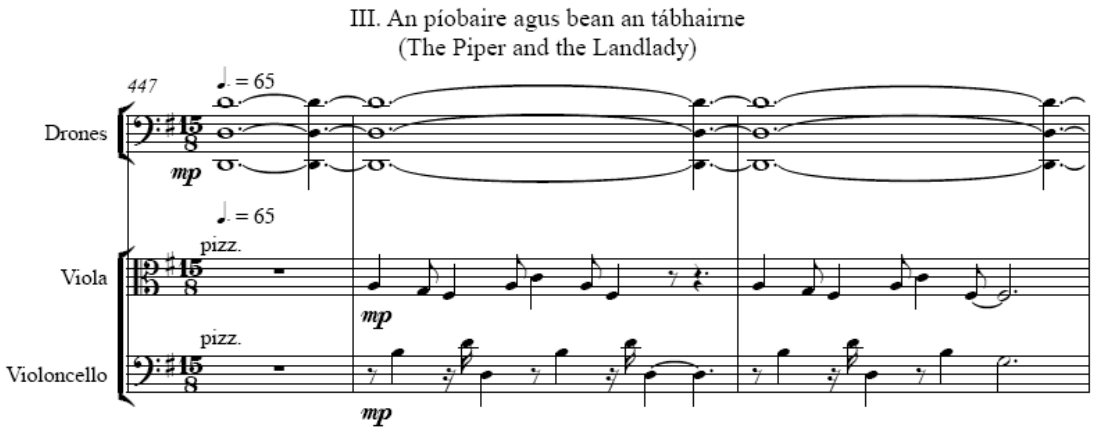


Figure 4.68 Flynn, *Stories from the Old World,* 447-449.

The fourth verse is accompanied by close canonic material. This style of close canonic material is a characteristic of Zimbabwean *mbira* music, such as the traditional piece 'Taireva'.

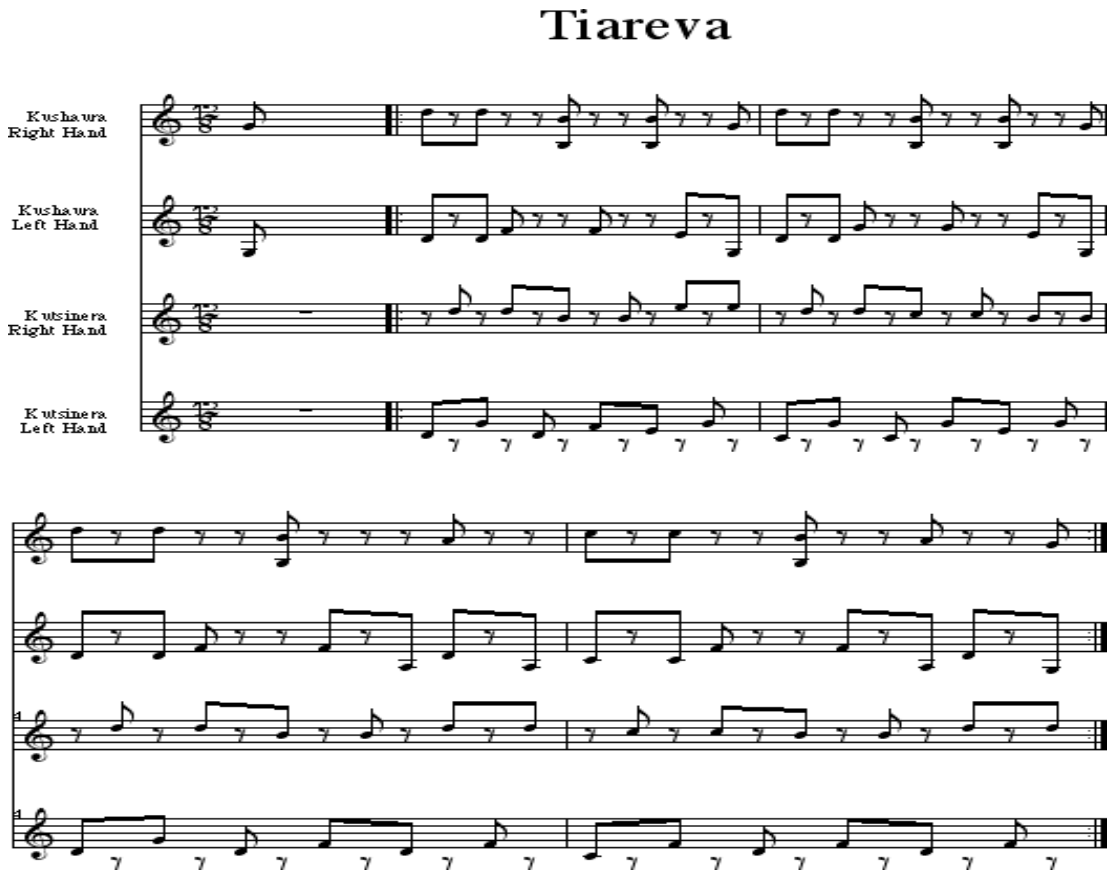


Figure 4.69 Zimbabwean traditional mbira tune 'Taireva.'[12]

[12] Krimmel, Max: "Taireva Transcription." *Max Krimmel's Official Web site.* http://www.maxkrimmel.com/ShonaMusic/Mbira/Mbirajumpstart/Taireva.html (accessed August 19, 2010). The transcription is incorrectly called 'Tiareva'.

In the following example, the violins play the same material as they do in the third verse but *arco* instead of *pizzicato*. The cello and viola add another *pizzicato mbira*-style canonic pattern in a duple rhythm. The combination of these two close canonic patterns creates considerable rhythmic movement.

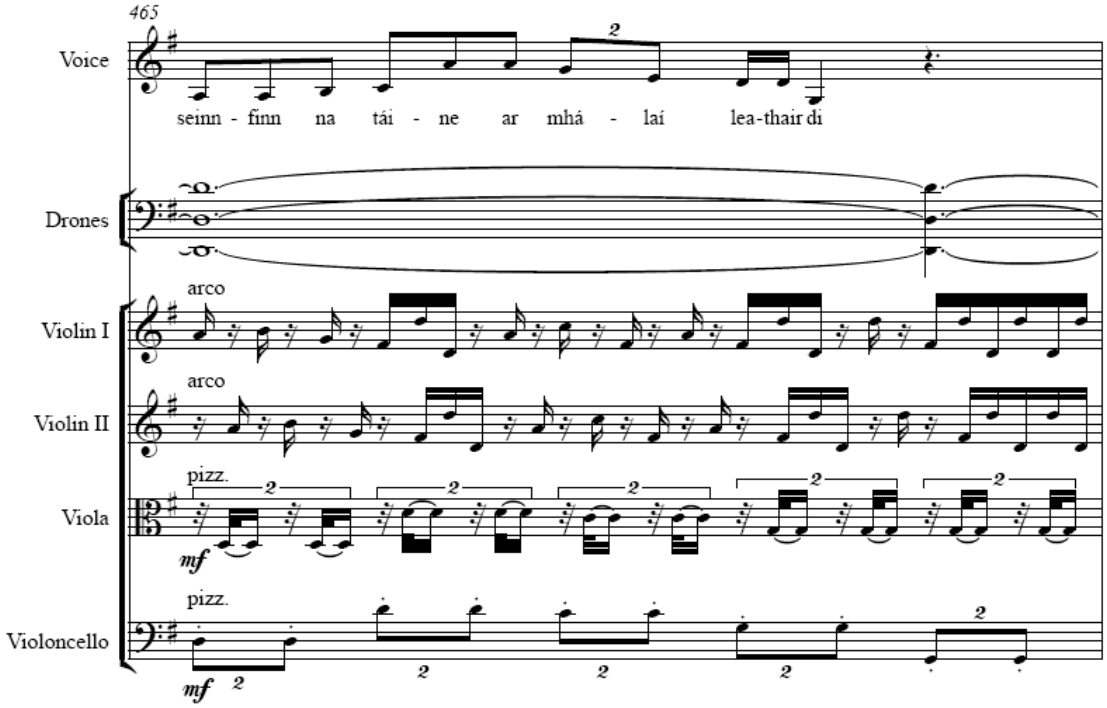


Figure 4.70 Flynn, *Stories from the Old World,* 465.

Story IV *Na Seana-Cailleacha* (The Old Hags) is the longest of the stories. It tells the tale of how a woman manages to fool hags who were intent on taking over her home. My accompaniment to the story is based on a long, winding melody in a slow *slide* rhythm.

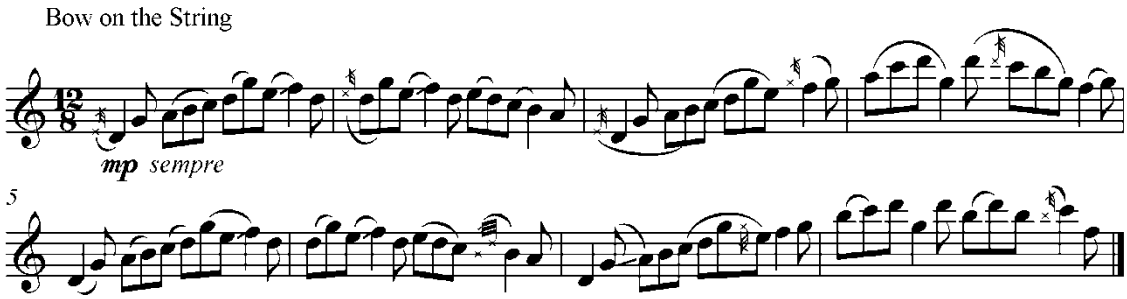


Figure 4.71 Flynn, *Stories from the Old World*, main melody of Story IV.

This melody appears initially in the first violin, with drone accompaniment from the other instruments. After one round of this melody the second violin starts playing a version of the melody transposed up a 3rd, in canon with the first violin.

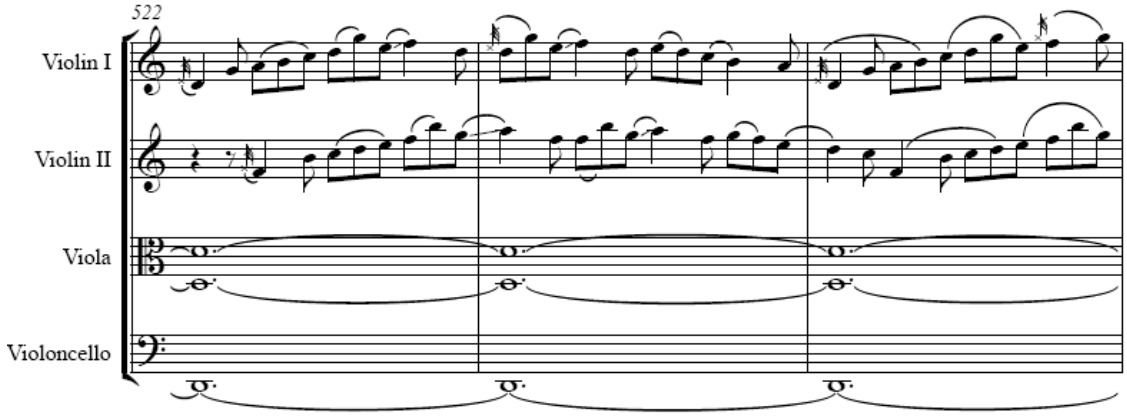


Figure 4.72 Flynn, *Stories from the Old World*, 522-524.

At the next round of the melody the viola plays a version of the melody transposed a 3rd below and also in canon. This process continues with the cello playing the melody an octave below the violin and with the canon beginning a quaver after the first violin.

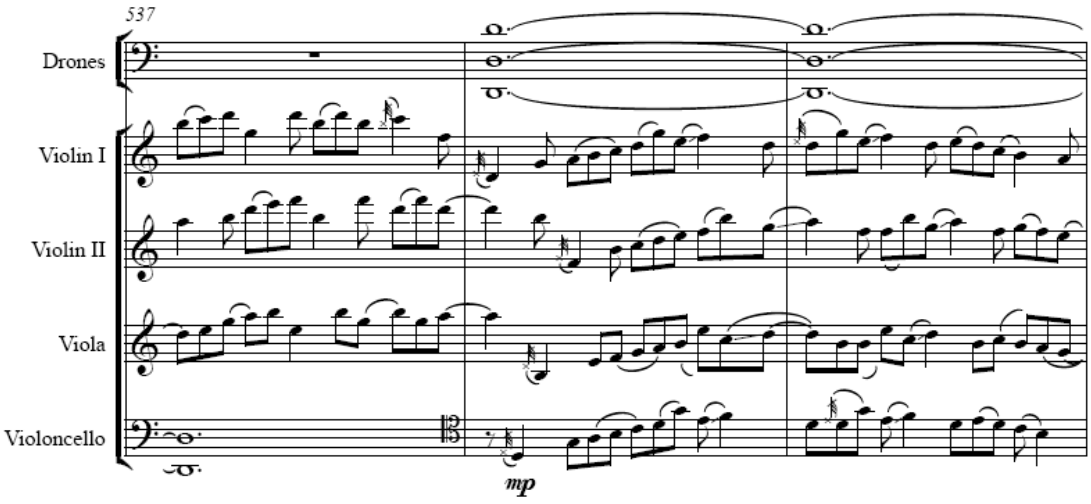


Figure 4.73 Flynn, *Stories from the Old World*, 537-539.

This process creates a rich contrapuntal texture in the D Dorian mode. At the next round of the melody this process is reversed and the first violin stops playing. The second violin stops after the next round and the viola stops the round after this, thus

leaving the cello to finish off this section with just the drones of the pipes for accompaniment.

4.5.4 Instrumental Sections

The tunes I composed for the piper are the basis of the instrumental sections. The tunes, in chronological order, are a *slide*, *reel*, *polka*, *slip jig* and *slide*. The first *slide* follows Story I. It is rhythmically a bit different to the normal *slide* rhythm and the pace I ask for it to be played at (♩. = 80) is slower than *slides* are usually played.

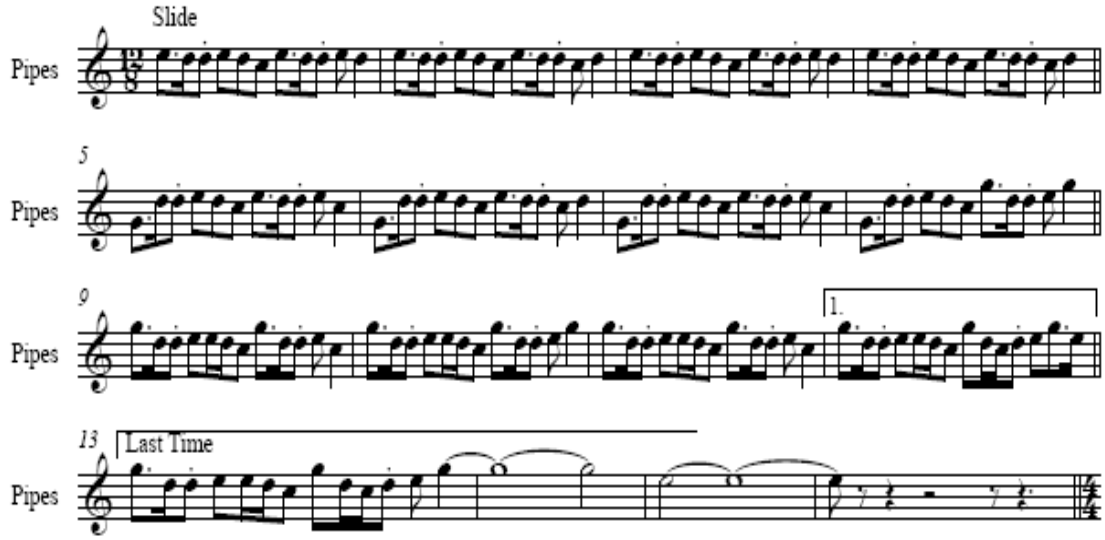


Figure 4.74 Flynn, *Stories from the Old World,* 'Slide No.1.'

Melodically this *slide* is deliberately very simple. I wanted to create a tune that was more about rhythm than melody and its simplicity is vital to the polymetric texture created with the string quartet.

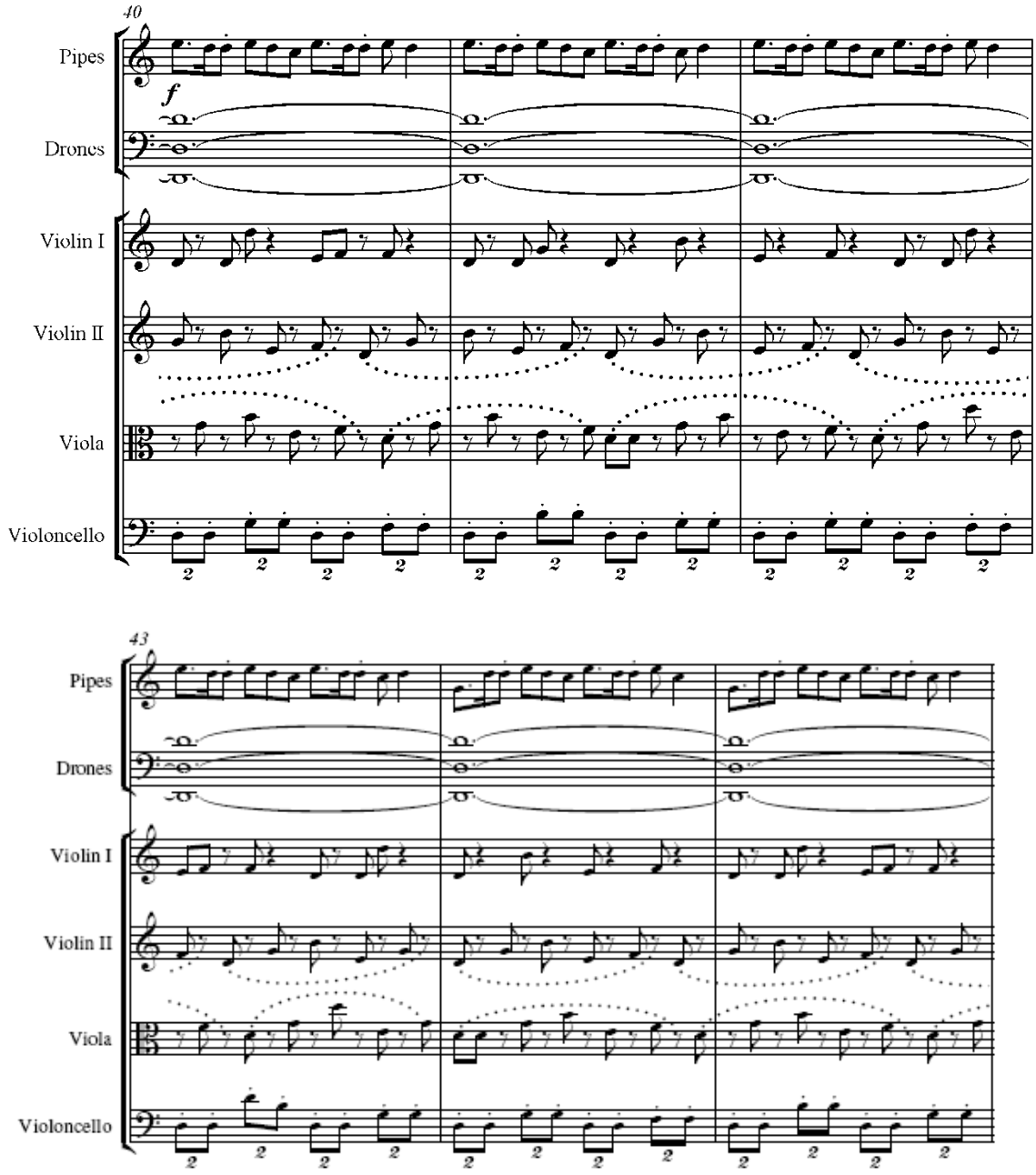


Figure 4.75 Flynn, *Stories from the Old World,* 40-45.

The dotted phrase marks in the second violin and viola reflect the inherent rhythm of those parts which is essentially 10/8 in the second violin and a three bar loop from 11/8 to 10/8 to 9/8 in the viola. The music is barred in 12/8 for convenience. There is a canonic relationship between these instruments, whereby a note in the second violin is often echoed in the viola. These are not strict canons though due to the polymetric movement.

The cello part follows a two quaver for every three quavers pattern, thus giving a sense of 4/4. The first violin part is in 12/8 but with a straight quaver rhythm rather than the dotted quaver to semiquaver rhythm of the pipes. So the overall effect of these polymetres is rhythmically rich.

This *slide* is followed by a *reel* in A Dorian which was also written with canonic and rhythmic possibilities in mind.

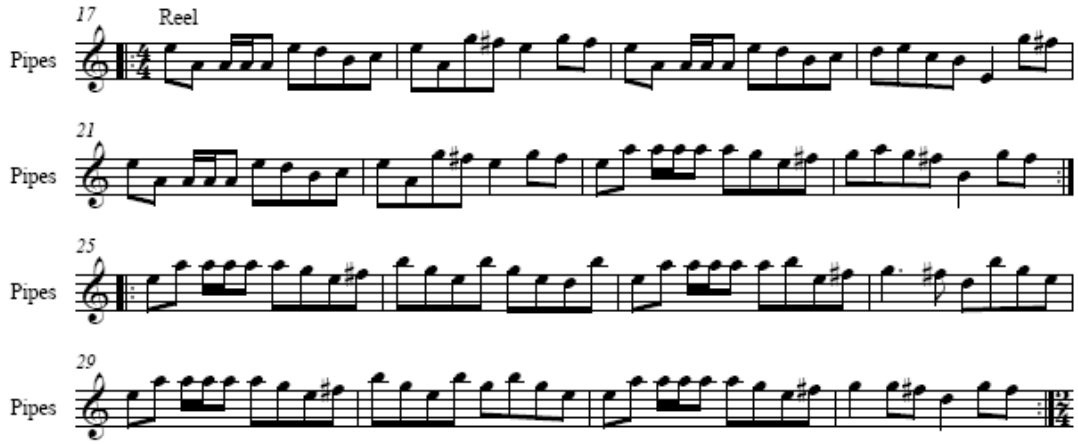


Figure 4.76 Flynn, *Stories from the Old World,* Reel following Story I.

The quartet plays polymetric rhythms which are derived from the opening of this *reel*.

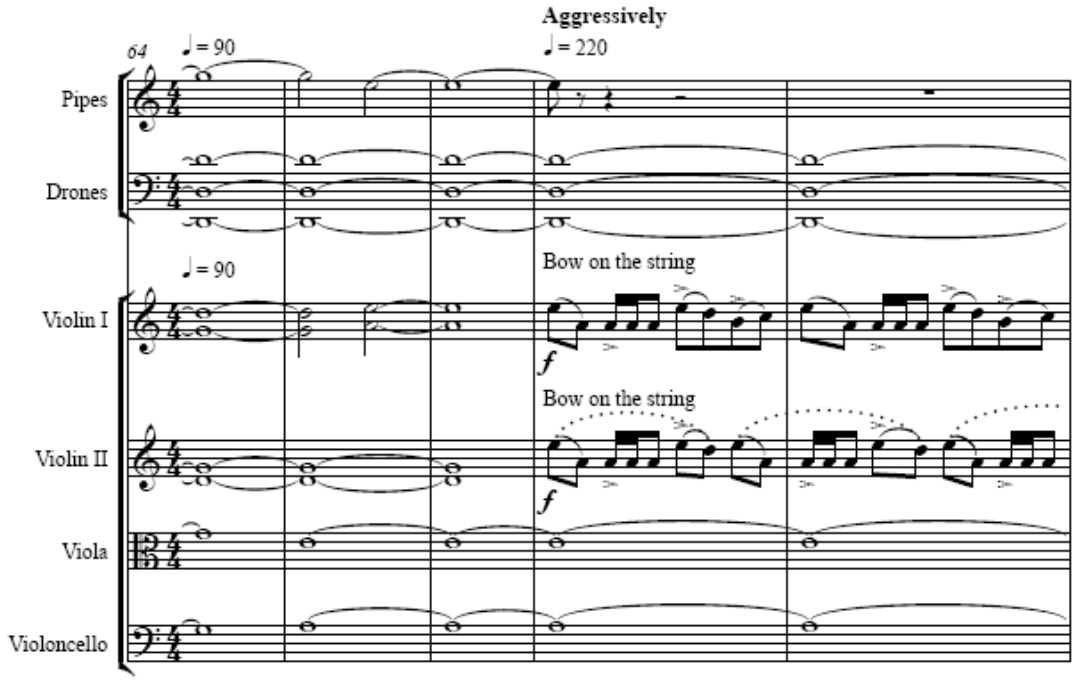


Figure 4.77 Flynn, *Stories from the Old World,* 64-68.

The first violin has a repeating pattern in 4/4 whilst the second violin has a repeating pattern (marked by dotted phrase marks) in 3/4. The instruments continue repeating these patterns against each other in a polymetric cycle before the pipes eventually enter with the *reel*.

By the end of this *reel* section the string quartet part has expanded in range considerably with the two violins playing high pitched, polymetric patterns an octave above the pipes.

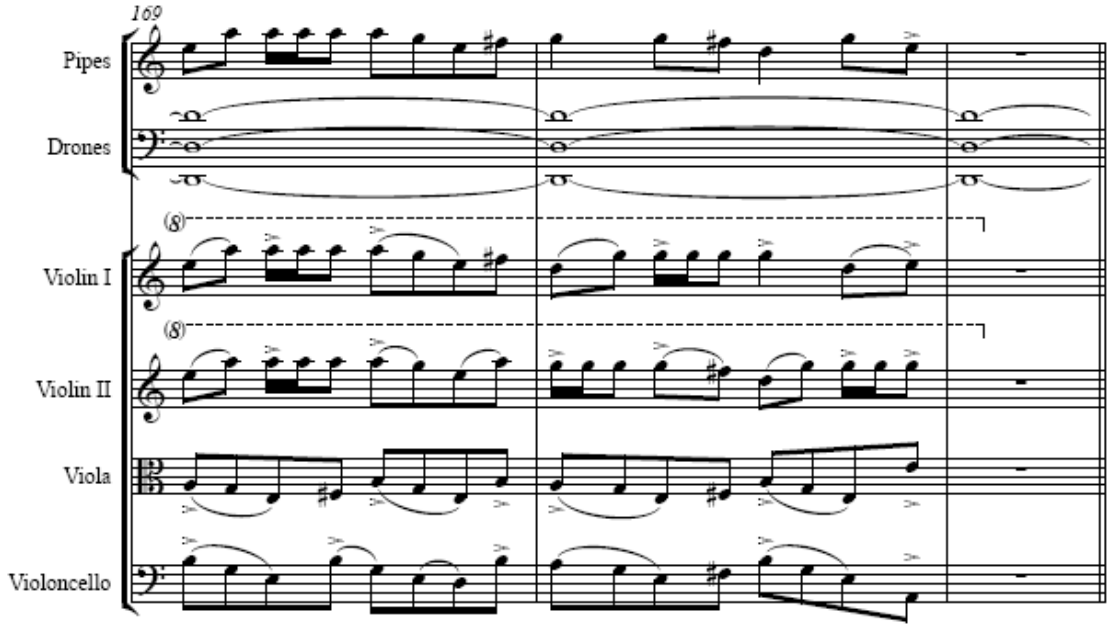


Figure 4.78 Flynn, *Stories from the Old World,* 169-171.

The instrumental section after Story II is based on a *polka* which has an A part in E Dorian and B part in A Dorian.

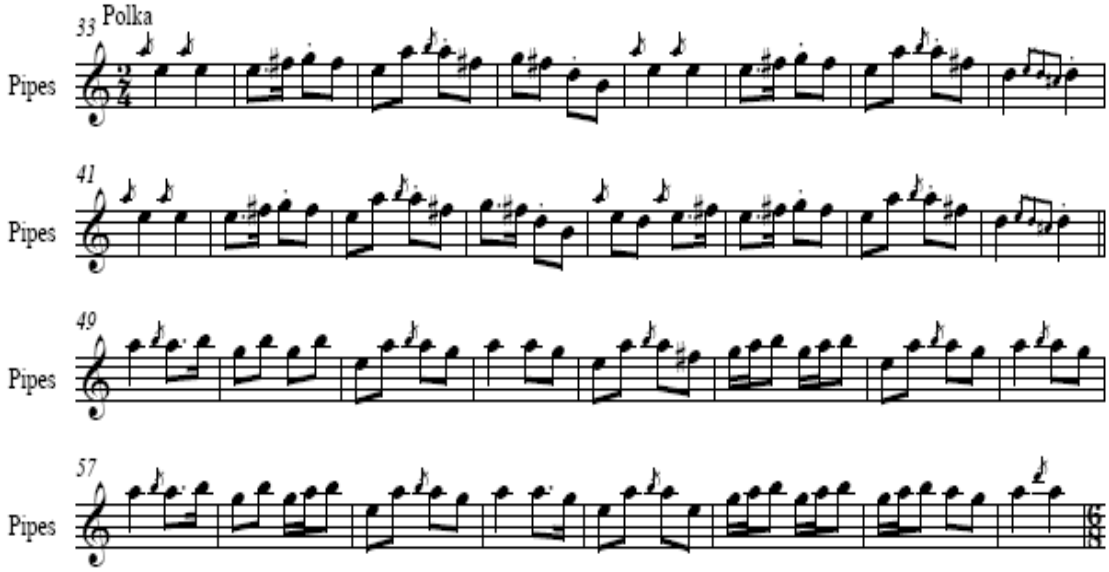


Figure 4.79 Flynn, *Stories from the Old World,* Polka which follows Story II.

The simplicity of this melody lends itself to canonic and contrapuntal accompaniment and that is what the string quartet mainly provides, although the first violin initially doubles the pipes melody an octave lower. I have given very specific bowing and phrasing marks for the first violin in order to approximate a general bowing style used for Kerry *polkas*.

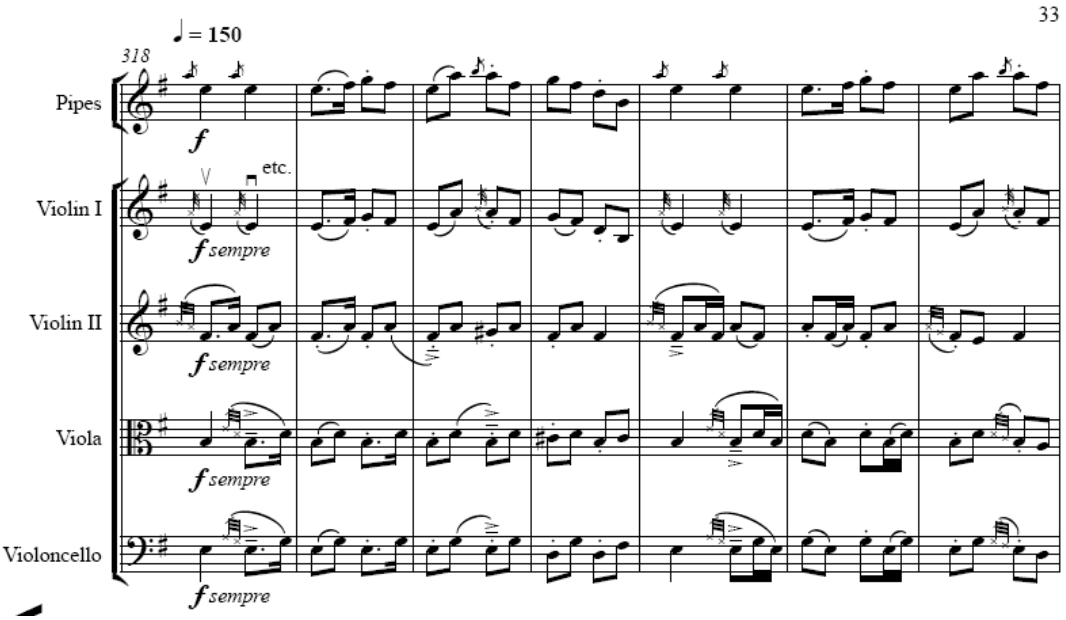


Figure 4.80 Flynn, *Stories from the Old World,* 318-324.

Bar 414 signifies the beginning of the climax of this section. The cello part is moved down to the instrument's lowest octave. This adds considerable power and in performance I found this to be one of the most musically satisfying sections.

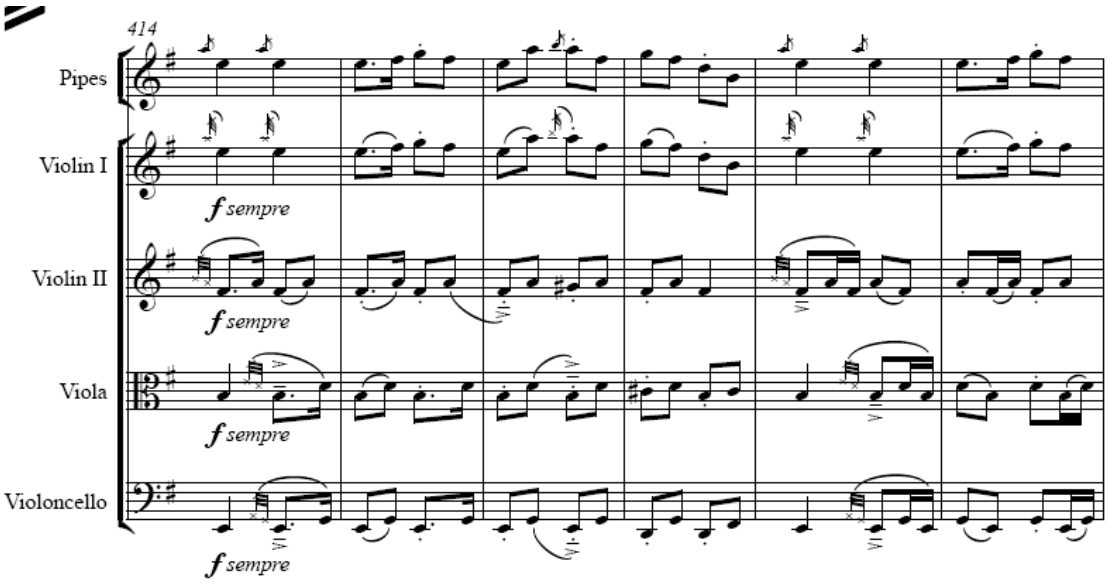


Figure 4.81 Flynn, *Stories from the Old World,* 414-419.

Story III has two instrumental sections each based on the following *slip jig*.

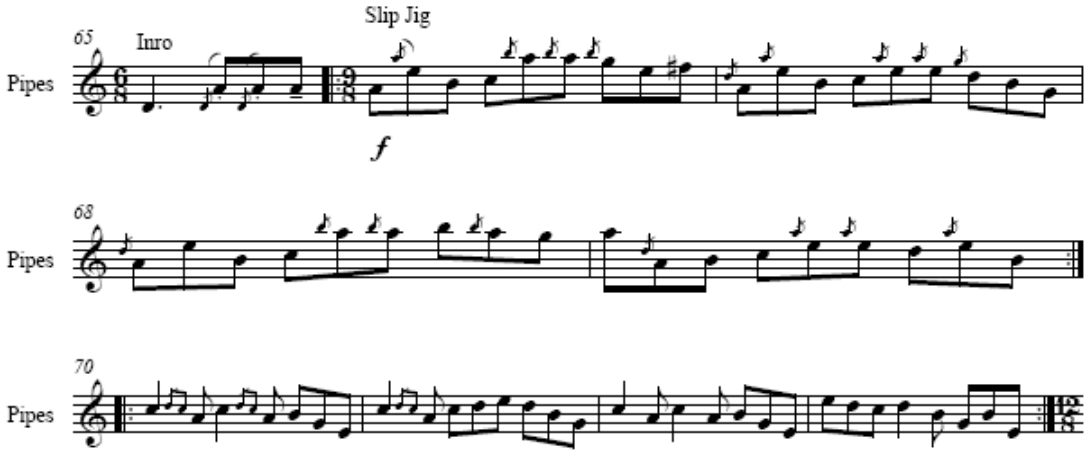


Figure 4.82 Flynn, *Stories from the Old World,* Slip jig used in Story III.

This is a simple tune in A Dorian in an imitative style. The string quartet first accompanies this *slip jig* with close canonic material.

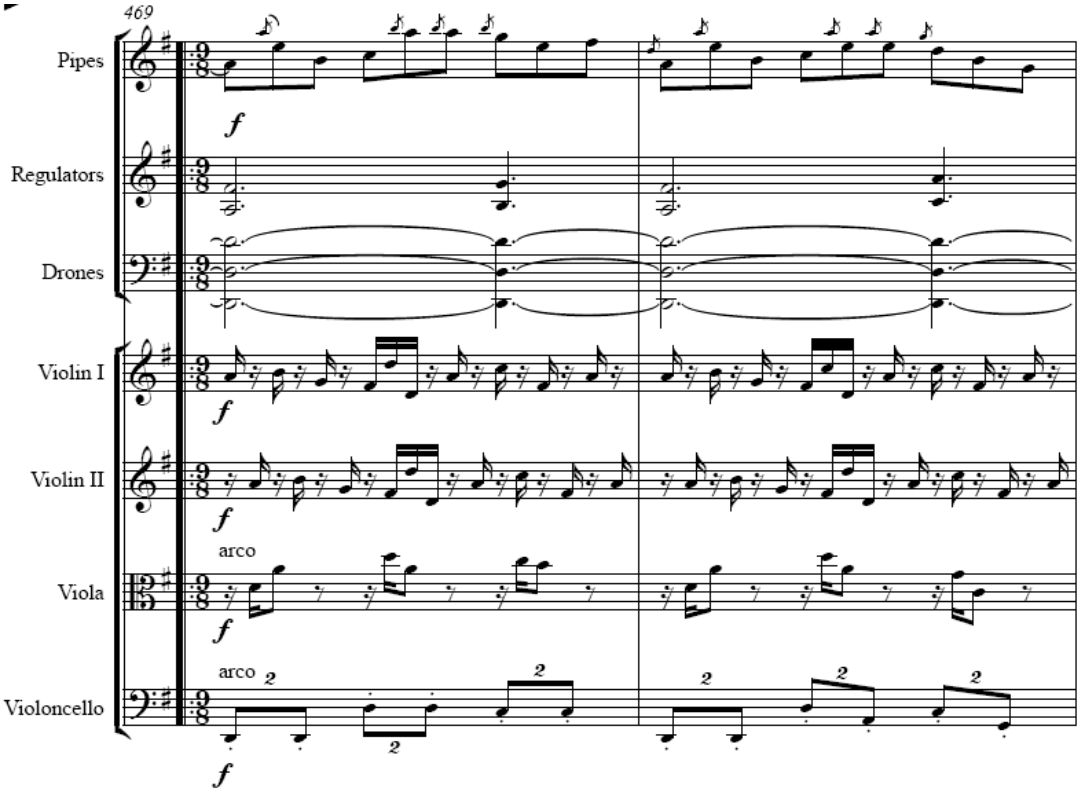


Figure 4.83 Flynn, *Stories from the Old World,* 469-470.

When the last words of Story III are sung, the *slip jig* returns and it is played twice. On the second repetition, the dynamic quietens and the musicians play *poco sul ponticello.*

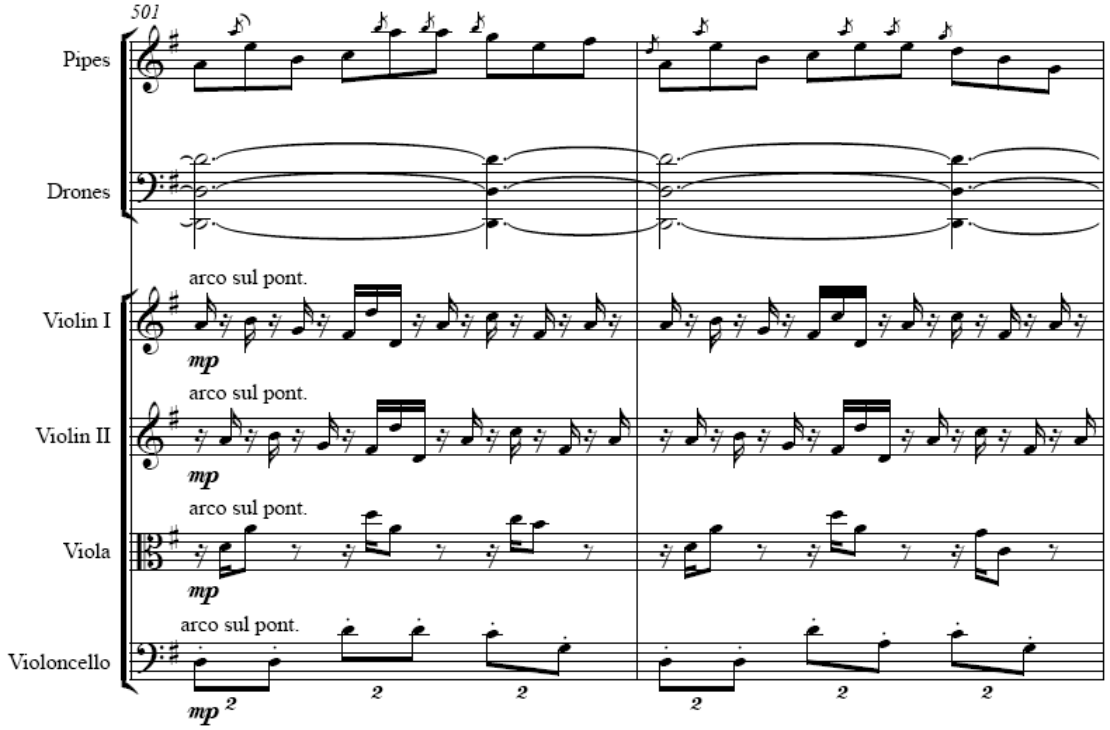


Figure 4.84 Flynn, *Stories from the Old World,* 501-502.

The final instrumental passage, in Story IV, is based on a three part *slide*.

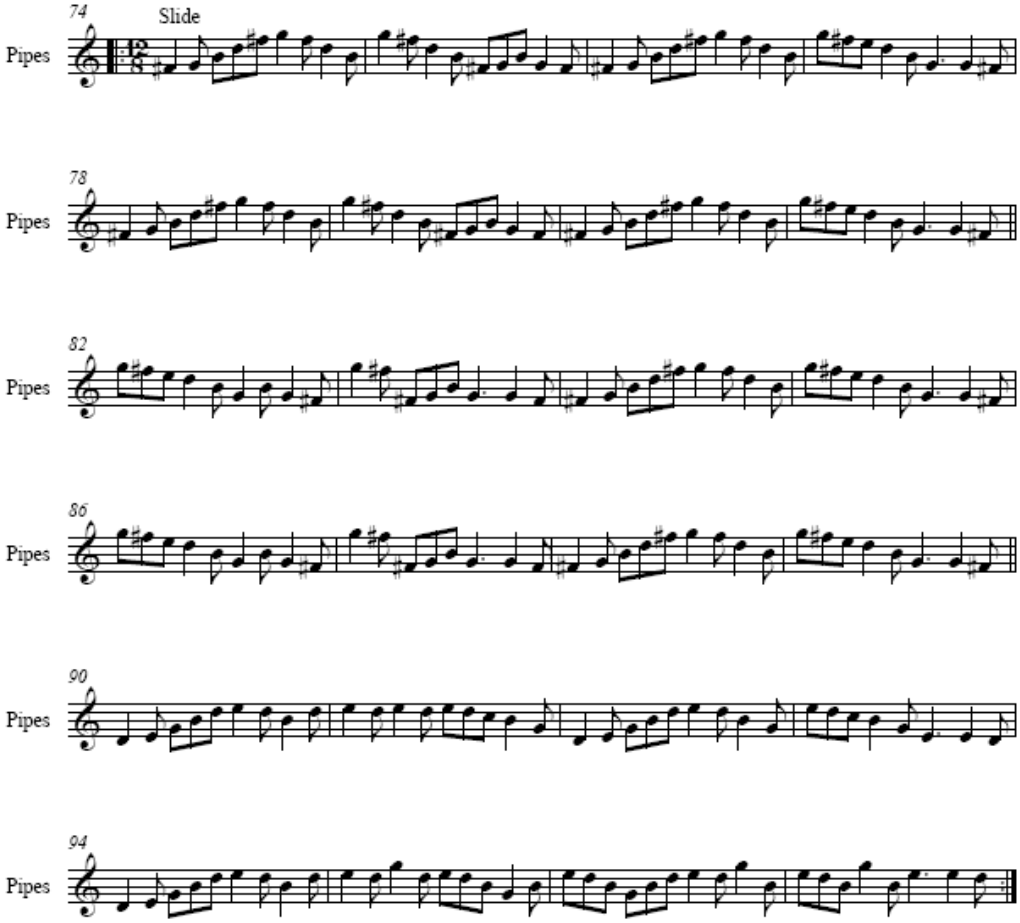


Figure 4.85 Flynn, *Stories from the Old World,* Slide which ends Story IV.

The piper plays this *slide* following a short introductory section by the quartet, which is based upon the opening notes of the *slide* played at different speeds. The first violin plays the first two bars of the *slide* at half the speed. The second violin and viola play at a similar speed but with shorter versions of the melody. The second violin melody is a crotchet shorter than the first violin melody.

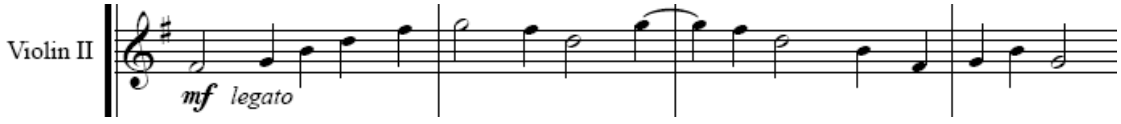


Figure 4.86 Flynn, *Stories from the Old World,* 575-578, second violin.

Since it is repeated exactly it could theoretically be considered as being a repeated phrase in 11/4.

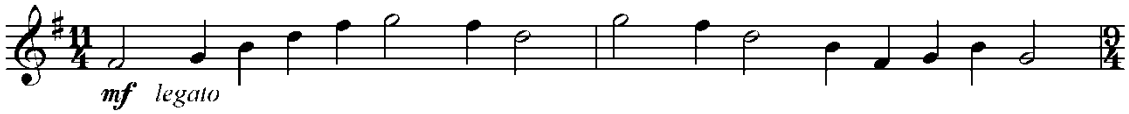


Figure 4.87 Flynn, *Stories from the Old World,* 575-578, second violin melody re-barred in 11/4.

The viola melody can also be re-barred to reflect its inherent 9/4 nature.

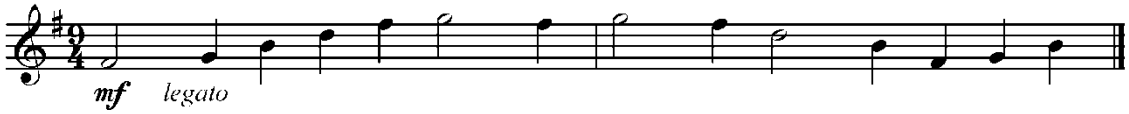


Figure 4.88 Flynn, *Stories from the Old World,* 575-578, viola melody re-barred in 9/4.

The cello plays a melodically similar pattern in a dotted crotchet rhythm to give further polymetric movement to this section.

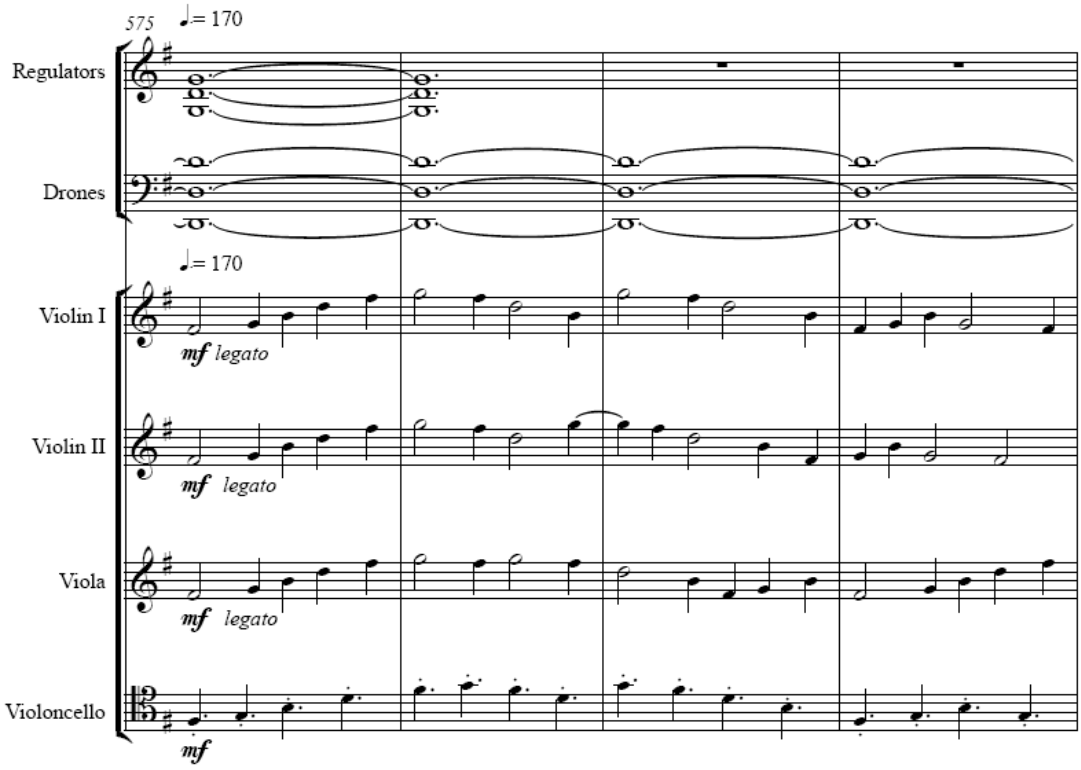


Figure 4.89 Flynn, *Stories from the Old World,* 575-578.

These patterns are repeated against each other for eight bars before the piper enters with the *slide*. The *slide* is played three times in total. The accompaniment for the second repetition of the *slide* is more rhythmically and melodically complex, with the violins going into the higher ranges of the instrument and the introduction of close canonic material.

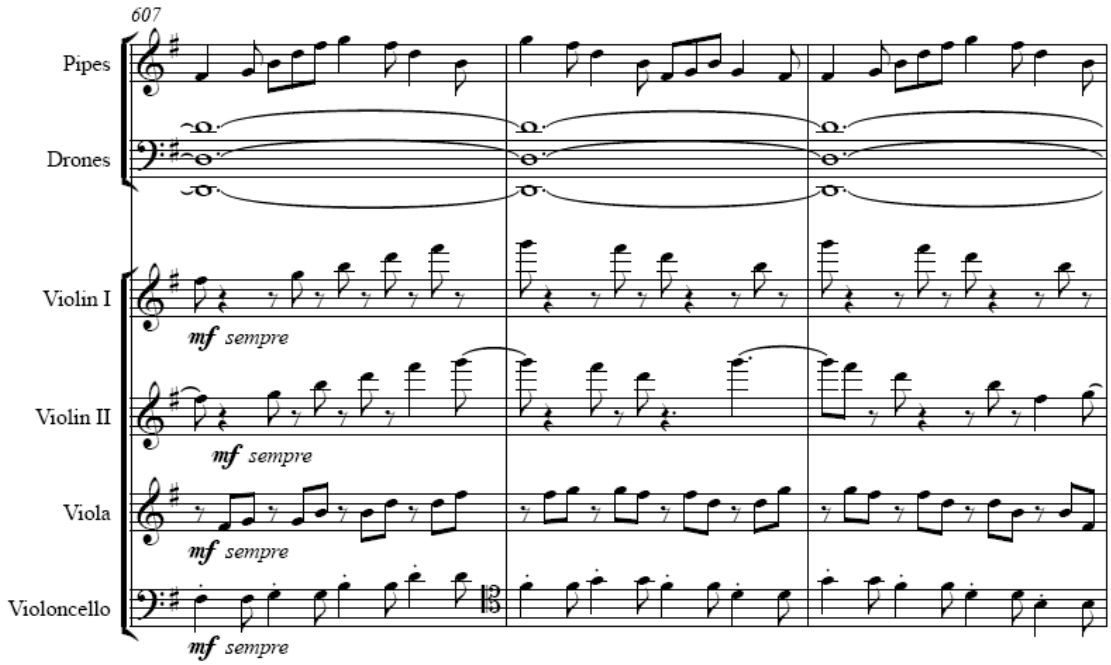


Figure 4.90 Flynn, *Stories from the Old World,* 607-609.

At bar 631 there is a short interlude before the third repetition of the *slide*. This interlude introduces the final accompaniment style to the piece, which is an aggressive chordal style based on the alternation of two chords, G major7 and C6add9. This accompaniment style continues through the final repetition of the *slide* melody.

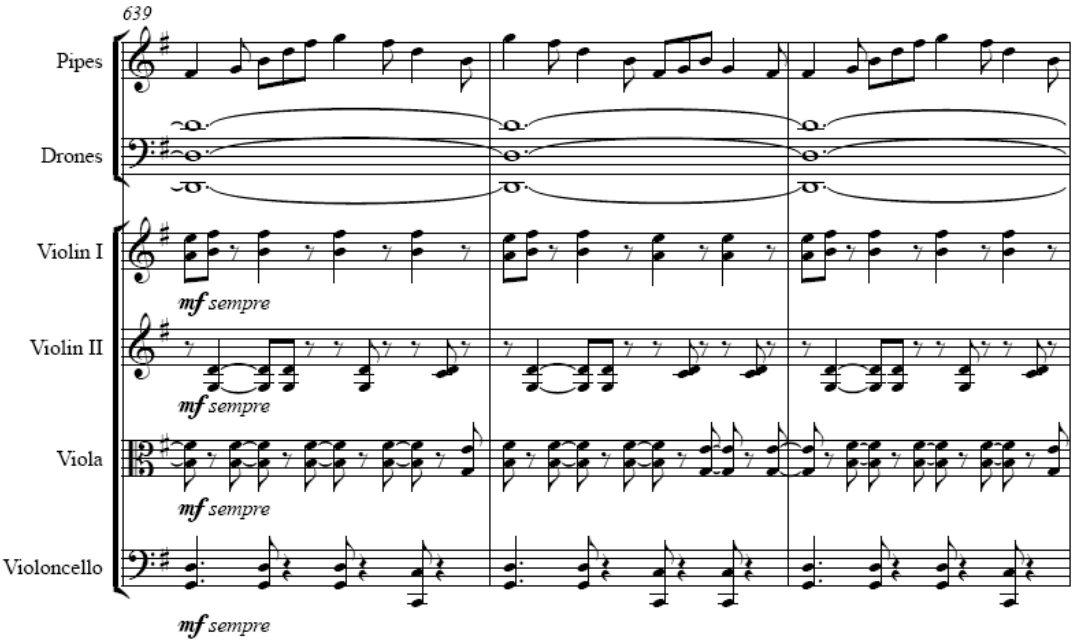


Figure 4.91 Flynn, *Stories from the Old World,* 639-641.

The pitch material in the string quartet gets gradually higher until the very end, where held harmonies are introduced into all instruments.

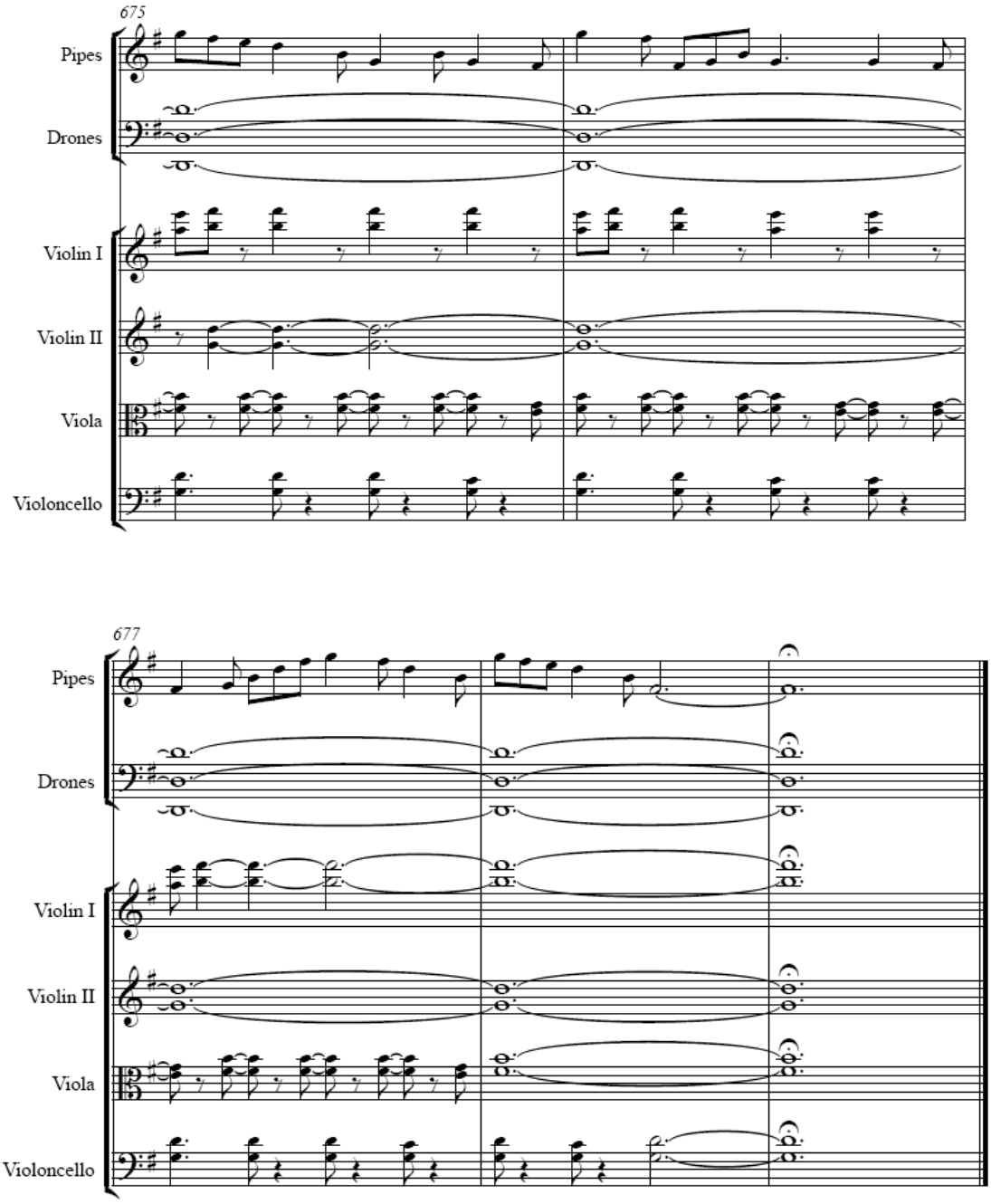


Figure 4.92 Flynn, *Stories from the Old World,* 675-679.

4.5.5 Summary

This piece received three performances during the Kerry International Chamber Music Festival from October 2-4, 2008. I prepared a MIDI version of the piece prior to rehearsals, which I synchronised with the recorded narration Áine Moynihan supplied me. I gave this recording in advance to all the musicians involved and Moynihan's theatre group *Annóg*.

The *Engegård Quartet* are classical musicians of the highest order but they were not entirely able to understand my ideas regarding rhythmic phrasing and timbre. There were many occasions when they used *vibrato,* despite me asking them on a number of occasions not to use *vibrato* at all. They seemed puzzled as to why I desired this no *vibrato* sound. I explained the reasoning that the no *vibrato* sound would blend well with the pipes.

They also had difficulty adapting to the bowing and phrasing styles I notated and demonstrated to them. I noticed they had a particular tendency towards *rubato* in the melody which underpins the final story. I asked a number of times for them to play it without *rubato* but this proved difficult, perhaps because *rubato* is so ingrained in their performance practice.

Áine Moynihan assigned four members of *Annóg* to narrate/sing the piece, one for each story. It certainly added an element of charm and local relevance to have local young people performing the parts; however my future preference would be that the stories are narrated by fully developed actors or storytellers and that the song is sung by a fully developed *Sean-nós* singer.

4.6 *Five Études for Uilleann Pipes* (2009)

These are the first set of *études* for the *uilleann* pipes that I am aware of. They follow the long classical music tradition of study pieces. The *études* were composed in collaboration with Mick O'Brien with the primary purpose of assisting *uilleann* pipers to develop the harmonic and melodic possibilities of regulator technique and to present them with a set of concert pieces which are outside the realm of what would be normally considered 'traditional' music.

These works are technically demanding because the regulators have rarely been used to the extent they are utilised in these pieces. The more pipers take up these pieces and master the techniques, the more possibilities there will be for more complex integration of the regulators.

No dynamics or phrasings are indicated because pipers usually choose their own approaches in these regards. Since the pipes are generally tuned in 'just intonation' rather than equal temperament I could have notated microtones in the score but I chose not to for ease of reading. The chanter parts can be freely ornamented according to Irish piping practice.

4.6.1 Étude No.1 - Right Hand Triadic Arpeggios

Sets of *études* often begin with arpeggio studies. The first *étude* will develop the ability to play arpeggiated accompaniment on the regulators along with chanter playing which features the left hand only. The development of this technique will create new contrapuntal possibilities on the pipes. The regulator part in this piece is a repeated arpeggio pattern that is sounded on its own first and then repeated through the rest of the piece. This pattern is first sounded through bars 1-22.

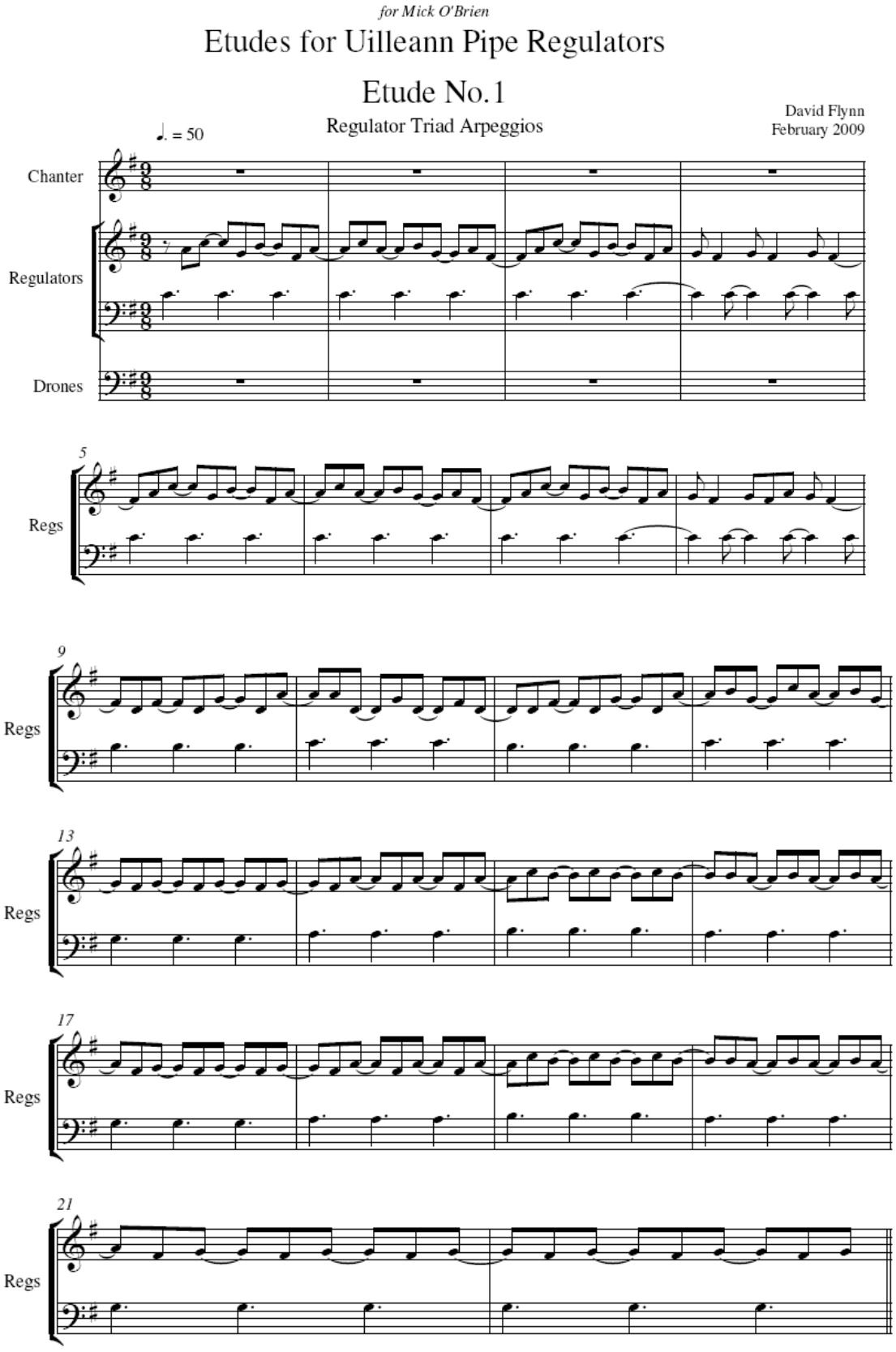


Figure 4.93 Flynn, *Étude No.1 for Uilleann Pipe Regulators,* 1-22.

This would be quite a simple passage to play on a piano; however it is technically quite difficult on the regulators. Initially Mick O'Brien was not sure if it would be possible to play but with determined practice he developed a fingering that would make it work. This fingering turned out to be different to the fingering I thought would work. In order to figure out the possibilities of using the regulators I had drawn a diagram by tracing O'Brien's regulators on a piece of paper. Since I do not play the pipes I was not aware that the angle the fingers need to go on the regulators means that some of the fingerings I had presumed would work were not practical. Luckily O'Brien was able to find a fingering that would work and he eventually mastered it to the point where he could add the chanter part.

The addition of the regulator part means only one hand can be used on the chanter. I was limited to just six notes as a result of this. I created a gradually developing melody using just five of these notes, all in the one octave, *G, A, B, C, D*. The chanter melody starts with downward scale movement.

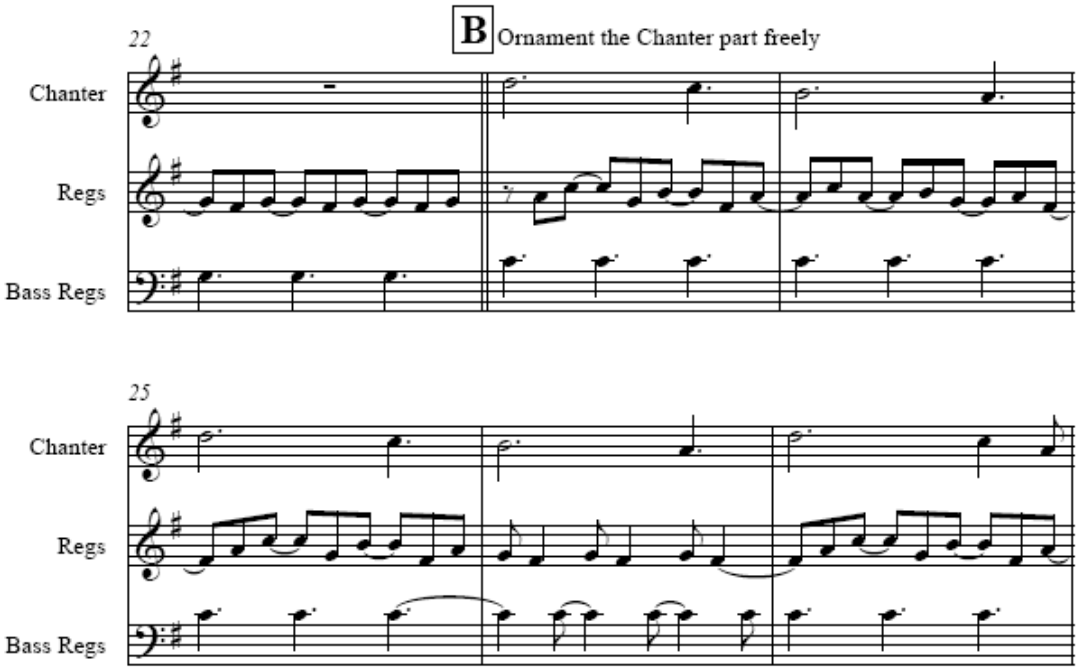


Figure 4.94 Flynn, *Étude No.1,* 23-27.

This melody develops into a tune similar in style to a *slip jig*.

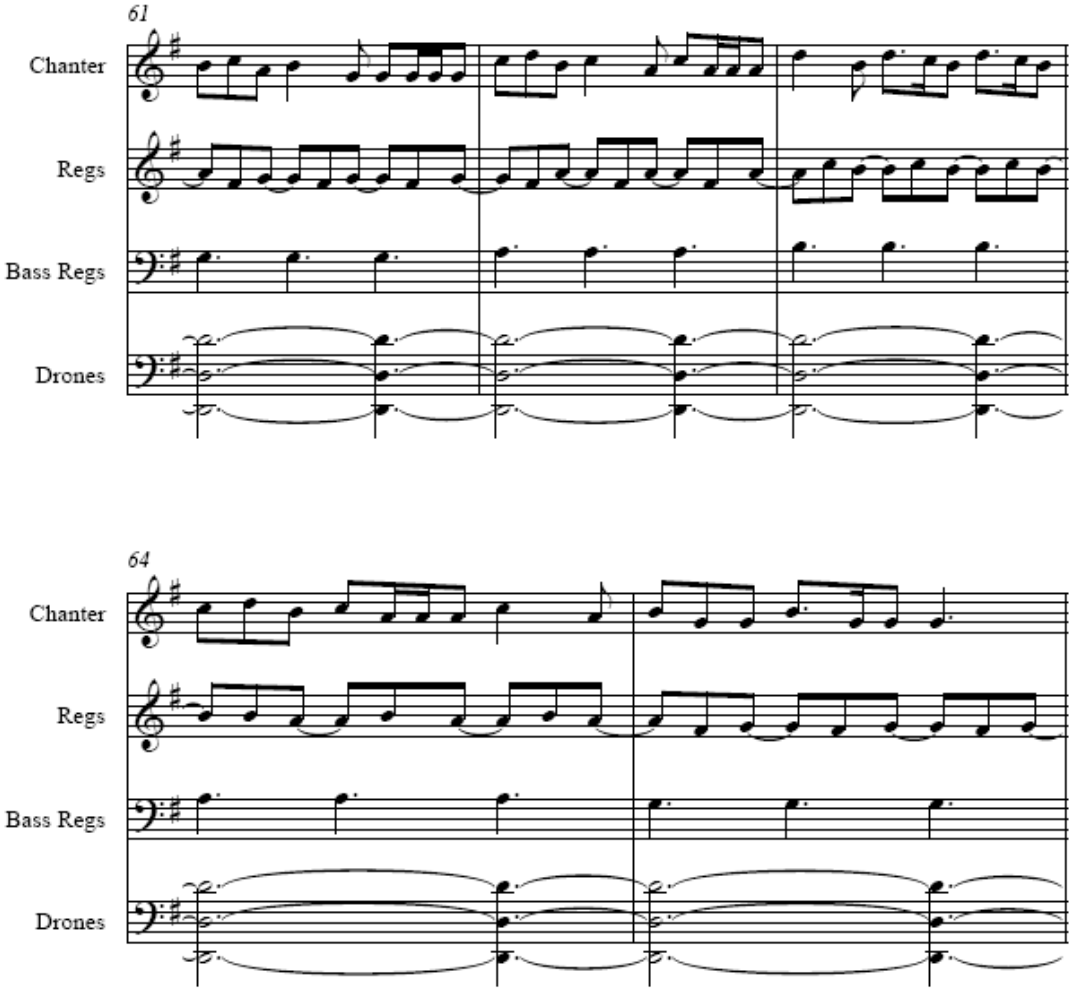


Figure 4.95 Flynn, *Étude No.1,* 23-27.

The tune seems to be in G Ionian, yet the regulator accompaniment begins with a pattern rooted in C, the drones add further harmonic ambiguity as they sound in D. The harmonies created by this have an open modal quality, with mild passing dissonances. The following example is the first bar when the drones are sounded.

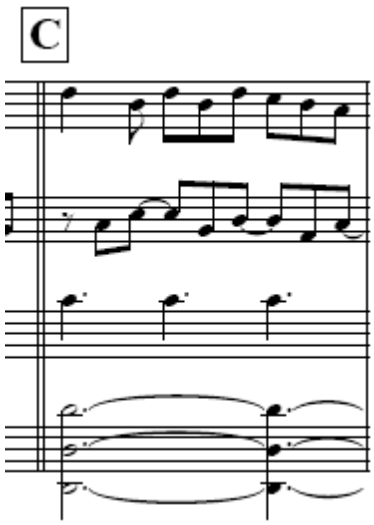


Figure 4.96 Flynn, *Étude No.1,* 45.

The following diagram illustrates the resultant harmony and dissonances.

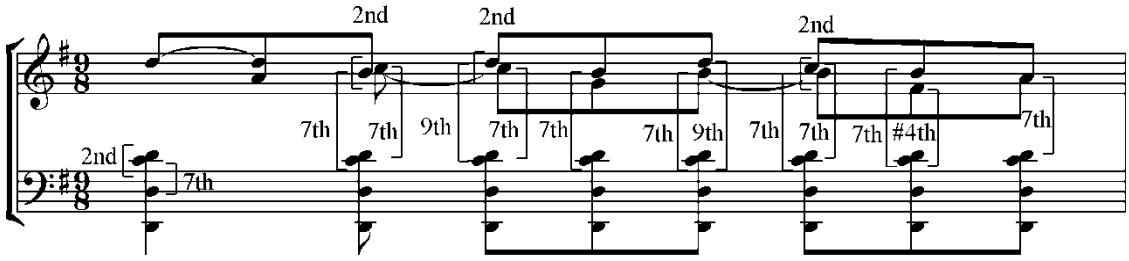


Figure 4.97 Resultant harmony of Flynn, Étude No.1, 45.

2nds, augmented 4ths (tritones), 7ths and 9ths are generally considered to be dissonant intervals. The diagram demonstrates how these intervals appear in abundance in this bar. At the same time, this dissonance is not jarring on the ear due to the fact that all the notes are part of the G Ionian mode.

This piece provides the piper with a good technical exercise and the harmonic style ensures it has a distinct modal flavour.

4.6.2 Étude No.2 - Long Arpeggios

This *étude* uses a combination of wrist chords and right-hand finger technique to allow the piper to explore a lower melodic range than is normally possible. The notes *G, A, B* and *C* that are lower than the chanter's lowest *D* note could be added to the melodic capabilities of the instrument if this technique is fully explored. This *étude* also assists in the development of switching quickly between wrist chords and right-hand finger techniques.

The opening bars demonstrate how I have integrated the regulator part with the chanter part to create arpeggios starting from the bass regulator.

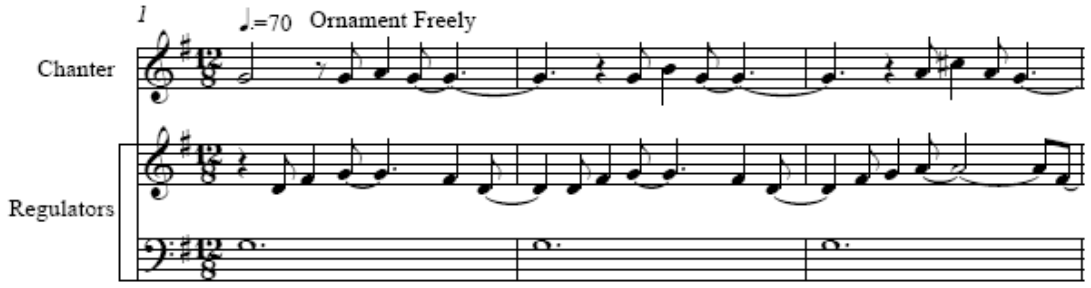


Figure 4.98 Flynn, *Étude No.2*, 1-3.

The arpeggios are clearly revealed by placing these notes on one stave.

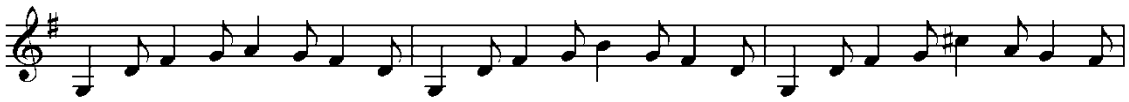


Figure 4.99 Arpeggios in Flynn, *Étude No.2*, 1-3.

As the *étude* develops the arpeggios elongate. The following extract shows the last two arpeggios.

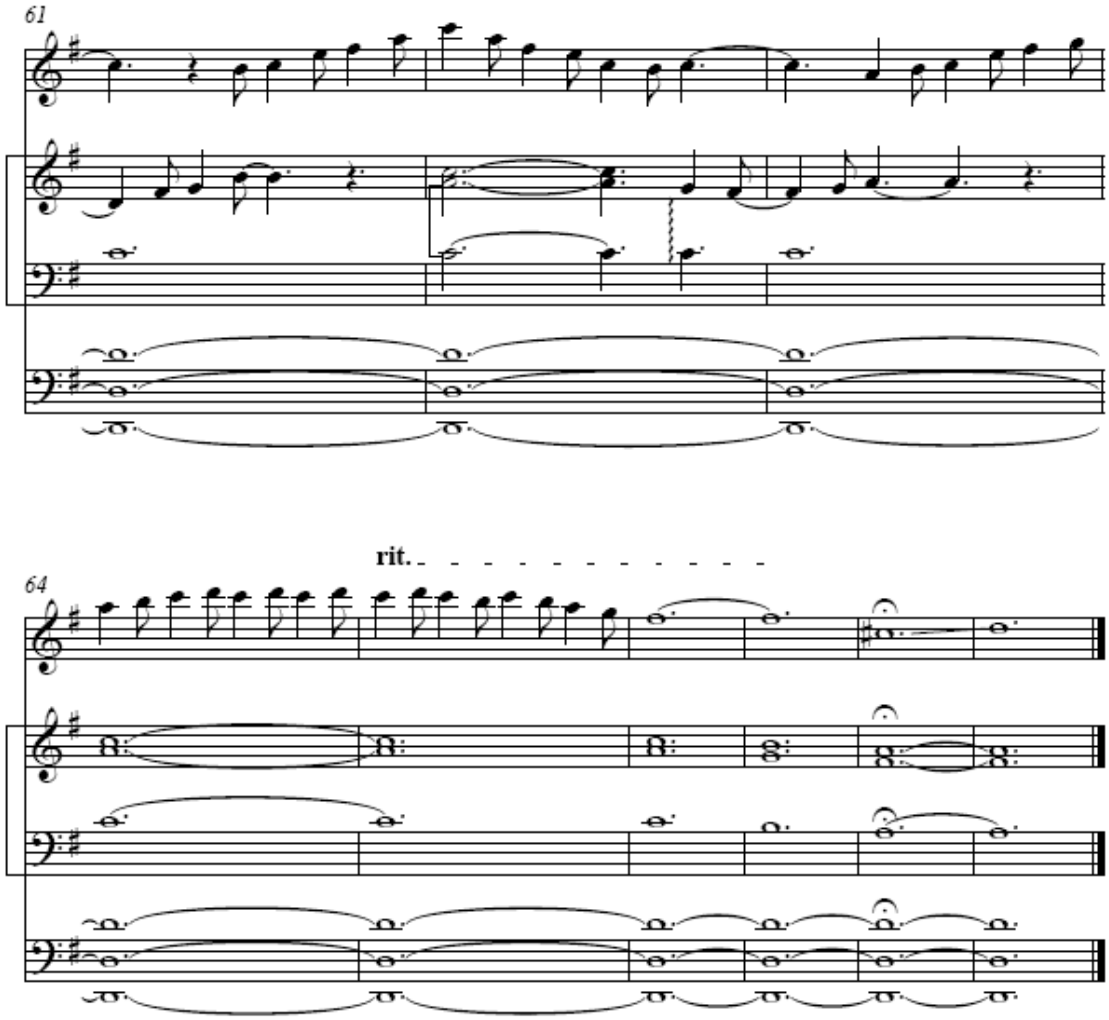


Figure 4.100 Flynn, *Étude No.2,* 61-69.

The harmonic character of this *étude* is similar to '*Étude* No.1' in its ambiguity. The *D* drones are used over these arpeggios which alternate between being rooted in G, A, B and C. The arpeggios often stem from chords with 7ths, 9ths and other dissonant intervals.

One of the principal aims of this piece is to allow pipers to develop dexterity in switching between wrist chords and fingered chords. I developed my own notation for distinguishing between wrist chords and fingered chords

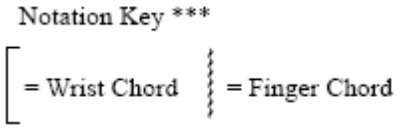


Figure 4.101 Wrist chords and fingered chords notation symbols.

The following extract from the piece shows the alternation between these techniques.

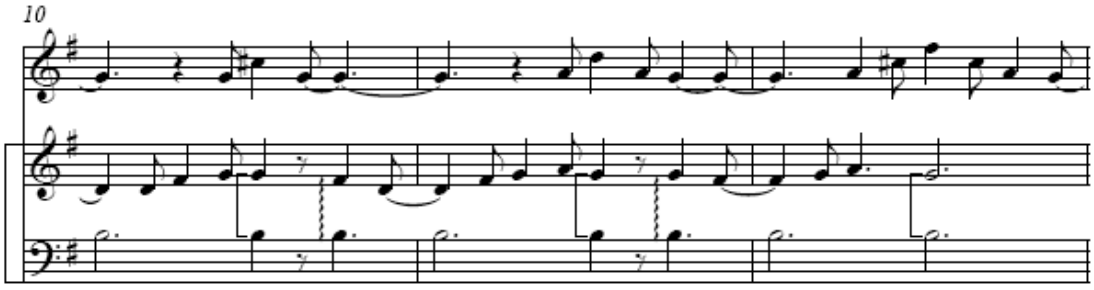


Figure 4.102 Flynn, *Étude No.2*, 10-12.

These indications proved important in assisting O'Brien to learn the piece. He has good sight-reading abilities and these indications made the process of figuring out how to play the music easier for him.

4.6.3 Étude No.3 - Polymetric Chorale

This *étude* is a polyphonic choral-style piece. Four simultaneous voices and a drone sound at the end. This *étude* enables pipers to thoroughly develop the right hand regulator technique.

This has proved to be one of the most challenging *études* for O' Brien. He has gradually learnt the piece line by line. The integration of the fourth voice is particularly demanding.

The piece opens with the low drone and the first voice is played on the bass regulator. It is a six bar descending and ascending scale pattern in 6/4 starting on the note *C*.

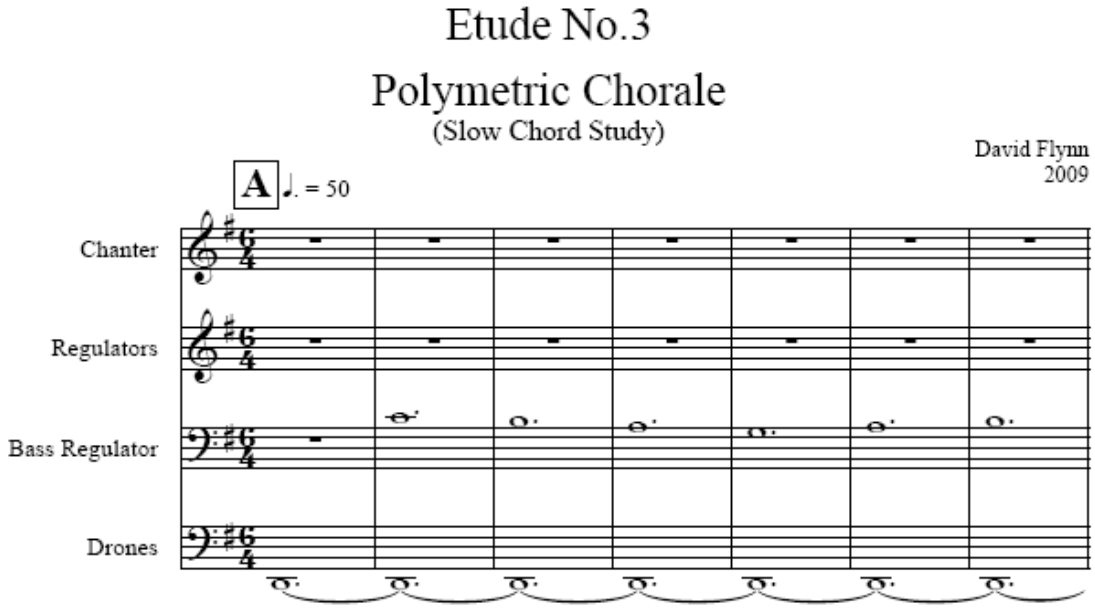
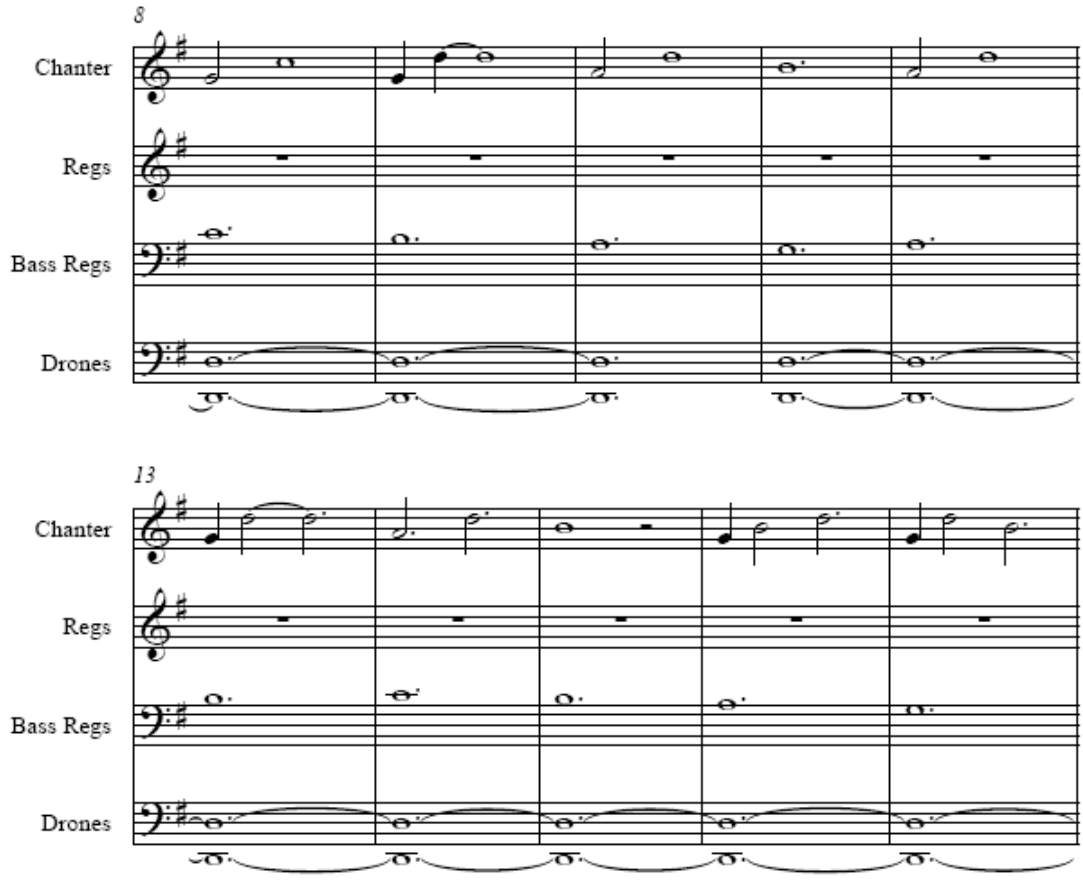


Figure 4.103 Flynn, *Étude No.3*, 1-7.

This pattern is repeated throughout the piece as a ground bass. At bar 8 the next voice enters on the chanter. This is a long melody using just the five notes *G, A, B, C, D*. It goes from bars 8-19.



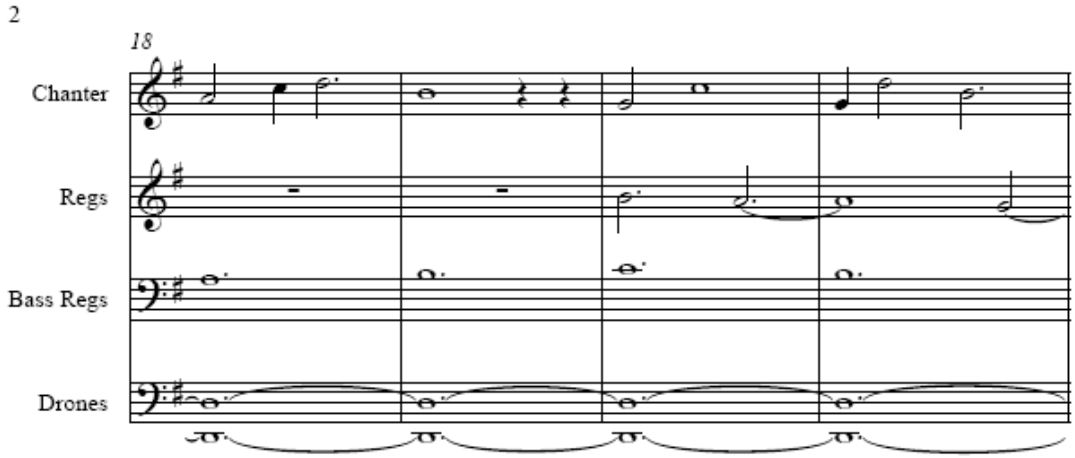


Figure 4.104 Flynn, *Étude No.3*, 8-21.

This melody repeats to the end with some melodic variations. The third voice enters on the regulators at bar 20. This voice is a sixteen bar syncopated pattern which is repeated twice.

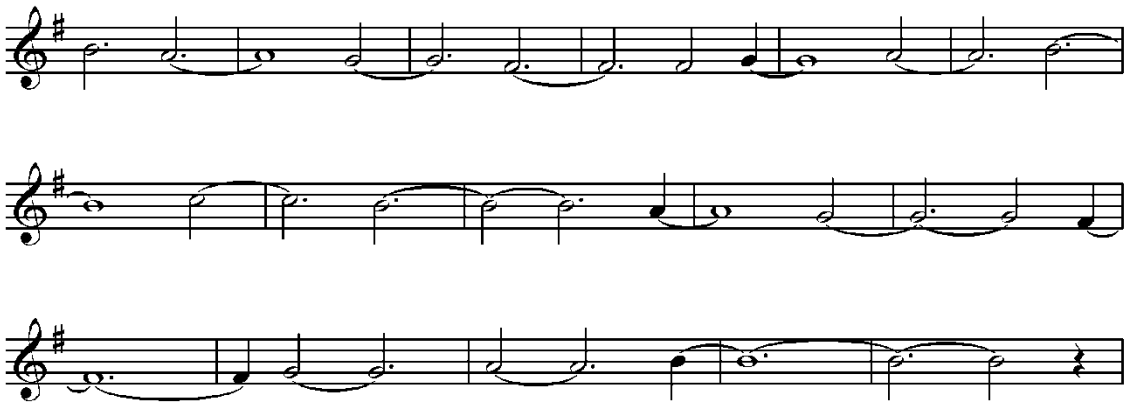


Figure 4.105 Flynn, *Étude No.3*, 20-35, third voice in regulator part.

The fourth voice enters at bar 36. It is an eight bar syncopated pattern which descends and ascends, just like all the other voices.

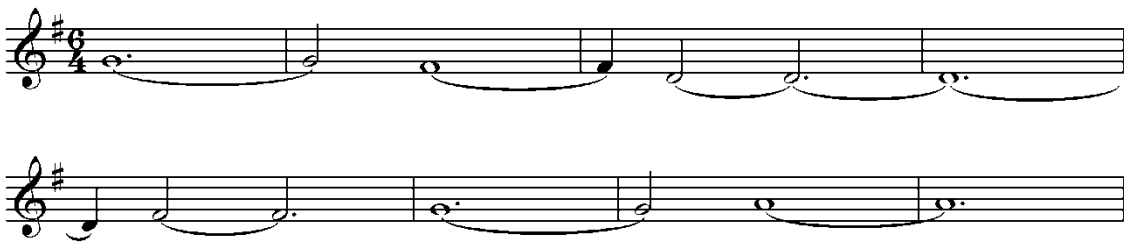


Figure 4.106 Flynn, *Étude No.3*, 36-43, fourth voice in regulator part.

This pattern is repeated once more until the end with slight changes in the length of some of the notes. The combination of these four overlapping patterns and the drone creates a rich polyphonic sound. I use an ambiguous harmonic palette with a *D* drone over a repeating bass line rooted in C. The technique I use of placing four descending and ascending lines of different lengths against each other is somewhat inspired by *Cantus in Memoriam Benjamin Britten* (1977) by Arvo Pärt (b.1935) where a descending A natural minor scale is played by the strings simultaneously, but at different speeds. My technique is a variation on this. The lines are not the same scale or set of notes but four descending and ascending lines starting on different notes.

This piece does not bear much resemblance to traditional music. It does have the spirit of a *slow air* and it was inspired by pipers who utilise the regulators when playing *slow air*s.

4.6.4 Étude No.4 – Pulsing Chords

This *étude* is partly inspired by the piper Leo Rowsome (1903-1970) who often played with constant pulsing wrist chords. This pulsing approach occurs throughout this *étude*. The use of wrist chords opens up the possibility of exploring the chanter and so this is by far the most difficult of the *études* in terms of chanter work. In many cases the wrist chords are combined with notes a piper might not usually harmonise them with. This creates harmonic material that is of a different character to traditional Irish music. This is not apparent at the beginning where the piper plays the five possible wrist chords on the pipes.

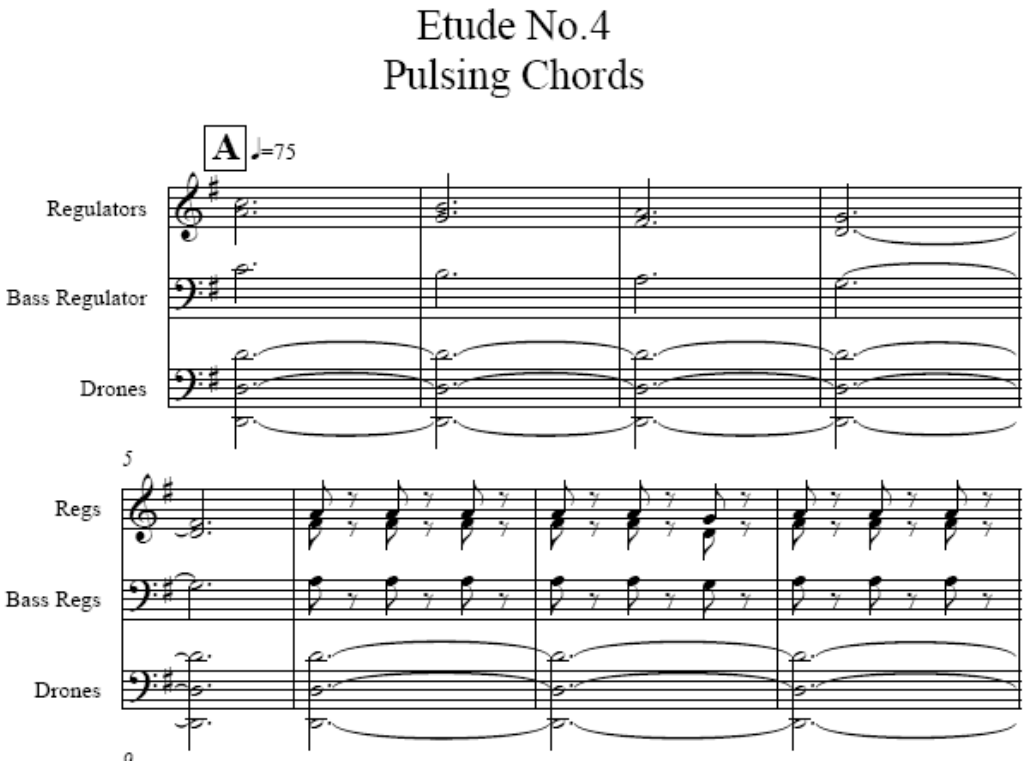


Figure 4.107 Flynn, *Étude No.4*, 1-8.

When the chanter is introduced, the harmonic language is considerably different to traditional music. It is primarily based on the use of chanter notes which are 7ths or 9ths, when analysed in the context of the implied harmony. The diagram which follows uses the first notes of each bar in order to define the harmony. The chord names are based on my understanding of modal jazz harmony where chords are related to the root note, in this case the *D* drone. These chords provide the main harmonic basis for the *étude*.

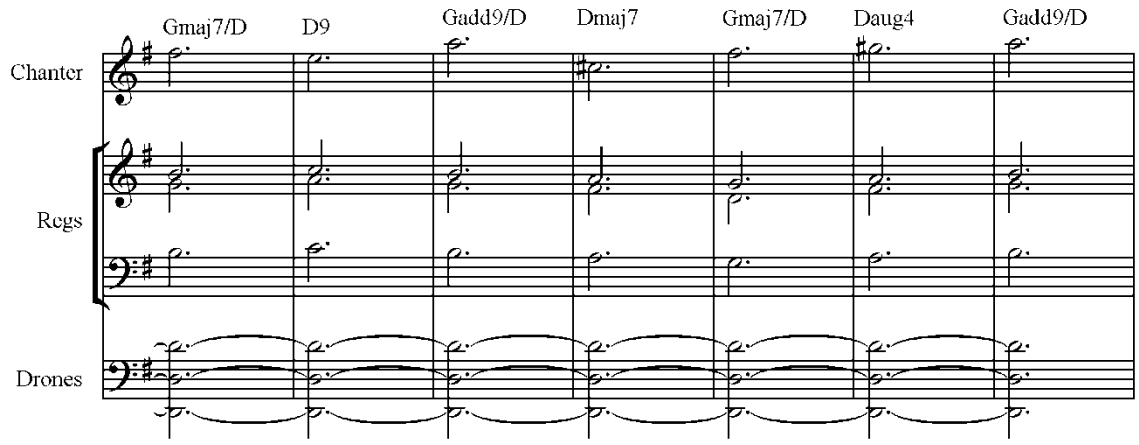


Figure 4.108 Chord progression in Flynn, *Étude No.4*, 15-21.

The chanter part gradually builds from a simple melody to a complex part, full of arpeggios and scale patterns.

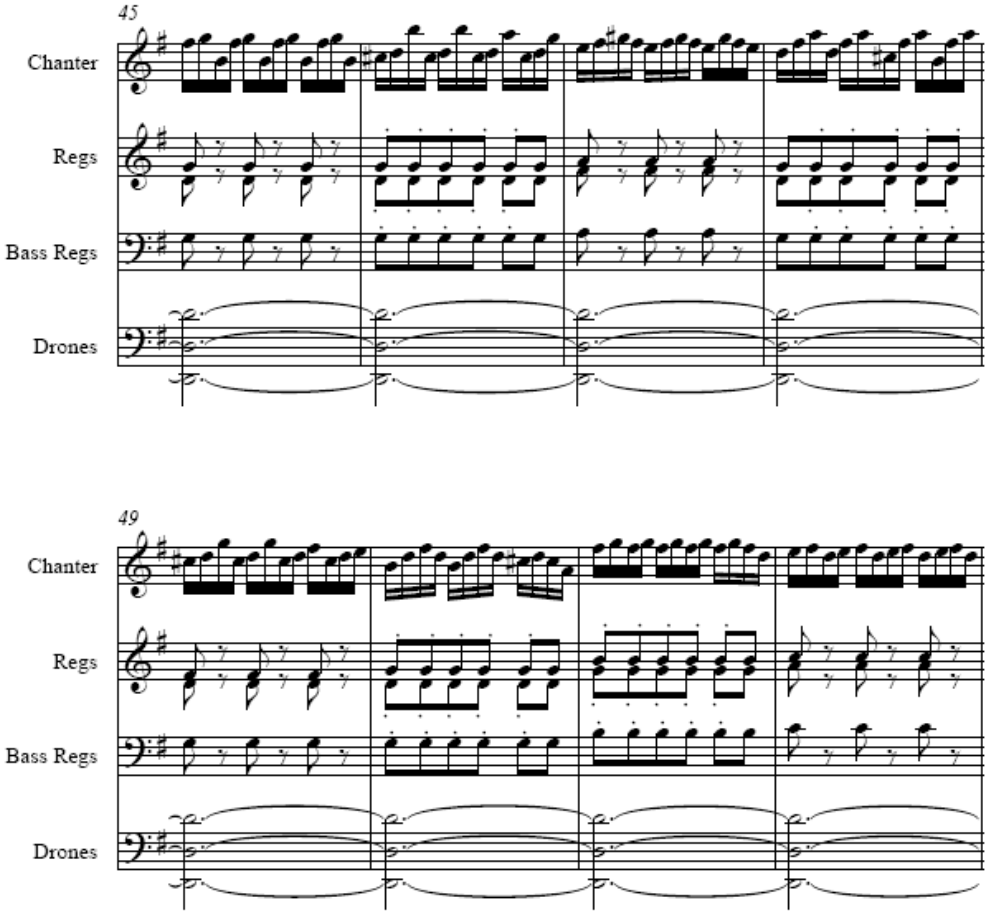


Figure 4.109 Flynn, *Étude No.4,* 45-52.

I had a number of high C-*sharp*'s in my original draft, these have all been moved down an octave as they are difficult notes to achieve in isolation, let alone when there is complex regulator work.

This is the only *étude* where the main focus is on the chanter. It also provides a student of the pipes with a great technical exercise for achieving the wrist chord dexterity of Leo Rowsome and Mick O'Brien.

The first four *études* can be played together without pausing, the drones can be left on after one *étude* finishes and then after a second or two the next *étude* can begin. This provides pipers with a large concert piece lasting around twenty minutes.

4.6.5 Étude No.5 - Chaconne

I am not aware of any precedent for a *chaconne* for *uilleann* pipes. The *chaconne* is a Baroque form with a repeating ground bass. It is possible to play a repeated ground bass on the regulators using the wrist of the right-hand. Over this ground bass, I place a tune which is slightly modified each time around to fit into five different traditional dance music forms; a *barndance*, *hornpipe*, *highland*, *reel* and *slide*. This is the closest of the *études* in sound to traditional music and so it can work as a showpiece for the piper, separate to the other *études*, or as an encore piece after the first four é*tudes* have been performed. I have included this piece more for the entertainment of pipers and their audience than anything else. My use of traditional tune forms in this piece has been discussed previously in this dissertation.

4.6.6 Summary

These *études* are unusual in the context of this dissertation as they are the only works which focus on specific possibilities of an instrument rather than being inspired by an individual's style or literary sources. Mick O'Brien and I have explored all the main uses of the regulators including arpeggiated accompaniment, polyphonic melodic movement, pulsing chords and movement between melody, wrist chords and finger chords.

The harmonic language of the works is modally ambiguous with an emphasis on 2nds, 7ths and 9ths. These aspects were determined to a great extent by the limitations of the pipes when the regulators are used fully. The first four *études* in particular have a sound-world that hints at the tradition yet has links to contemporary classical styles, particularly the music of Philip Glass and Arvo Pärt.

4.7 *The Valley of the Lunatics* (2010) for Detuned Irish Fiddle, Hardanger Fiddle and Digital Loop Technology

4.7.1 Genesis

This piece was composed for Caoimhín Ó Raghallaigh, who suggested I create a piece he could play live using the *Ableton Live* digital loop system. With this system, polyrhythmic and polyphonic structures can be created by looping musical material in a live context. This process is a development of the process Steve Reich used in pieces such as *Violin Phase* (1967) and *Electric Counterpoint* (1987) whereby a musician pre-records a number of different tracks and then plays against them live.

With *Ableton Live,* there is no need for pre-recorded sounds, the musician can play everything live, record it, loop it, turn loops off and bring them back in again by using a foot pedal. This allows for a more spontaneous approach where each performance can be quite different. In a piece such as *Electric Counterpoint* the pre-recorded parts will always be the same. In *The Valley of the Lunatics,* each performance will have slight differences in the overall sound. This is in keeping with the practice of variation in traditional music.

Ó Raghallaigh also suggested using the Norwegian *hardanger* fiddle and alternative tunings. So his input was profoundly important for the piece, his playing style was obviously influential and I agreed with his ideas of using a digital loop system, *hardanger* fiddle and alternative tunings.

4.7.2 Structure

Following our initial discussions, I developed a structure for the piece which was naturally influenced by Ó Raghallaigh's playing style and Reich's 'counterpoint' series. Whilst the structure and sound of the piece bear some similarities to Reich's music, there are many elements in the piece which would not be common to it. The most obvious being the sound and techniques of Irish fiddle playing, the use of a *hardanger* fiddle and the *scordatura* tunings. It is also possible for this piece to be played by multiple fiddlers.

The title comes from a story I found in the *Blasket Islands Centre* during my research for *Stories from the Old World*. The story is called *Gleann na nGealt*. It is about a valley on the Dingle peninsula where lunatics were said to have been banished. The titles of the three movements are:

I. The Lunatics Loop around the Valley

II. The Lunatic's Lament by the Fire

III. The Lunatic's Polka

The first movement gets its name from the fact that the musical material loops, so I imagined this section could paint a picture of several lunatics looping around a valley!

The second movement has a more abstract origin. I made a recording of this piece for Ó Raghallaigh to refer to.[13] When I recorded the second movement I did so by my fireplace. When I listened back to the recording the crackles of the fire were quite audible. I thought this was a nice effect and so I named the movement after it. I have suggested that the use of crackling fire sounds is an optional possibility to include in recording and live situations.

The reason for naming the third movement 'The Lunatic's Polka' is self-explanatory.

[13] This is the recording included with this dissertation.

4.7.3 The Score

The *scordatura* tuning necessitated the creation of two different versions of the score. One is notated as the music sounds and the other as if the music was played on a fiddle tuned normally. The following examples show the difference between the first pages of each version of the score. I mostly refer to the version at sounding pitch in the analysis which follows.

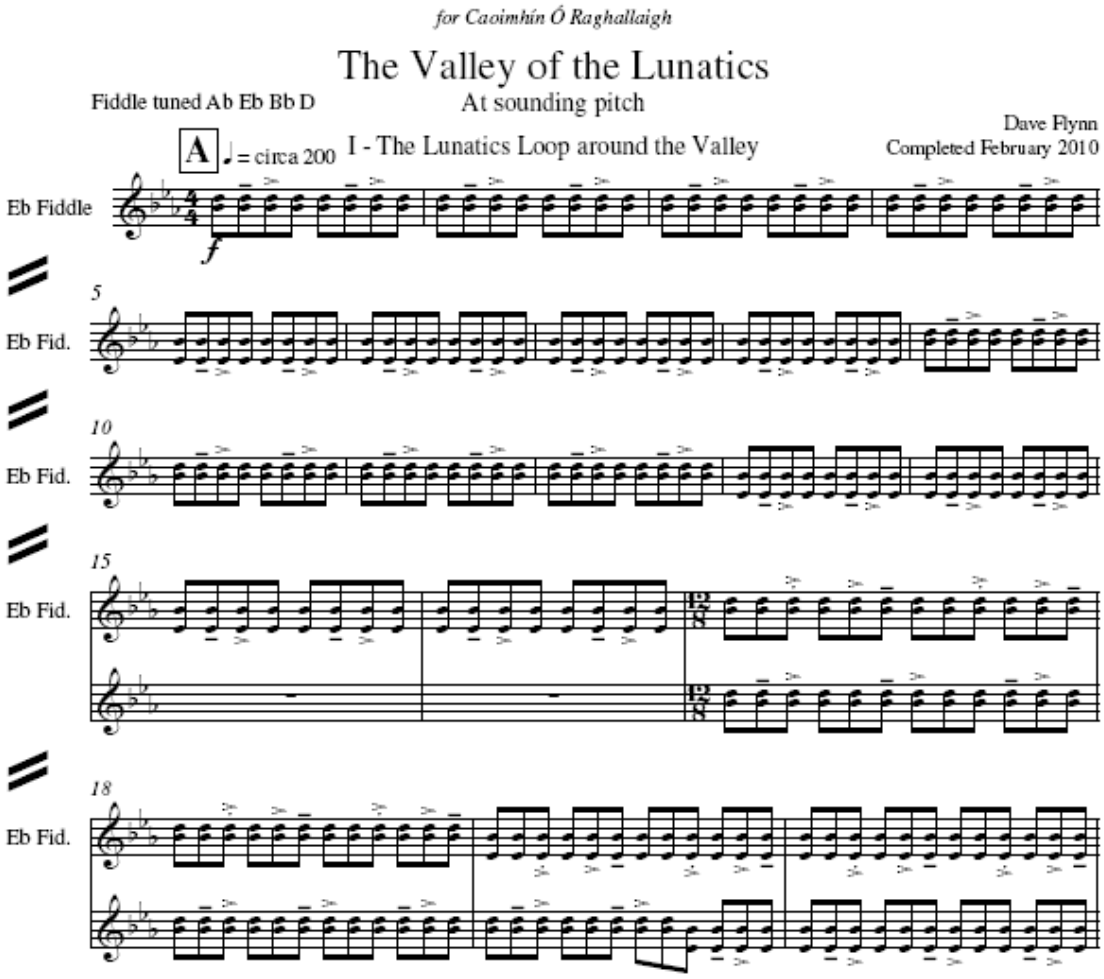


Figure 4.110 Flynn, *The Valley of the Lunatics*, 1-23 at sounding pitch.

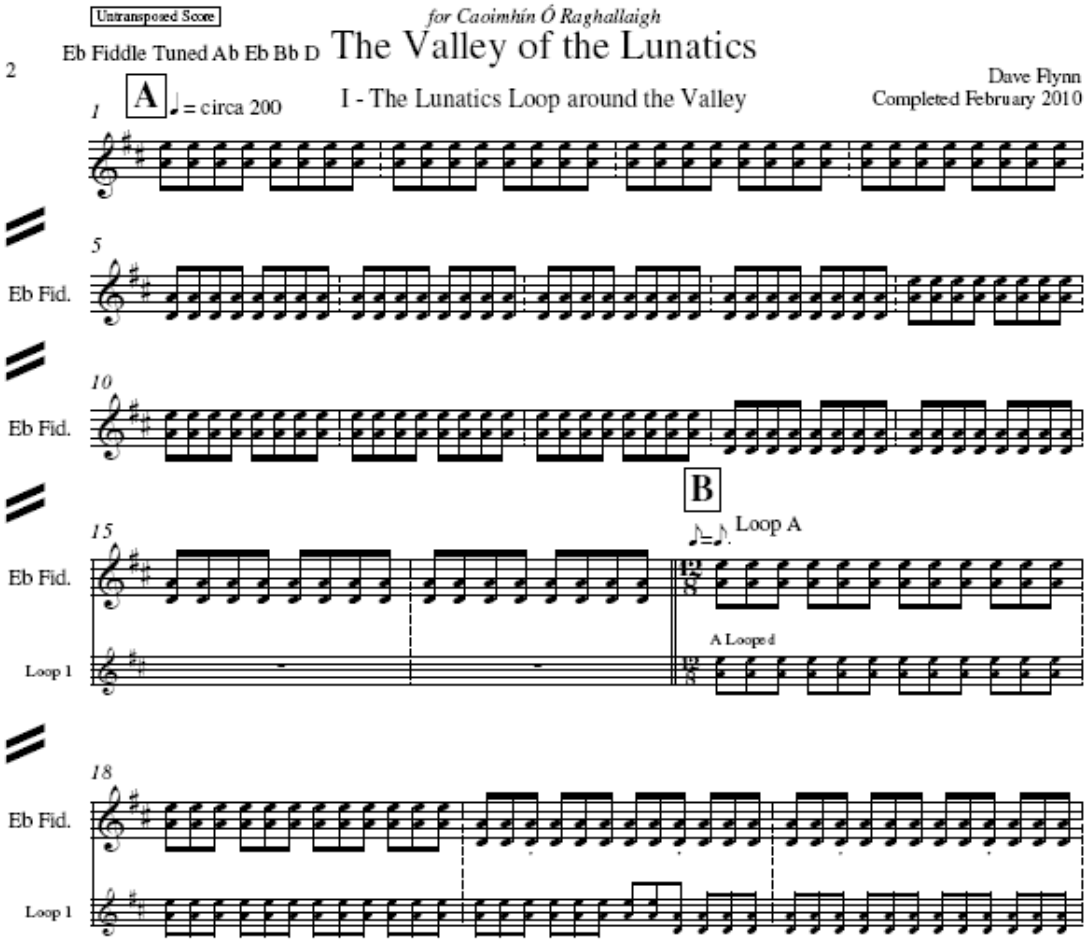


Figure 4.111 Flynn, *The Valley of the Lunatics,* 1-20 as if the fiddle was tuned *GDAE*.

4.7.4 Composition Techniques

The main composition technique used in the piece is polymetric cycles, which I have used extensively in pieces composed prior to this dissertation. Usually more than one musician is required to create a polymetric cycle, whereby two or more motifs or phrases in differing metres are played concurrently until they meet in a cycle.

The digital loop system allows one musician to create polymetric cycles and this occurs throughout this piece. This is not apparent in the score at first glance. The first polymetric cycle begins as soon as the first loop is created at bar 17, where the time signature changes from 4/4 to 12/8. I notate everything in one time signature for convenience sake, but at bar 17 there are two phrases occurring, one in 4/4, the other in 12/8. The bottom stave is the same 4/4 material that was played from bars 1-16.

These opening phrases are played on the *hardanger* fiddle which is tuned *A-flat, E-flat, B-flat, D.*[14] I base most of the material on these open strings to create a large, multi-phonic, droning sound. The phrases in 4/4 and 12/8 repeat against each other and when they coincide at bar 33 a new, more melodic phrase reminiscent of the opening of a *reel* occurs in the live fiddle part (the top stave). The lower notes in this part are open string drones which will not sound exactly in the same rhythm as notated. Sometimes they will be held for longer or shorter durations, or not used at all.

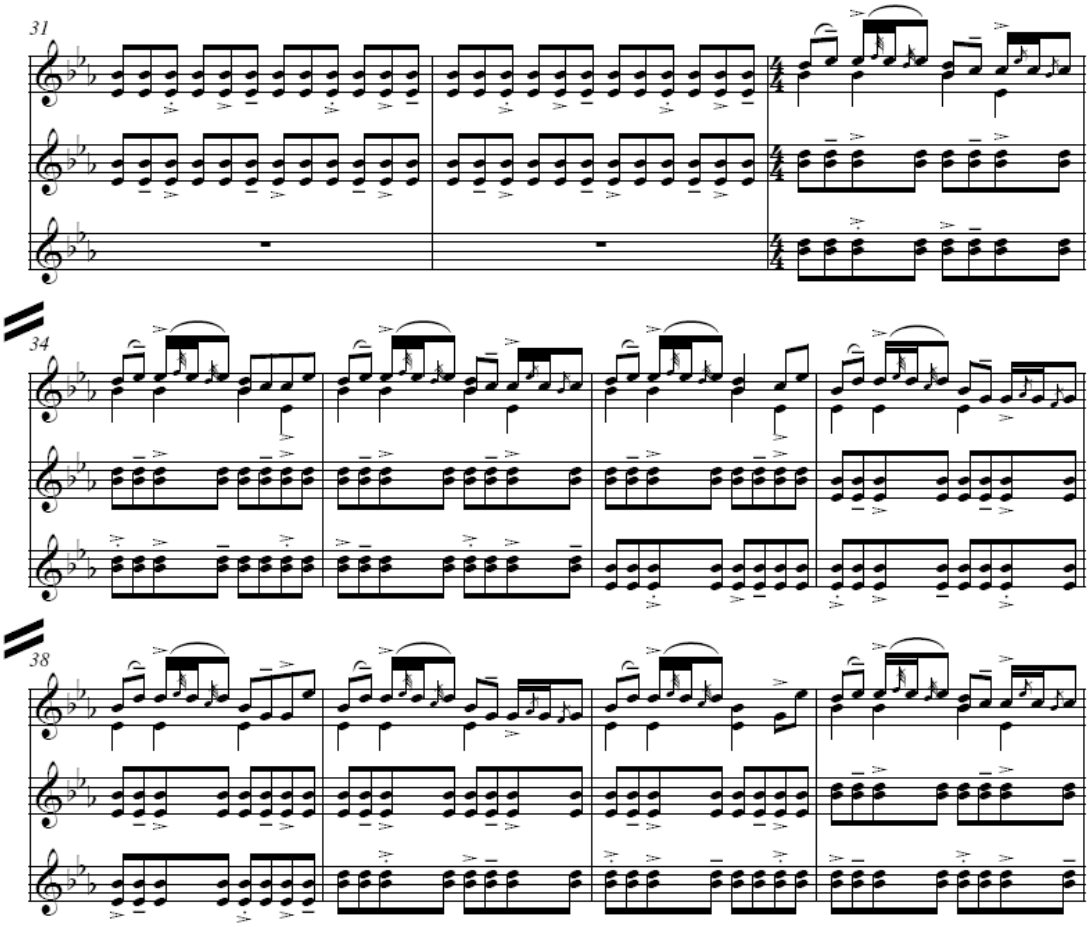


Figure 4.112 Flynn, *The Valley of the Lunatics*, 31-41.

Eventually all three of these phrases are looped against each other and a pattern in 6/4 derived from the previous *reel* pattern in 4/4 is played against these loops.

[14] I do not have a *hardanger* fiddle, so on the recording I made a regular fiddle is used.

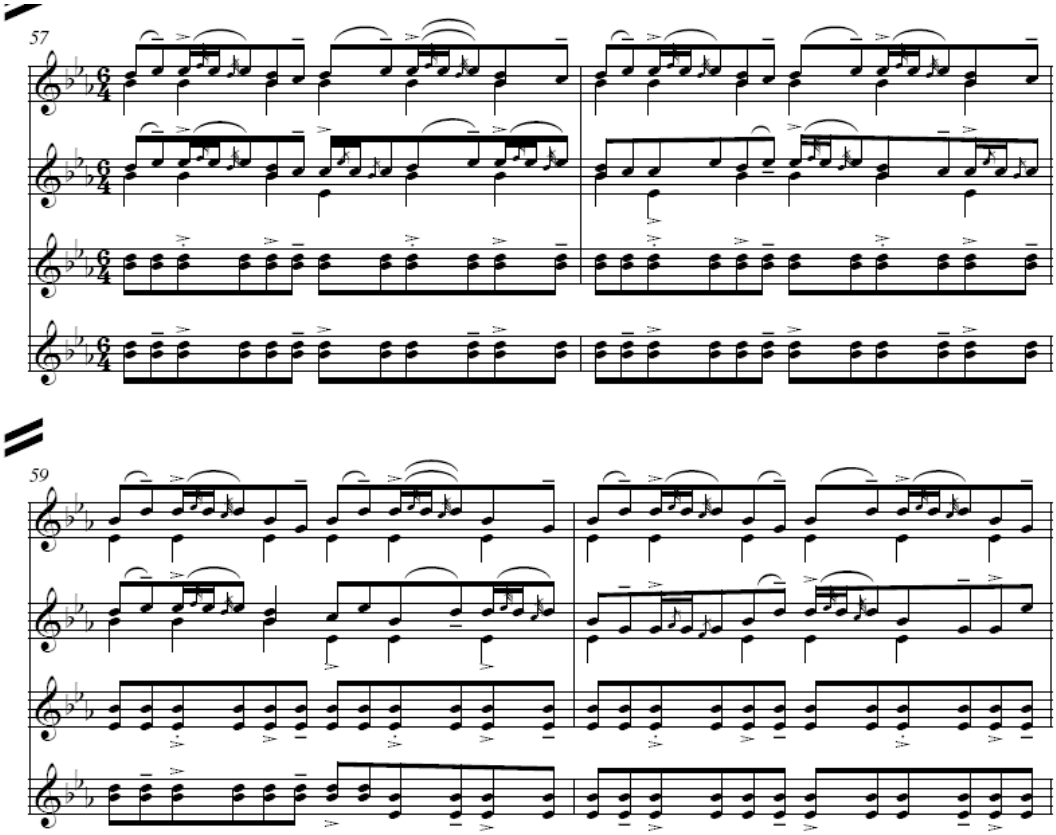


Figure 4.113 Flynn, *The Valley of the Lunatics,* 31-41.

In the score it would appear that everything is in 6/4, but in reality only the top stave is. Similar processes continue throughout the piece.

Bar 113 signals the first major change where there is a return to the same material as in bar 17. In a live situation the performer would not be playing at this point in order to facilitate a switch from the *hardanger* fiddle to the *B-flat* fiddle. The *B-flat* fiddle is introduced at bar 137 with a pattern in 5/4 which changes the rhythmic and harmonic emphasis of the 4/4-12/8 cycle that has been looping since bar 17.

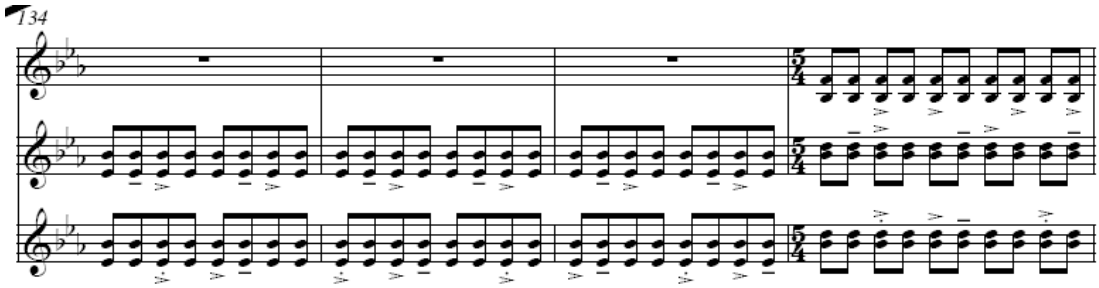


Figure 4.114 Flynn, *The Valley of the Lunatics,* 134-137.

The section from bar 137 to 185 could be perceived as if it was all in 5/4. If it is listened to in this way, then the points where the *E-flat* fiddles change would come as a surprise since these changes do not occur in a 5/4 rhythm. This rhythmic variety, created by the polymetres, is the key to the piece's vitality. The polymetric cycles ensure there are no exact repetitions in the overall scheme. I also allow the performer freedom to vary ornaments, accents, rhythm, pitching, timbre and dynamics to add to this constant, subtle change. So the notation I have presented is really just a skeleton of what will actually sound.

4.7.5 Melodic content

The melodic material is quite simple; in this way it is quite a different piece to *The Longest Reel*, which is one long stream of melody. My decision to use such simple material was influenced by something Ó Raghallaigh said to me when I interviewed him. 'I choose simple tunes because I find the simpler the tune; the easier it is to spotlight intonation and tonality or tone,' (Ó Raghallaigh interview).

I felt relatively simple melodic phrases would give Ó Raghallaigh the freedom to experiment with intonation and tone. The simpler phrases also lend themselves much better to looping and polymetric cycles than the long melodic lines I have been using in some of my other works.

A melodic effect both Ó Raghallaigh and I have used extensively is the use of an interval of a major 7th played with the root note. This interval forms the basis for many of the melodic ideas in this piece. The major 7^{th} interval of *E-flat* to *D* is found consistently in the following example.

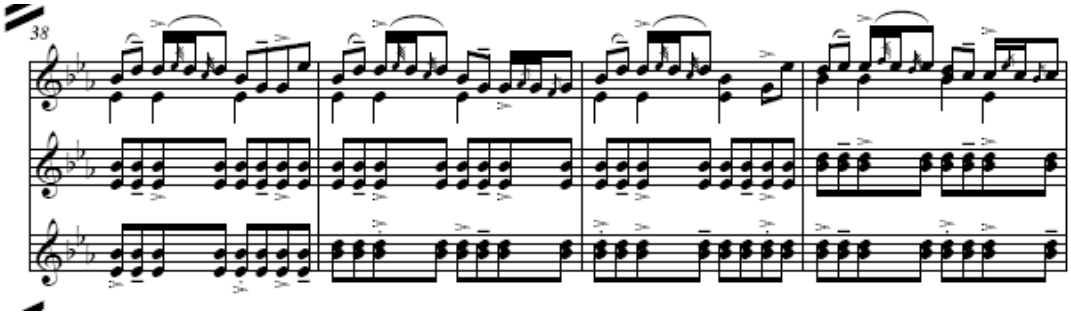


Figure 4.115 Flynn, *The Valley of the Lunatics,* 38-41.

The same interval features prominently in the second movement from the end of bar 291.

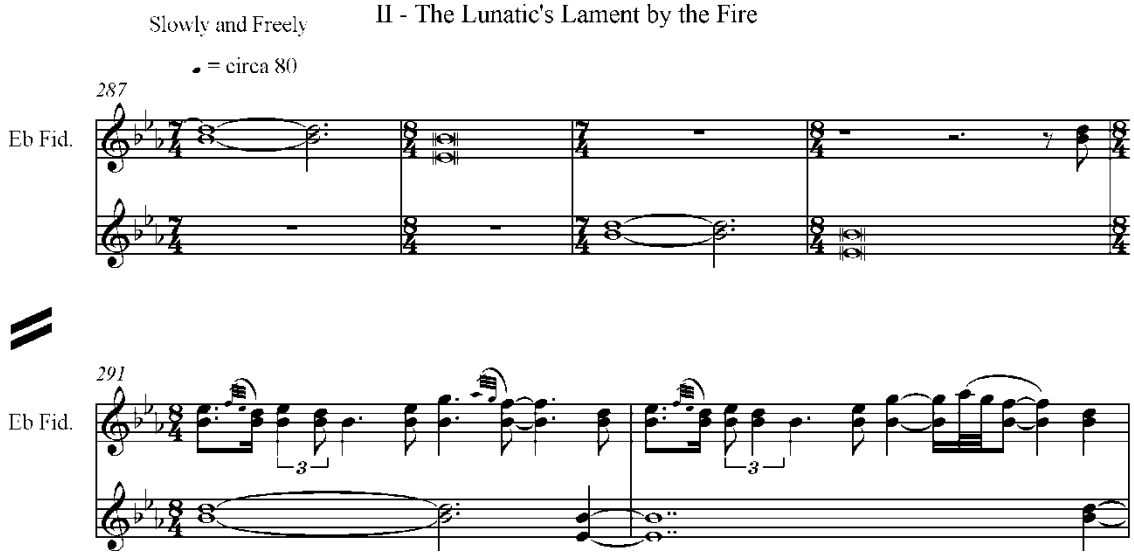


Figure 4.116 Flynn, *The Valley of the Lunatics,* 287-292.

In the third movement, this interval is prominent alongside another major 7th interval, *B-flat* to *A.*

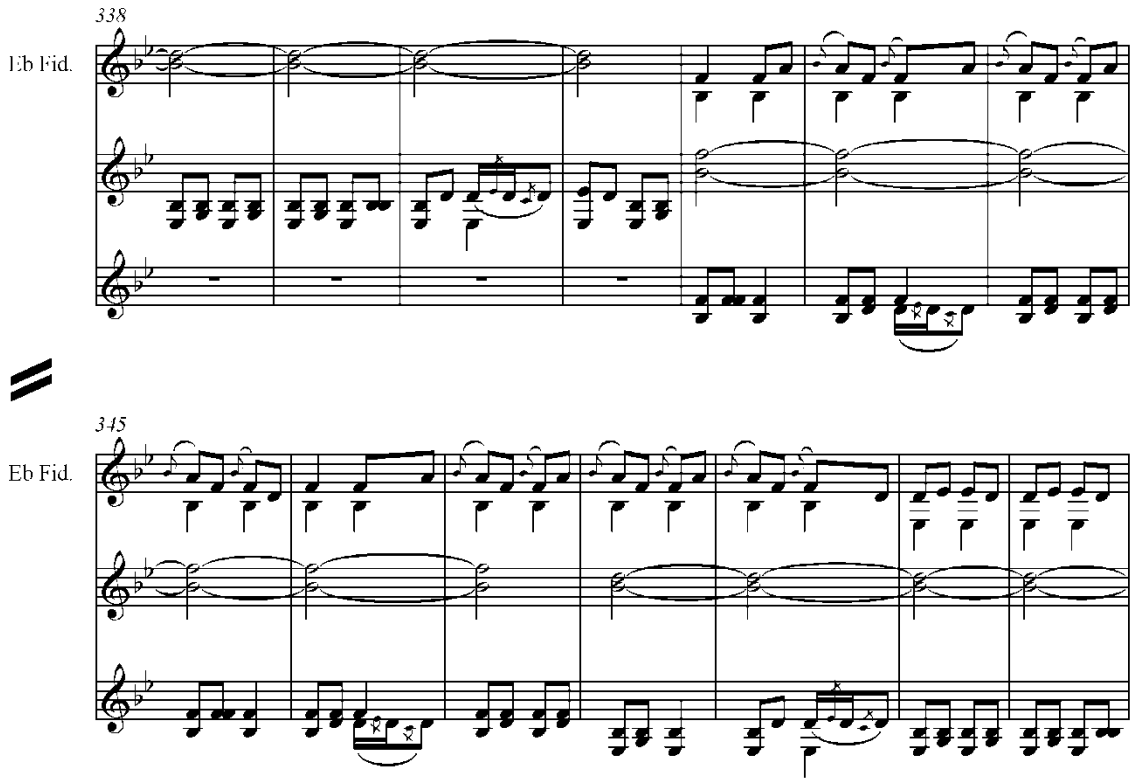


Figure 4.117 Flynn, *The Valley of the Lunatics*, 338-351.

There is a common melodic link between all the movements by this consistent use of the *E-flat-D* and *B-flat-A* intervals. This also hints at the harmonic texture of the piece.

4.7.6 Modal and Rhythmic Aspects

The three connected movements are each based on a different rhythmic form. Movement I is based on *reel* rhythms, particularly the melodic material from bars 33-112 and 185-285. There are no complete modes or keys used; the material is all based on gapped scales. The opening 136 bars are based on an *E-flat* pentatonic scale. Only the notes *E-flat, G, B-flat, C* and *D* are used. The note *F* occurs in the notation, but only to indicate a *roll*, the actual pitch *F* would not be clearly heard.

At bar 137 the *B-flat* fiddle is introduced and at this point the note *F* is strongly sounded. The placement of these notes at the bottom of the pitch spectrum signals a change to material based on a *B-flat* hexatonic scale (*B-flat, D, E-flat, F, G, A*). This pitch material remains constant between bars 137-226. There is no use of the note *C* in this section, other than in the notation for *rolls*.

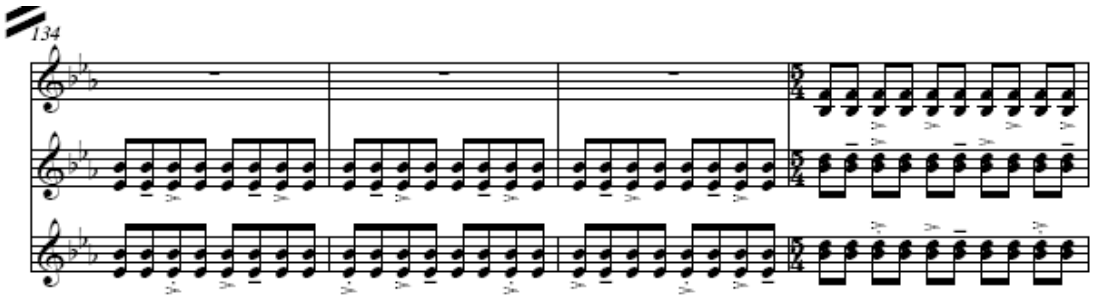


Figure 4.118 Flynn, *The Valley of the Lunatics*, 134-137 - Introduction of *B-flat* fiddle at bar 137.

Materials from the two previous sections are combined at bar 227. This produces polymodality with *E-flat* Pentatonic phrases played against *B-flat* Hexatonic phrases. This section could be defined in *B-flat* Ionian because it features all notes of that mode; however the interaction between the *E-flat* Pentatonic and *B-flat* Hexatonic phrases gives the music harmonic ambiguity.

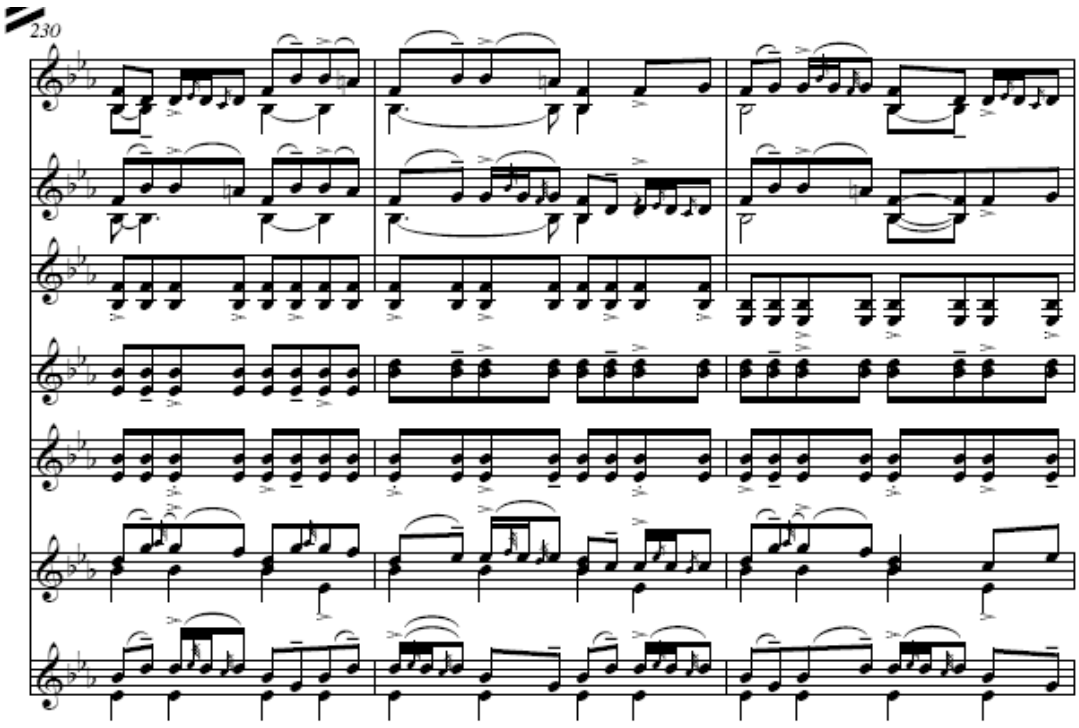


Figure 4.119 Poly-modality in Flynn, *The Valley of the Lunatics*, 230-233.

Movement II is based on an *E-flat* Hexatonic scale; *E-flat, F, G, A, B-flat, D*. There is an accumulative structure here whereby melodic fragments of different lengths, some of which are in a *slow air* style, are looped against each other to create a rich polymetric tapestry. The looped fragments, lettered A-E, appear in this section.

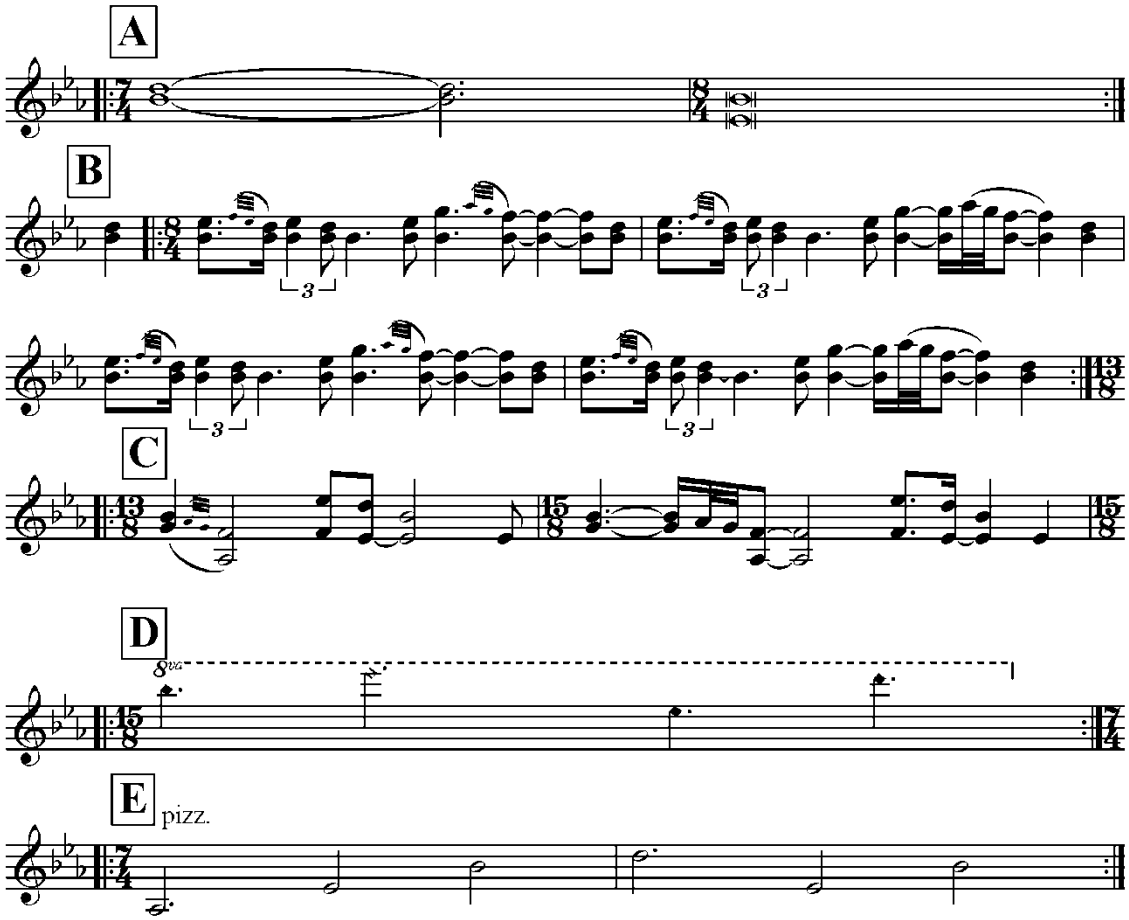


Figure 4.120 Loop fragments used in Movement II of Flynn, *The Valley of the Lunatics*.

These fragments are notated in one overall time signature in the full score; the examples show the actual time signature they were conceived in. This movement also includes the use of harmonics and *pizzicato*. I have given the performer some flexibility regarding the rhythm, so example C may not always occur with the exact rhythmic division of 13/8 to 15/8. As long as the rhythms are not deviated from too much, then all the loops should end in a similar way to how they do at bar 316.

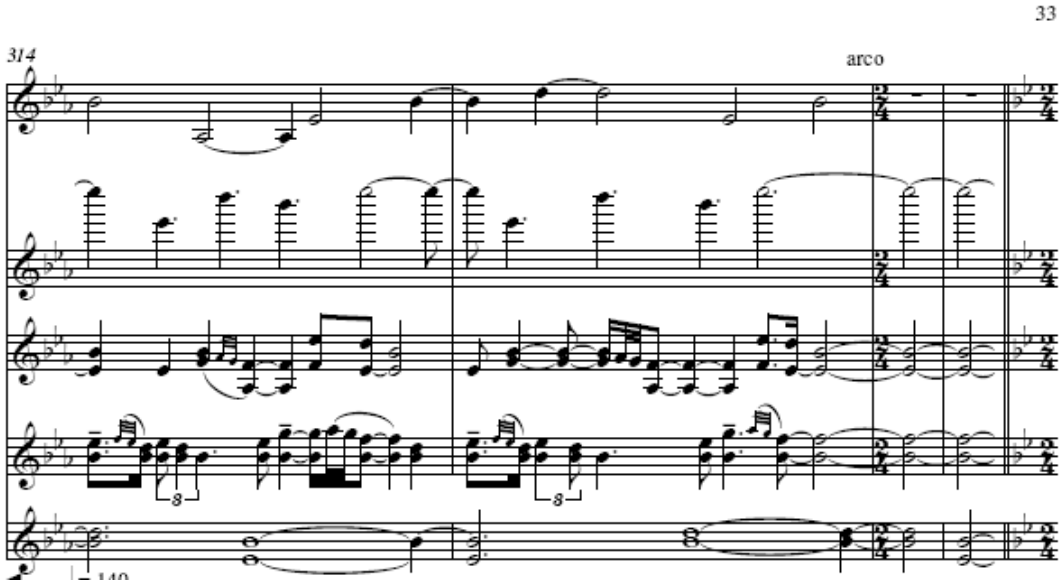


Figure 4.121 Flynn, *The Valley of the Lunatics*, 314-317.

Movement III is based on *polka* rhythms. It is structurally similar to the previous two movements because there is accumulative addition of looping fragments of different lengths, using the basic 2/4 principle of a Kerry *polka* rhythm. When these rhythms are phrased in different lengths it necessitates the notation of odd metres like 7/4 and 5/4. The different phrases are given on the following page. The combination of these phrases, along with the rhythmic emphasis that the performer will naturally apply, creates a continuously changing texture. The harmonically static nature of the material means that theses changes are only really apparent upon close listening.

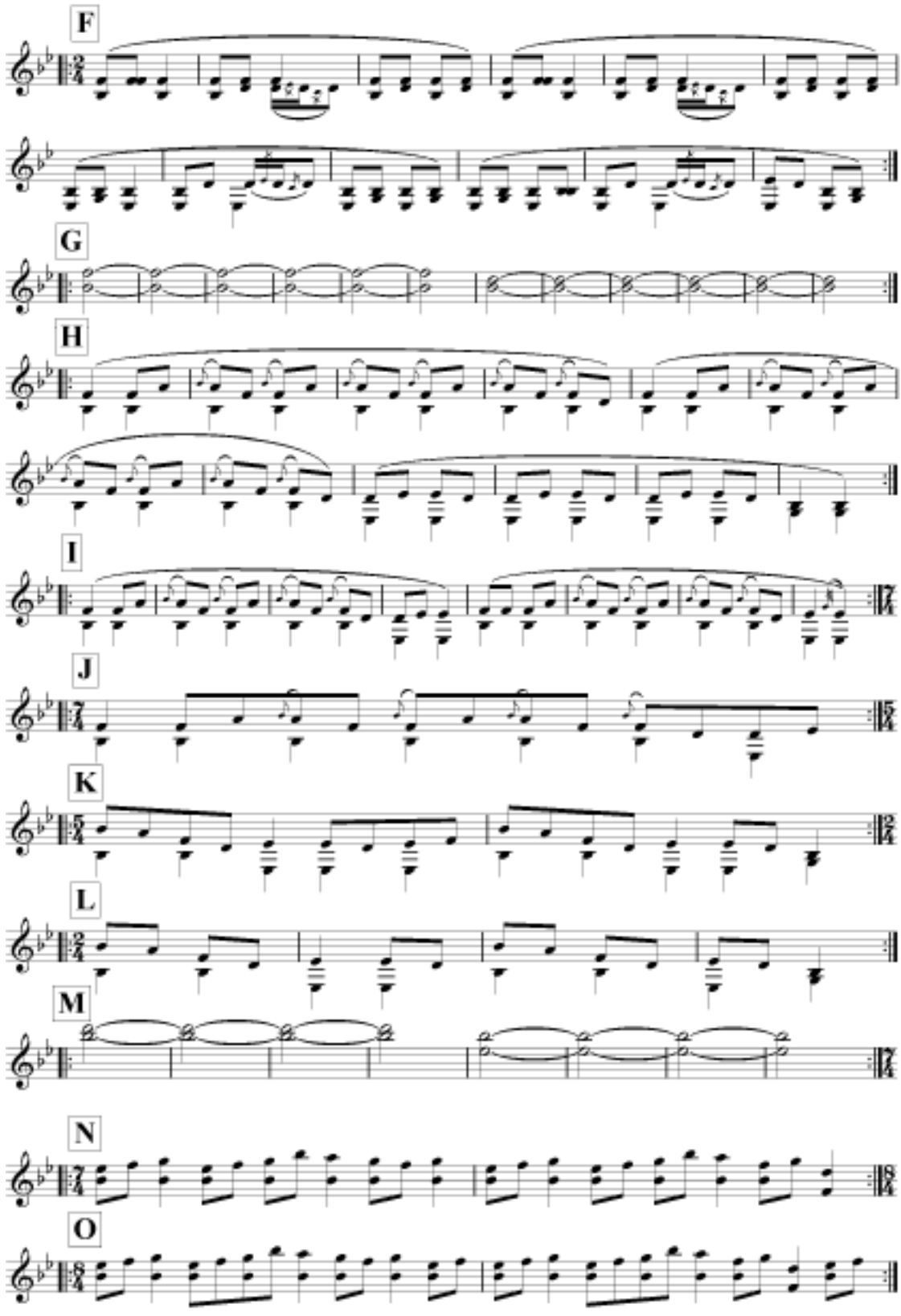


Figure Figure 4.122 Phrases used in Flynn, *The Valley of the Lunatics*, III.

4.7.7 Summary

I have combined the characteristic fiddle style of Caoimhín Ó Raghallaigh with my own compositional voice in this work. There are many aspects of the piece which are not evident in the score. These aspects include microtonality; ornamentation; dynamics; and melodic, rhythmic and harmonic variation. It is rooted in traditional rhythms and melodic ideas, whilst being very much a piece of new music utilising the latest looping technology.

4.8 *The Forest of Ornaments* (2009) for Flute, Fife, Shakuhachi and Fujara

This piece was composed in collaboration with Harry Bradley. This is the most collaborative of all the pieces I have composed. I would class it as a co-composition for two reasons:

- It consists of a collage of sounds I created from recordings of improvisations Bradley created under my guidance.
- Bradley improvises an additional part to go with the collage in live performance and recording situations.

4.8.1 Genesis

When I approached Bradley about this project he expressed an interest in doing something completely different to the traditional style of playing he is known for.

> Where 'Art Music' is concerned I'm more into whacked out stuff, strong improvisational elements, rough edges, challenging people's concepts of what sound/music is... I'm probably not into putting effort into a re-jigged version of what I already do.
>
> (Harry Bradley email correspondence, May 18, 2007).

We agreed to create a piece that would allow Bradley to improvise over a pre-prepared collage of sounds. To create this collage there were two main steps:

- Recording improvisations using various wind instruments.
- Creating the collage.

4.8.2 Recording

I recorded Bradley playing various ornamentations and other techniques characteristic of the Irish flute and a number of other instruments which Bradley brought to the recording session. These instruments are:

- Wooden ‘Irish’ flute in D
- Wooden ‘Irish’ flute in C
- Fife in F

- Wooden ‘Irish’ flute in F
- Japanese *Shakuhachi* Flute
- Slovakian *Fujara* (A long, pipe shaped bass flute)

These recordings were mostly structured rather than being random improvisations. I asked Bradley to perform various ornaments on each note of the instruments. He first recorded *cuts* on each available note of the *D* flute and followed this with *roll*s, *crans*, *glissandi*, *trills*, microtonal inflections and various other effects. He then did short improvisations using various techniques. This process was repeated on most of the other instruments.

4.8.3 Collage

Once these improvisations were recorded into *Pro-Tools*, I went through the recordings and isolated sections of interest using *Pro-Tools’* editing software. From these recordings I experimented by layering various sounds together. I found the textures interesting enough in themselves and felt little need for any sound manipulation or processing. The only manipulation of the sounds is a slight delay effect I created by subtly moving either the left or right stereo channel side of some of the wav. files. In other words, when seen in *Pro-Tools* up close, the left side of a certain sound’s wav. file will not align exactly with its right side. This gives the illusion that the sound has been processed with a delay effect. The only processing effect in the entire piece is the use of various reverb sounds placed on different tracks to give a more spacious sound than the raw studio recording.

4.8.4 Section 1

Section 1 is a gradual build up of ornamental techniques until a big ‘forest’ of sounds develops roughly two-thirds into the piece. The instruments used in this initial section are flutes, fifes and *shakuhachi*. The *fujara* is introduced at the climax of this section. In

the first draft of the piece there were eight specific sections within this overall section, with each section concentrating on one or more specific sounds. I eventually edited it down to five subsections:

- 0'-2'14" Long, held ornamented notes and *glissandi* on various notes using flutes, *shakuhachis* and fifes. Contains dissonant clashes. Atonal in nature.
- 2'15"- 3'32 Short *glissandi*, mainly using fifes but also *F* flute and *shakuhachi*. Centred around the F Ionian scale
- 3'32"- 4'44" *Cuts* and *rolls* on the same instruments mainly in upwards scale movement on F Ionian. Section ends with high pitched *rolls*.
- 4'45"-5'49" *Rolls* & *Crans*. Moving gradually higher, starting with *F crans* and *rolls*, moving to *G rolls* and *crans*.
- 5'50"-7'10" The climax of the piece. A large collage containing a combination of the previous sounds and techniques, along with high pitched sounds from the *fujara*. Uses *D* and *F crans*.

4.8.5 Section 2

Section 2 provides a contrast from the end of Section 1. The two main differences in this section are in relation to instrumentation and the density of the collage. Only flutes are used and the sound is sparer and usually rooted around one particular pitch, as in the first part of Section 2, which is rooted on the note *G*. There are five subsections:

- 7'11"-8'11" Accented *rolls, cuts* and rhythmic pushes around the note *G*.
- 8'12"- 9'14" Downward accented scale movement at various different speeds using the notes *B, A, G, F-sharp, E, D. Cuts* and *rolls* are used.
- 9'15"- 9'38" *Slow air* section. Fragments of *slow air*-style melodies are played against each other. Mixes between G and D Ionian.
- 9'39"- 10'53" *Cranning* and microtonal ornamentations centred on *D*.

- 10’54”-end. Layered *trills* characteristic of fife playing, but played on flutes. Mostly using the notes *G, F-sharp, E* and *D.*

4.8.6 Revision and Completion

When I completed the first draft I sent it to Bradley. His reaction had a bearing on the completed composition.

> I like the way I can't remember making most of those sounds in the piece you sent me... and not being able to always tell what instruments are playing at any one time!
>
> It's like a sort of post modern 'Fox Chase'-type descriptive piece... actually there's a couple of themes from Séamus Ennis' 'Fox Chase' thrown in there.
>
> There's a few sections that would make for good 'question and answer' parts...a bit like sections of the Fox Chase, and one of the most famous Japanese *shakuhachi* pieces for two *shakuhachi* which represents the mating calls between two lonesome deer. The opening section is very reminiscent of the latter... but darker.
>
> (Bradley email correspondence, December 3, 2009).

Following this, we arranged to meet to record him improvising over the collage. During this recording process he had a few attempts at improvising over each smaller section. After this, I created a full version of the piece by mixing the best improvisations with the first draft of the collage. A few weeks later Bradley sent me another email in which he expressed a few concerns about the opening section.

> I was just listening to it again on good headphones. I really like where the *crans* come in, and the *fujara*, that whole section after that is really working well I think, and I think there is 'performance potential' there.
>
> I like what's before that as well as a 'stand alone' affair, but I'm not confident that we can 'perform' it as it is and make anything more of it.
>
> How about restructuring the piece up til that point; make it more structured and formally composed, and more melodic, more of what people can identify with as a performance of music, and then have the piece 'decompose' from the *cran*/*fujara* section?
>
> (Bradley email correspondence, January 28, 2010).

Bradley’s thoughts echoed some of my thoughts during the previous recording session where I recorded him improvising over the collage. I noticed it was difficult for him to find space to improvise within certain parts of the opening section. My supervisor, Dr. Jane O’Leary, expressed some similar thoughts.

I made a number of important decisions after the recording sessions and following careful consideration of Bradley and Dr. O’Leary’s thoughts. I decided that there would

be two versions of the piece. The first would be a stand alone electro-acoustic piece which would not have any live performance aspect. The second would be an edited version of this which Bradley would improvise with in performance situations.

For the electro-acoustic version I stuck mostly to my original first draft, as I find it satisfying as a stand alone piece. The only changes I made to this first draft regarded mixing. I did not do much by way of mixing the piece in its initial draft. I felt considerable re-mixing and mastering would improve the piece significantly. It is yet to be professionally mastered.

For the live performance version I decided to take note of Bradley's and Dr. O'Leary's comments to create a version with more space for live improvisation. I also made several edits and textural changes to the piece, particularly in the opening section. I do not have a recording of this version because the piece has yet to be performed live.

I followed Dr. O'Leary's advice regarding creating a written representation of the piece which the performer can refer to when improvising. Bradley coincidentally said that it would be helpful for him to know what he's improvising over in written form until such time as he is fully familiar with the piece. This written representation was given in the descriptions of each section (pages 434-435). In these descriptions there is reference to the timeline of the piece along with the techniques and tonal centres used. This is enough information to facilitate improvisation over the collage.

4.8.7 Summary

The Forest of Ornaments is one of the most challenging pieces I have composed, both from the aspect of challenging me as a composer and for challenging the listener. The piece has challenged me to work in a collaborative manner. There is only one other piece I have written which had a similar collaborative compositional process.

As a master's student at the *Guildhall School of Music and Drama,* I composed an electro-acoustic piece called *Electric Guichair* (2004) in which I created a sound

collage from recordings of myself improvising with an electric guitar and of sounds Dr. Nye Parry[15] and I generated from a squeaky chair. Dr. Parry was particularly good at improvising with this squeaky chair, so the compositional process of that piece and *The Forest of Ornaments* is very similar, because I have directed people other than myself to create controlled improvisations and from the recordings of these improvisations I have created a collage of sounds by way of editing, layering and sound manipulation.

There is considerably more sound manipulation in *Electric Guichair*. With *The Forest of Ornaments* Bradley's input has been vital and with the live performance/live recording version of the piece, Bradley is improvising a significant amount of musical material over the collage. This is a form of live composition. So I have no hesitation in calling this a co-composition.

The sounds Bradley created for the collage had a significant bearing on the overall sound of the piece and this opened up a new compositional style for me. Whilst the looped repeating fragments in the collage are characteristic of some of my music, the overall sound-world is quite different, particularly regarding the microtonal aspect, which I have only subtly explored in some previous works.

I found this way of composing quite liberating, particularly by way of the fact that there was no need for me to notate the piece. The process of recording improvisations and re-arranging them through editing software proved a very rewarding compositional technique.

This piece presents several new challenges. The lack of conventional melody places it firmly in the realms of experimental music. For a listener accustomed to Bradley's usual performance style or indeed any other traditional Irish flute player's style, this music will be quite unusual and challenging. They will likely recognise the sounds as emanating from traditional instruments and a traditional musician, but they

[15] Dr. Parry is a lecturer in electro-acoustic composition at the Guildhall.

are unlikely to regard it as ‘traditional music’. This is in essence what I hoped to achieve in creating this piece, a piece of contemporary music that draws on the Irish tradition, without sounding like traditional music.

For a listener accustomed to contemporary classical music the piece presents different challenges. I know of no other piece which utilises Irish flute techniques in this manner and it is unlikely there are other pieces which combine Irish flutes and fifes with Japanese *shakuhachi* and Slovakian *fujara*!

4.9 *Le Chéile is in Aonar* for Traditional Music Ensemble

Le Chéile is in Aonar (Together but apart) is a piece for a traditional music ensemble of two fiddles, two flutes, three tin whistles and *uilleann* pipes. The piece can be performed by a minimum of four and a maximum of eight musicians, due to the multi-instrumental capabilities of many traditional musicians. It marks the first time I have consciously used old traditional tunes in the context of a work which I would consider to be more than an arrangement of traditional tunes.

There are a number of reasons why this piece is different to the usual approach of arranging traditional tunes for an ensemble of traditional musicians. In traditional music, ensembles have been formed in a variety of ways. The pub session is the most informal form of ensemble. It is a spontaneous coming together of musicians playing various instruments. Duos and trios are very common formations in traditional music recording and performance situations. The most common larger traditional ensemble formations created for formal purposes are as follows.

4.9.1 Céilí Band

The typical *Céilí Band* consists of two fiddles, two accordions, two flutes, piano and a small drum kit consisting of a snare drum, bass drum, hi-hats and woodblock. This line-up is variable, the number of fiddles, accordions and flutes varies, there can be banjo, concertina and tin whistle in the tune playing section and guitar, *bodhrán* and bass can be found in the accompaniment section. The piano provides harmonic accompaniment and the drums the steady beat, over which the other instruments usually play the tune in close unison. Harmony amongst tune playing instruments in *Céilí Band*s is rare. Since the primary purpose of *Céilí Band*s is to accompany set dancing, the musical content of a *Céilí Band* performance is not designed for concert performance.

4.9.2 The Ó Riada Template

One of the most important developments regarding ensemble playing in traditional music was the foundation by Seán Ó Riada of the group *Ceoltóirí Chualann* in 1960. Ó Riada's original intentions for the ensemble were very ambitious.

> In theory it (*Ceoltóirí Chualann*) was to have a wide variety of unison timbres with jazz-type opportunities for stretches of virtuoso solo variation and with creative arrangements of traditional music and perhaps actual composition, using in the new-old form ancient techniques such as canon, canon with augmentation and other contrapuntal means, leading to a new synthesis of age-old Irish tradition and European means.
>
> (Acton, Charles: "Obituary-Seán Ó Riada: Changed the sound of Irish Traditional Music." In *The Achievement of Ó Riada*, edited by Bernard Harris and Grattan Freyer, 201. Ballina: The Irish Humanities Centre Ltd, 1981:201).

Ó Riada's ambitions in this area were not fully fulfilled as he never followed the route of creating compositions for *Ceoltóirí Chualann* which featured canon and other contrapuntal means. Nevertheless, he did create a new ensemble sound which is quite different to the *Céilí Band* sound. The primary instrumental difference was that he replaced the drums and piano with harpsichord and *bodhrán*. He placed fiddles, flutes, tin whistles and accordions as the front line of melody instruments, much like a *Céilí Band*, however he treated them differently. Rarely would the ensemble play in unison like a *Céilí Band*. Instead, one or two instruments played the melody whilst others added harmony and counterpoint. Melodies were broken up so that pieces were given gradually developing introductions. The arrangement of the *reel* 'The Morning Dew' is particularly famous for such an introduction.

Ó Riada eventually rejected his own template, but Paddy Moloney (b.1938), the piper in *Ceoltóirí Chualann*, took the template and modified it slightly to create the now internationally renowned group *The Chieftains*. He replaced the harpsichord with the harp and dispensed with accordions. Outside of the tradition, this resulting sound is now almost universally hailed as the 'authentic' Irish ensemble sound.

4.9.3 The Bothy Band Template

In the 1970's a new form of traditional group developed which was driven by the power of rock music. The main groups of this style were *The Bothy Band, Dé Danann* and *Planxty*. *The Bothy Band* in particular is responsible for reinvigorating traditional music for the rock music influenced generation of the 1970's. They introduced powerful strummed guitar and bouzouki accompaniment and electronic instruments by way of the clavichord, which replaced the Ó Riada-influenced harpsichord that appeared on the group's eponymous debut album.[16] *The Bothy Band's* template of guitar, bouzouki, *bodhrán*, keyboard, *uilleann* pipes, flute and fiddle has proved to be an enduring one. Contemporary groups such as *Altan, Dervish* and *Lúnasa* have deviated little from this template. In the 1980's Donal Lunny and *Moving Hearts* developed this template to add rock instrumentation including saxophone, electric guitar, keyboards and drums.

4.9.4 New Directions

The string quartet is now being utilised in traditional music more than ever before. *The West Ocean String Quartet*, founded by composer Neil Martin, brings traditional music and newly composed traditional style material into the classical format of a string quartet. All members of the ensemble have classical training, whilst Martin and the first violinist Séamus McGuire, are also accomplished traditional musicians. *The West Ocean String Quartet* lean heavily towards the classical tradition through their use of sheet music on stage, a harmonic approach influenced by classical music from the eighteenth and nineteenth centuries and regular use of *vibrato*.

In 2009 the concertina player Niall Vallely released his second album with his brother, the pianist Caoimhín Vallely, under the moniker *Builleé*. On this album, *Builleé 2*, they integrate a string quartet with jazz-influenced playing. The majority of the album

[16] The Bothy Band: *The Bothy Band – 1975.* Polydor LP 2383379. 1975. Vinyl Record.

contains Niall Vallely's own highly syncopated compositions in traditional music forms. There are echoes of minimalism in some of the arrangements, such as on the final track 'Sergeant Pluck's'.[17]

A more recent traditional ensemble sound to emerge is the Donegal fiddle trio *Fidíl*. They just use their fiddles; no guitars, percussion or keyboards. They use *pizzicato* techniques considerably, often in imitation of guitar and bouzouki accompaniment styles. They use piping influenced drones and harmonies and they often play tunes in octaves. Almost everything they do has precedents in the Donegal tradition; however the way they have brought these aspects together is innovative in the context of traditional music.

4.9.5 A New Ensemble Sound

The ensemble sound I have created differs from all those previously mentioned in a number of ways.

- In this piece tunes are played concurrently, at no point is one tune played on its own.
- The piece is over twenty minutes in duration without a pause.
- There is little rhythmic or harmonic accompaniment aside from the spontaneous accompaniment that may be created by the *uilleann* pipes' drones and regulators and drones in the fiddles. Harmony and counterpoint are produced spontaneously by the overlapping of tunes.
- Every sound in the piece originates from traditional music and is played on the four primary instruments used in traditional music; the *uilleann* pipes, flute, fiddle and tin whistle.

[17] Buille: *Buille 2*. CVCD0003. 2009. Compact Disc.

4.9.6 Tune Treatment

In traditional music it is normal for one tune to be the main focus at all times; any rhythm, harmony or counterpoint is usually based on this tune. This can make it difficult to hear one player's variations in an ensemble situation when more than one or two musicians are playing a tune and percussion and harmony is added. As a way of counteracting this in an ensemble situation I developed the idea that if a number of accomplished musicians were concurrently playing different tunes which have rhythmic and melodic similarities, then it would be possible to clearly hear the spontaneity of each players variations whilst also experiencing an ensemble sound that is different to standard traditional music ensemble sounds.

Seán Ó Riada (1969) briefly experimented with this idea with *Ceoltóirí Chualann* on the live recording *Ó Riada Sa Gaiety*.[18] One of the tracks is called 'The Whinny Hills of Leitrim'. There are two *slip jigs* which go by this name and Ó Riada came up with the novel idea of the two tunes being played concurrently.

Cage (1979) also asked for tunes to be played concurrently in *Roaratorio*; however he left it up to the musicians to pick the tunes and to play them randomly. This results in one musician playing a *slow air* whilst another musician might play a *jig* in an unrelated mode and rhythm.

Siobhán Peoples related to me how she was once involved in a project called *Eklego* (1984) where Mícheál Ó Súilleabháin asked her and some of her fellow students at *University College Cork* to each compose a tune and then they were asked to play the tunes concurrently. There were also different tune types involved in this process.

For *Le Chéile is in Aonar* I picked tunes that I felt would fit together well when played concurrently, even when submitted to variations by the musicians. There are ten sections in the piece; nine of them are based on traditional tunes. Each of these sections

[18] Ó Riada, Seán: *Ó Riada sa Gaiety.* Gael-Linn LP 027. 1969. Vinyl Record.

is named after the tunes that are used in the section. The piece is quite tightly structured so that musicians come in at defined points. I was aware that certain dissonances would be likely to occur naturally when these tunes are played together. I felt these dissonances would add colour to the sound. In section I of the piece, two *reels*, 'The Abbey Reel' and 'The Jolly Tinker', are initially played concurrently.

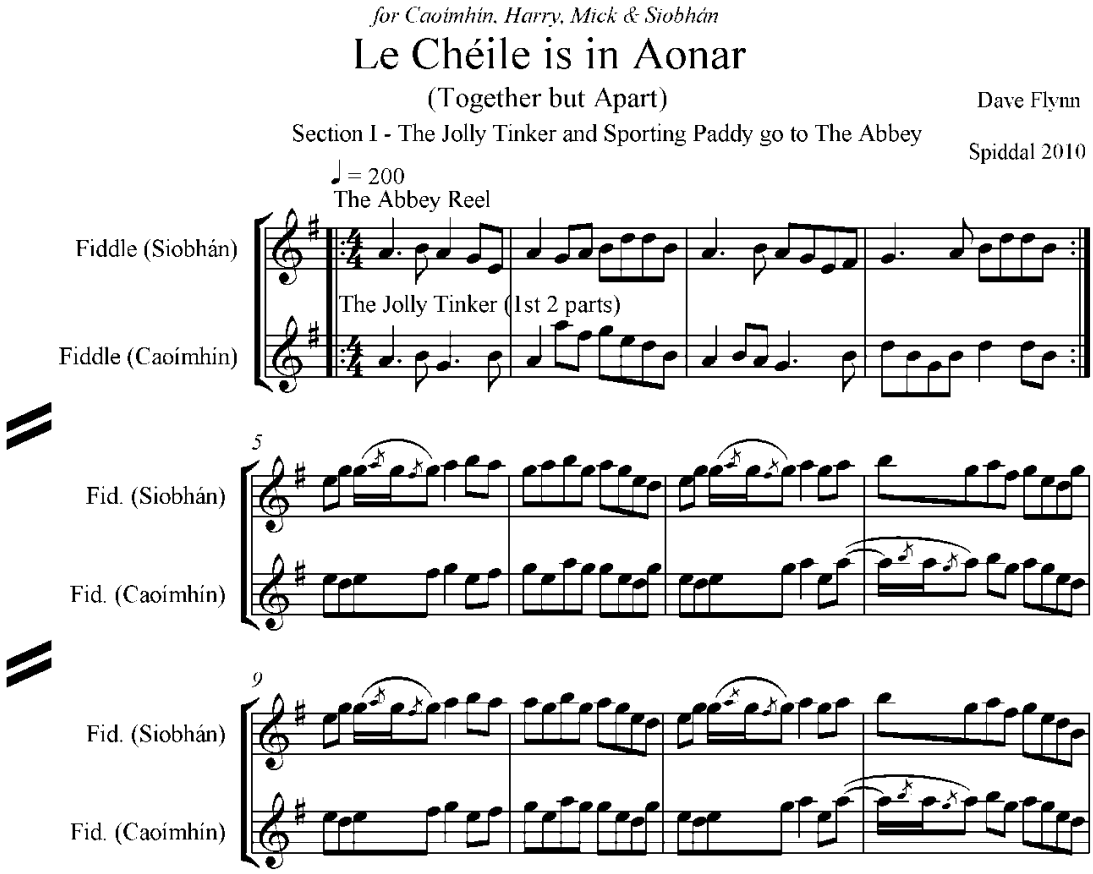


Figure 4.123 Flynn, *Le Chéile is in Aonar*, 1-12.

These tunes are both in A Dorian, and they are rhythmically quite similar. There are melodic similarities also which mean there are moments of unison, harmony, counterpoint and dissonance when they are played concurrently. This effect is heightened in performance in a way that the score cannot indicate. The musicians can vary the melody, rhythm and dynamics to create moments of real musical interest. The flautist enters at bar 13 with the Donegal version of 'Sporting Paddy', as the fiddlers play another round of the tunes they are playing.

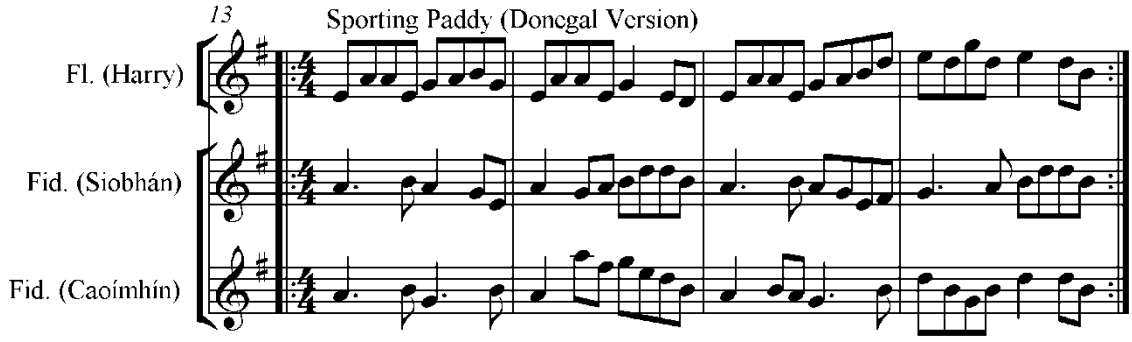


Figure 4.124 Flynn, *Le Chéile is in Aonar,* 13-16.

'Sporting Paddy' is also in A Dorian; however its melodic structure is quite different to the other two tunes. The opening acts like a bass line for the first three bars. I repeat this process throughout the piece to the point that there can be four tunes played concurrently, such as in the beginning of Section IV where four *polkas* in A Dorian are played together.

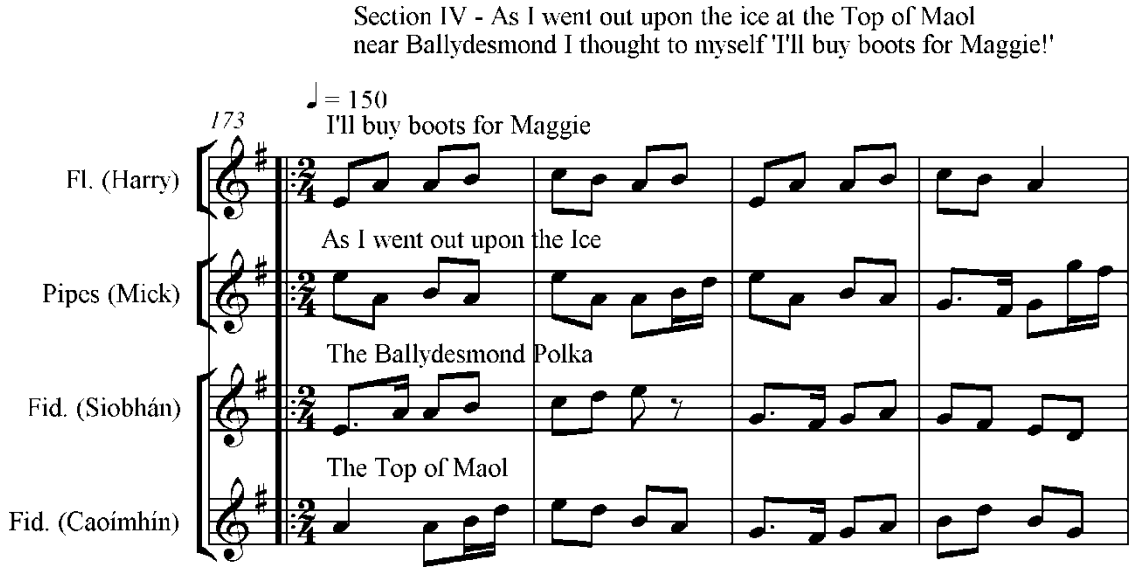


Figure 4.125 Flynn, *Le Chéile is in Aonar,* 173-176.

There are melodic and rhythmic similarities between all four tunes, yet they deviate from each other enough to create an overall sound of great melodic and rhythmic vitality. I was conscious that canonic and contrapuntal effects could occur because I knew the tunes well and understood their structural similarities and differences.

The overall structure of the piece in relation to the tunes used in each section follows:

Section I – *Reels* in A Dorian - The Jolly Tinker, Sporting Paddy and The Abbey Reel

Section II – *Reels* in G Ionian - Tommy Peoples' Reel, The Maids of Feakle, The Primrose Lasses and The Blacksmith

Section III – *Reels* in D Dorian - Julia Delaney's, Mother's Delight, The Porthole of the Kelp and The Humours of Scarriff

Section IV – *Polkas* in A Dorian - As I went out upon the ice, The Top of Maol, The Ballydesmond Polka, I'll buy boots for Maggie

Section V – Double *Jigs* in D Mixolydian - Tatter Jack Walsh, Garrett Barry's, Fraher's, The Hag at The Churn

Section VI – Improvised Ornamentations

Section VII – *Slip*/*Hop jigs* in E Dorian - The Kid on the Mountain, The Butterfly, The Promenade

Section VIII – *Slip jigs* in E Dorian - The Kid on the Mountain, Dever the Dancer, The Night Poor Larry Was Stretched

Section IX – *Reels* in C Ionian - John Doherty's Reel, The Steeplechase, The Graf Spee

Section X – *Reels* in D Ionian - The Bucks of Oranmore, Lucy Campbell's, Davy Maguire's and The Boyne Hunt

Most of these tunes would be in the repertoire of many traditional musicians; they are all tunes I know from memory. The main challenge lies in the musicians getting used to the concept of performing tunes concurrently and also the memorisation required in relation to the structure of the piece.

4.9.7 Duration

In traditional music it is rare to find ensemble arrangements of considerable length. Arrangements tend to average three to five minutes. Martin Hayes and Dennis Cahill have created several long arrangements for their live performances. In every live performance of theirs there is at least one long arrangement lasting between ten to thirty minutes. In their recorded output they have only produced two such arrangements. One set on the album *The Lonesome Touch* (1997) lasts for nearly twelve minutes; another set on the album *Live in Seattle* (1999) lasts for nearly twenty-eight minutes. This particular recording has proved very influential to me and it inspired *Music for the Departed*.

With *Le Chéile is in Aonar* I sought to create a piece of considerable length in a different style to *Music for the Departed*. The piece is rhythmically relentless in that there are no pauses, silences or *slow air* sections. In this respect it is both similar to the long sets that can happen spontaneously in traditional music sessions and the long continuous rhythmic pieces that are a hallmark of American minimalists like Philip Glass and Steve Reich.

My experience of very long continuous sets in Irish pub sessions is the primary influence on this piece. This is a phenomenon that has not, to my knowledge, been documented on a commercially released recording. It occurs occasionally when the musicians in a session are really tuned into each other and some magical force seems to take over to make a spontaneous set of *reels* last for well over ten minutes. It is one of the most exhilarating musical experiences I have encountered; the only experience I can equate it with was listening to Reich's hour long *Music for 18 Musicians* (1976) for the first time.

My approach to duration and structure in this piece has been informed by both these experiences; it is like an attempt to bring elements of the pub session into a

minimalistic approach to structure. My use of ten separate sections in different modes and tune forms relates to Reich's methods in *Music for 18 Musicians* where there are twelve sections, each in a different key or mode. One section stays in the same basic mode for a certain amount of time and then eventually changes to another section in a different mode, with slightly different rhythmic emphasis. A similar approach is taken in *Le Chéile is in Aonar*.

4.9.8 Harmony and Accompaniment

There is no conventional accompaniment or harmony in this piece, aside from a few places where I suggest to the piper where they might use the regulators and drones and where I suggest to the fiddlers that they might play drones or double-stops. Yet, harmony and counterpoint abounds in this piece due to the different tunes being played concurrently. For the most part this harmony and counterpoint follows the principles of traditional Irish harmony which I explained in Chapter 3.3.3. This is because the tunes I have selected to be played concurrently tend to imply similar harmonic changes.

There are some instances where poly-modality occurs due to modal changes occurring in a part of one tune while the other tune remains in its root mode.

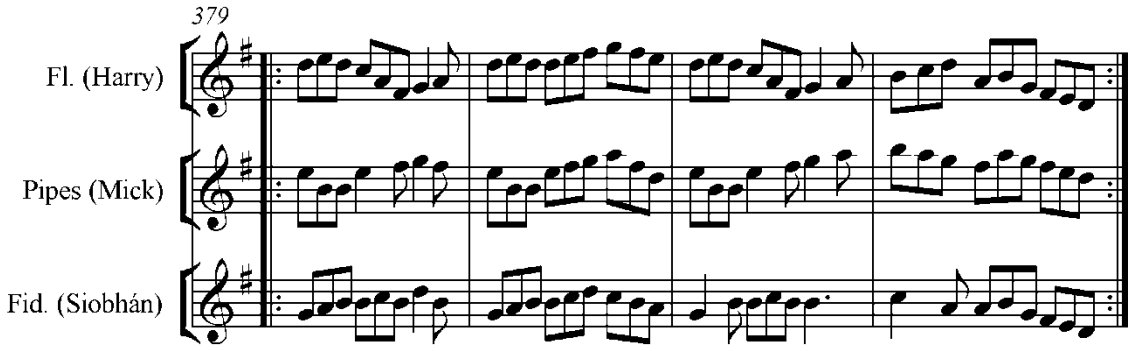


Figure 4.126 Flynn, *Le Chéile is in Aonar,* 379-382.

In the example above, the *uilleann* piper is playing the fourth part of the *slip jig* 'The Kid on the Mountain' in E Dorian. The fiddler is playing the second part of the *slip jig*

‘The Night Poor Larry Was Stretched’ in G Ionian. The flautist is playing the second part of ‘Dever the Dancer’ which mixes between E Dorian and G Ionian.

This is the most harmonically unusual place in the piece in the context of traditional music. There are many minor and major 2nd clashes in this short section as it is notated. It is likely such clashes will occur in performances, even when the musicians use melodic variations. The example below shows this section on one staff to demonstrate the harmonic clashes more clearly.

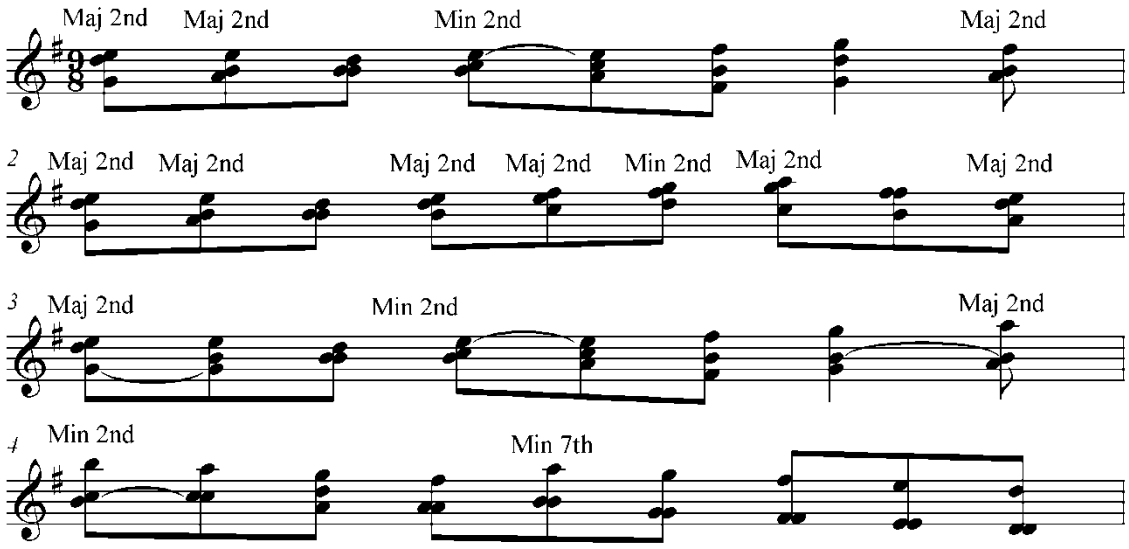


Figure 4.127 Flynn, *Le Chéile is in Aonar*, 379-382 combined into one staff.

These harmonies are not particularly dissonant in the context of contemporary classical music but they do relate more clearly with the harmonic styles commonly found in tonal and modal contemporary classical music, rather than earlier styles of classical music. The musicians are also likely to play in just intonation to tune in with the *uilleann* pipes.

The approach to harmony and accompaniment is unusual as it primarily results naturally due to the concurrent juxtaposition of different tunes. The modal, rhythmic and melodic similarities between the tunes ensure that the inherent harmony and counterpoint follow a broadly modal shape.

4.9.9 Instrumentation

This piece was written with four musicians in mind; Harry Bradley, Mick O'Brien, Caoimhín Ó Raghallaigh and Siobhán Peoples. It is scored for eight instruments; *uilleann* pipes, two Irish flutes, three tin whistles and two fiddles, so the piece could be performed by an ensemble of eight musicians. The multi-instrumental capabilities of the original dedicatees ensure the piece can be played by just four musicians. This fact is not dependent on the musicians I have chosen. Most pipers can play the flute and tin whistle as Mick O'Brien is required to do, and most flute players would also play the tin whistle as Harry Bradley is required to do. It would be less common for a fiddler to have a high ability on the tin whistle as Caoimhín Ó Raghallaigh does, but there are many fiddlers who do.

Perhaps the most unusual aspect from a traditional ensemble point of view is the lack of accompanying instruments. There is no guitar, bouzouki, *bodhrán* or piano. In the context of contemporary ensemble playing in traditional music this is highly unusual. The only common situation where one might find between four and eight traditional musicians playing together without these instruments would be pre-organised house sessions where musicians sometimes arrange to meet and perform without accompaniment. In pub sessions it would be very unusual not to have at least one of the aforementioned accompanying instruments.

My reason for excluding these instruments relates to something Charlie Lennon said to me when I interviewed him:

> I quite like playing without backing and indeed when Ben (Lennon) and myself play I'm as happy to play with him and have no backing as have backing, unless it's very good, but I get a lot of enjoyment out if it if there's no backing and it's very pure and it's very very rich and you hear all the little nuances happening. Whereas the backing coming in tends to make it that bit more difficult to hear what's going on. Generally I like backing but I can get great joy out of playing without any.
>
> (Lennon interview).

I do not think I would have been able to relate to this until a few years ago. I was primarily an accompanist and tended to find unaccompanied traditional music quite uninteresting. As I have immersed myself into fiddle playing, I find I actually enjoy traditional music more when there are either no accompanying instruments or when there are just one or two very good accompanists.

One of my favourite traditional music recordings is the album *Kitty Lie Over* (2003) by Mick O'Brien and Caoimhín Ó Raghallaigh. It is made up of duo performances played on combinations of *uilleann* pipes, flute, whistle and fiddle. It is richly detailed due to the variations both players use and the harmonic effects created by O'Brien's regulators and Ó Raghallaigh's fiddle drones and double-stops. The lack of accompanying instruments allows the inherent rhythms of the music to flow naturally. Their approach had a major influence on the creation of this piece. I wanted to use their collective sound as a basis and then expand it into something different to standard traditional music, hence the addition of Harry Bradley and Siobhán Peoples and the idea of tunes being performed concurrently.

4.9.10 Section VI

In Section VI, entitled 'The Return to the Forest of Ornaments', the musicians are given the following instructions:

> At this point all musicians are to improvise for around 2 minutes just using *cuts*, *crans*, *rolls* and other ornaments and effects on the notes *G*, *D*, *A* and *E* only. Continue improvisations and gradually thin out texture. Make sure the last few notes that are played are *E's*. Then hold a long *E* note into Section VII.
>
> (Flynn, Dave: *Performance notes to Le Chéile is in Aonar*. Spiddal: Frisbee Publications, 2010).

The title reflects the fact that the musical processes are similar to those used by Harry Bradley in *The Forest of Ornaments*. Here, I transfer a similar sound palette that Bradley and I created using recording, overdubbing and editing techniques, to a live performance context. This section builds from the end of Section V, which ends with

two *jigs* in D Mixolydian, 'Fraher's' and 'The Hag at the Churn'. These *jigs* are usually heavily ornamented with *crans*, *rolls* and *cuts*, so this influenced me to create a section similar to middle section of *The Forest of Ornaments* where all these styles of ornaments are layered together.

In the recording session it became clear that the best approach for this section was for it to occur in four stages beginning with ornamentations on the note *D* in various octaves, which merges into ornamentations on the note *A*, followed by ornamentations on the note *G*. The instruction to end with ornaments on the note *E* is to enable a smooth transition into Section VII, which begins with the E Dorian tunes 'The Butterfly' and 'The Promenade' played concurrently.

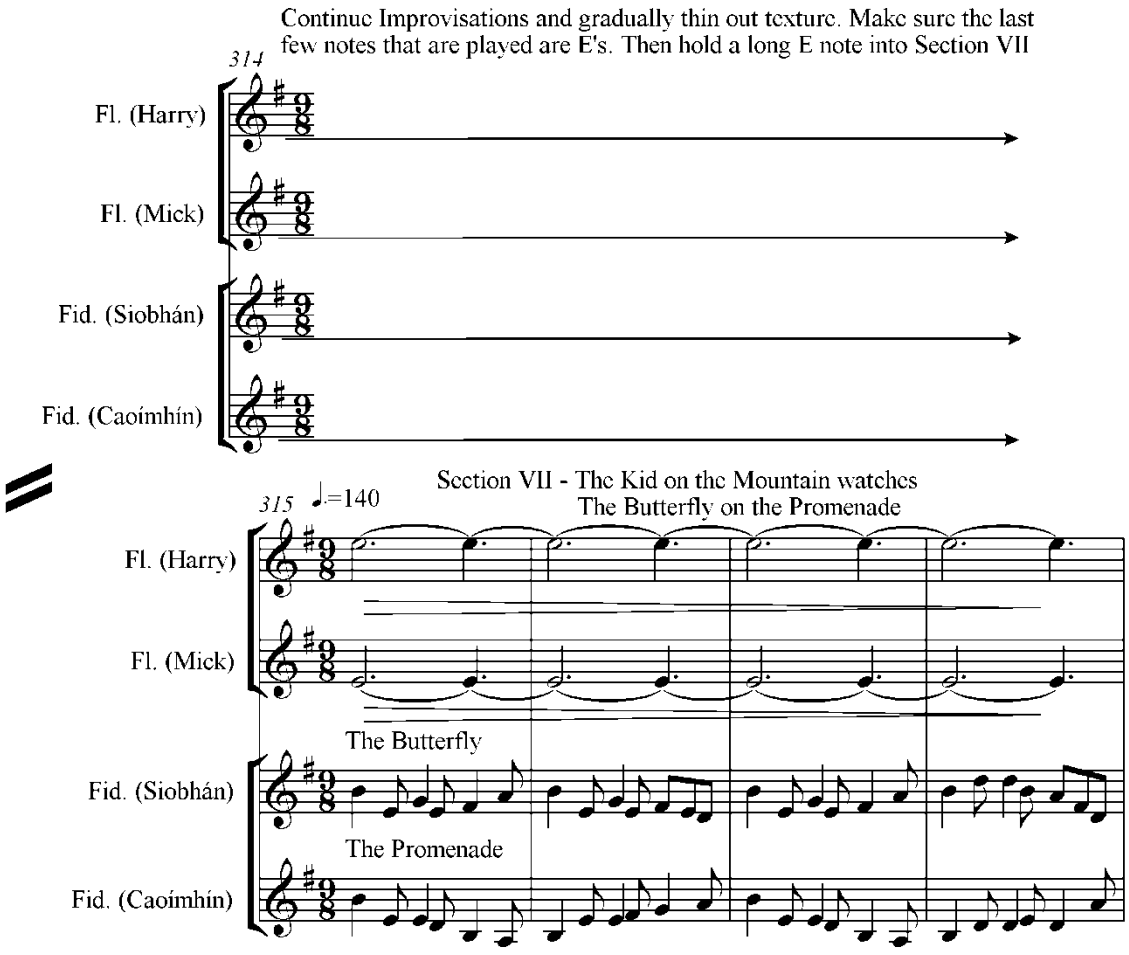


Figure 4.128 Flynn, *Le Chéile is in Aonar,* 314-318.

4.9.11 Summary

I am surprised by the direction I have taken with this piece. I was previously quite against the idea of using traditional tunes as a basis for creating a ‘new’ piece of music. However I am quite satisfied with the results of this piece. I think the idea that each tune is allowed to remain exactly as it would be played in a traditional context, without interference from other styles of music, has a bearing on this. At the same time, I feel justified in calling this a contemporary composition rather than an arrangement of traditional music, because the way I have placed the tunes together is quite removed from standard traditional music practice and it creates a sound more akin to the minimalist style of contemporary classical music.

4.10 Research Conclusions

I have developed my knowledge of traditional Irish and contemporary classical music considerably through this research. This has enabled me to compose what I would consider to be some of my most important works to date. The challenges I have faced in bringing elements of traditional music into the context of new concert compositions have been wonderful learning experiences. This thorough engagement with traditional music has greatly assisted in the development of my compositional voice. I believe I have achieved my principal aim of composing a body of original concert works which are strongly influenced by various aspects of traditional music.

I believe my research has many potential benefits from an academic perspective. This dissertation brings together, perhaps for the first time, the views of some of the most important contemporary Irish musicians and composers of both classical and traditional music. I believe there is also great scholarly value in my analysis of various aspects of traditional music and how these elements have influenced contemporary Irish composers. My initial research enabled me to conclude that there are no significant theses which thoroughly discuss the influence traditional music has had on contemporary Irish composers. Whilst it was beyond the scope of this dissertation to present a thorough analysis of the influence of traditional music on contemporary composers, I believe the research I have carried out in this regard is original and significant due to the combined knowledge I have accumulated concerning traditional and classical music.

Finally, I believe the *Table of Ornamentations*, *Table of Uilleann Pipes Harmonies* and the list of *Contemporary Irish Concert Compositions which feature Traditional Irish Instruments and Musicians,* as presented in the Appendices, are of considerable referential value.

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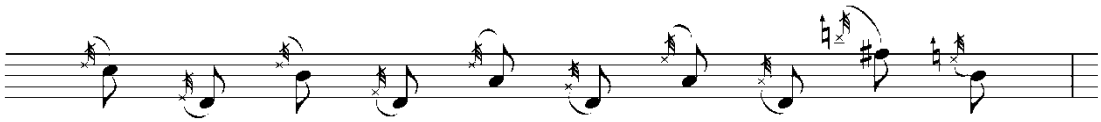
Appendix I – Table of Ornamentations

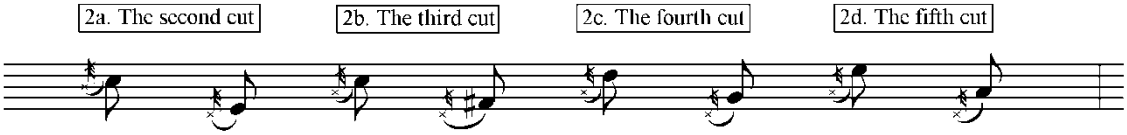
1. Upper single cuts

1a. The second cut | 1b. The third cut | 1c. The fourth cut | 1d. The fifth cut | 1e. The high micro-tonal cut



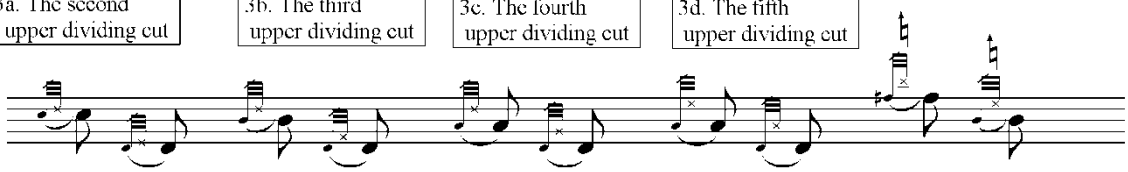
2. Lower single cuts

2a. The second cut | 2b. The third cut | 2c. The fourth cut | 2d. The fifth cut



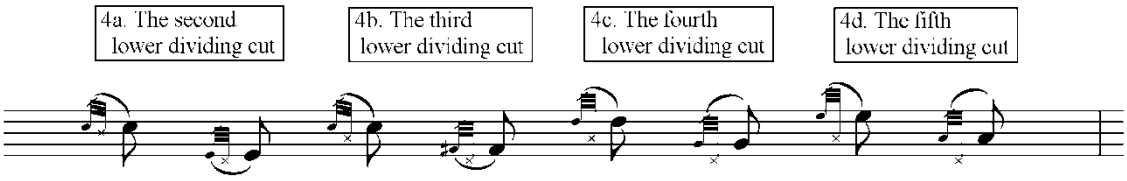
3. Upper dividing cuts

3a. The second upper dividing cut | 3b. The third upper dividing cut | 3c. The fourth upper dividing cut | 3d. The fifth upper dividing cut | 3e. The high micro-tonal upper dividing cut



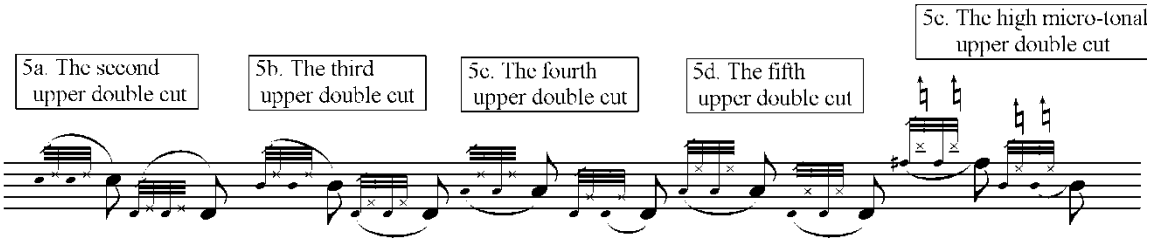
4. Lower dividing cuts

4a. The second lower dividing cut | 4b. The third lower dividing cut | 4c. The fourth lower dividing cut | 4d. The fifth lower dividing cut



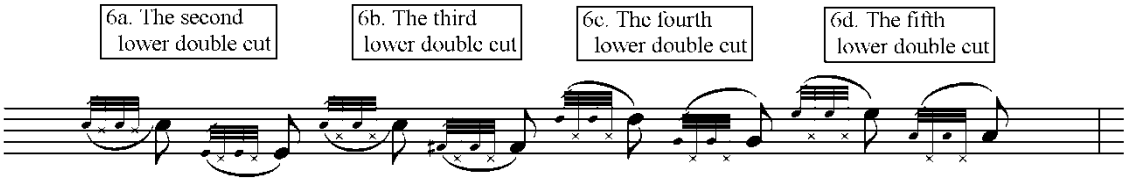
5. Upper double cuts

5a. The second upper double cut | 5b. The third upper double cut | 5c. The fourth upper double cut | 5d. The fifth upper double cut | 5e. The high micro-tonal upper double cut

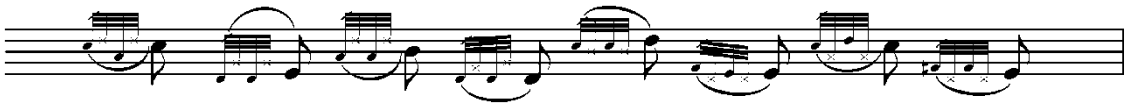


6. Lower double cuts

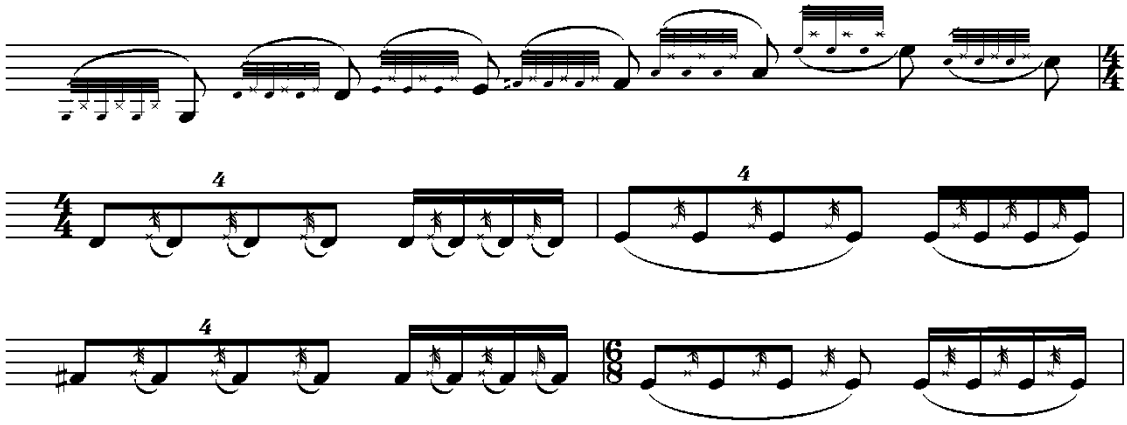
6a. The second lower double cut | 6b. The third lower double cut | 6c. The fourth lower double cut | 6d. The fifth lower double cut



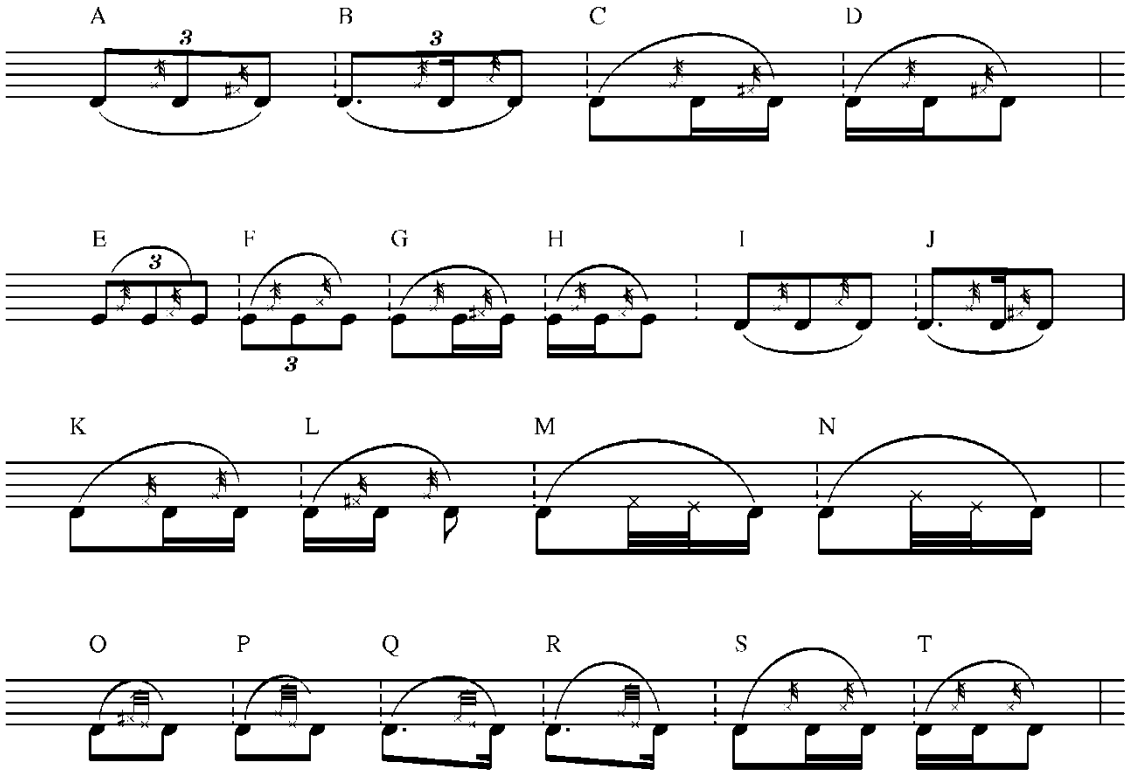
7. Two note double cuts



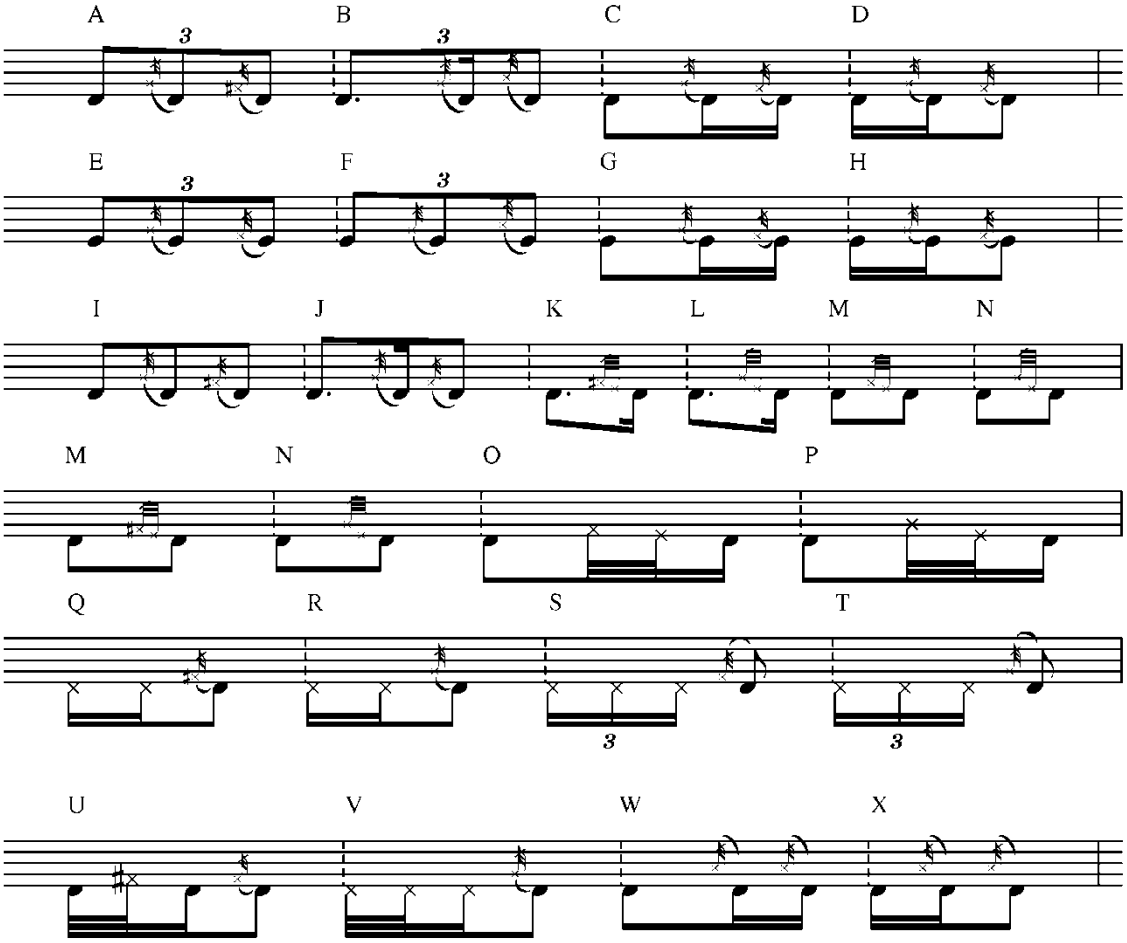
8. Triple Cut or Shiver



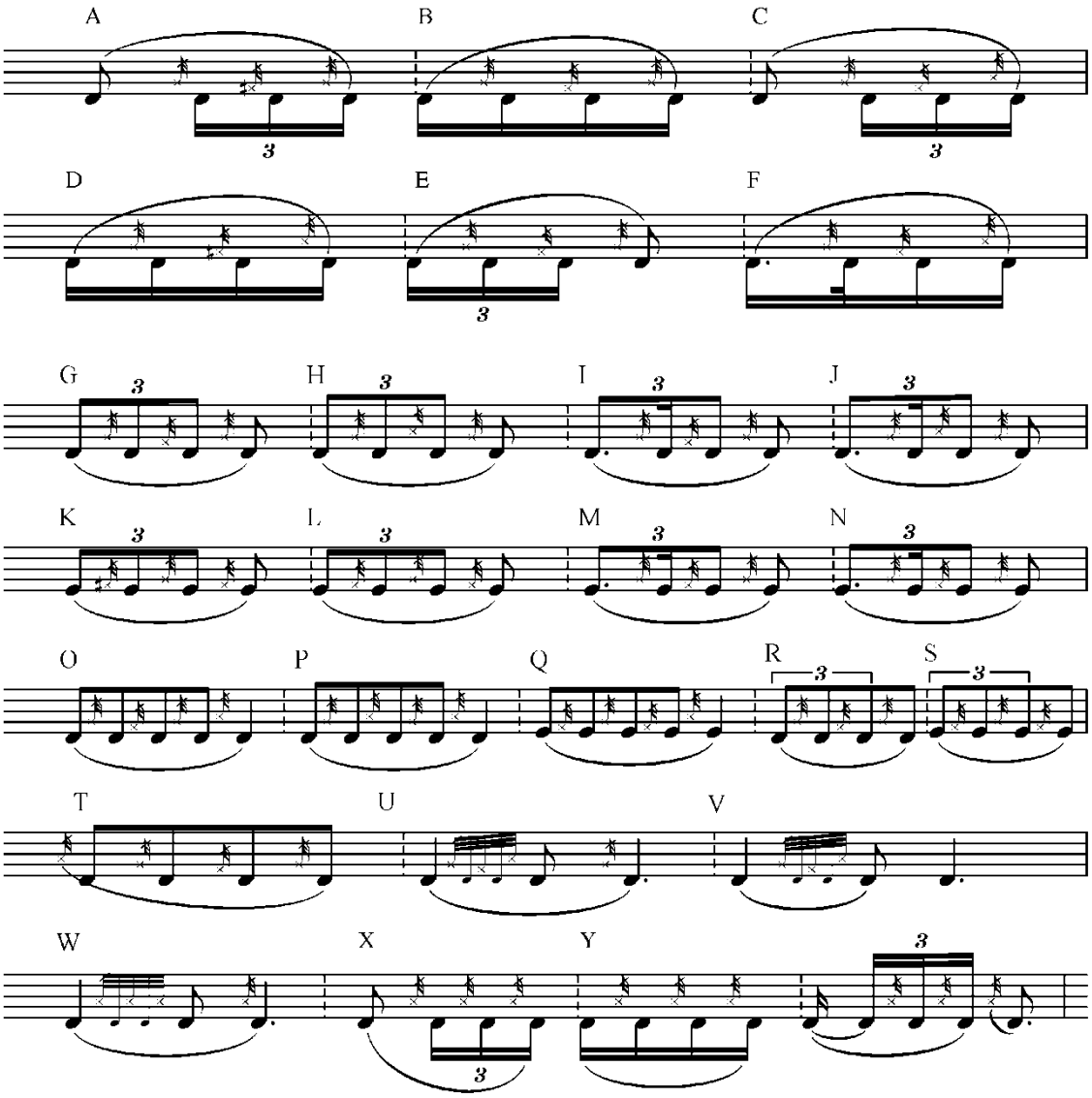
9. Legato Short Crans



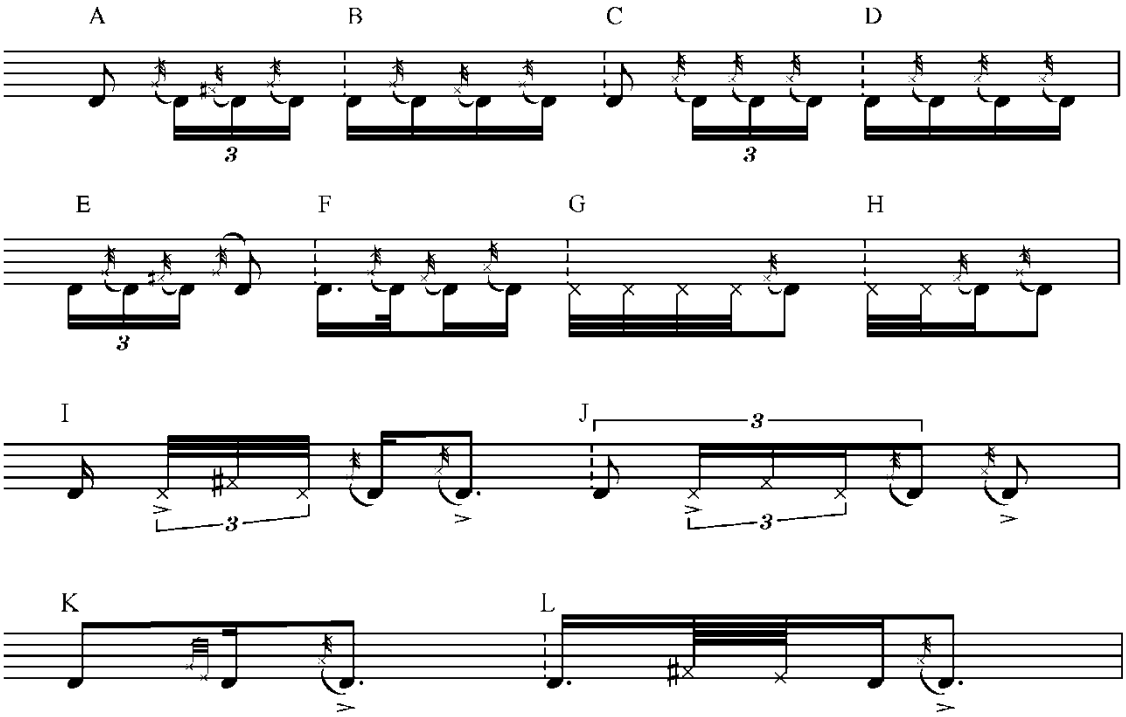
10. Staccato Short Crans



11. Legato Long Crans



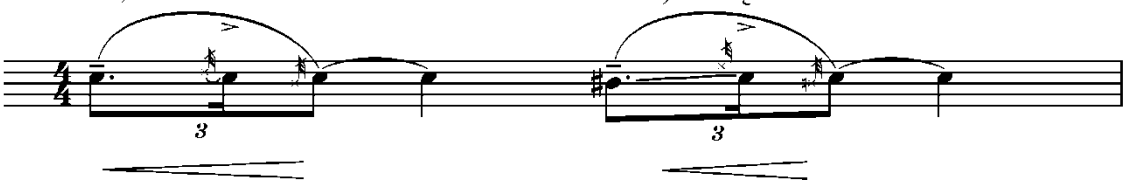
12. Staccato Long Crans



13. Rolls

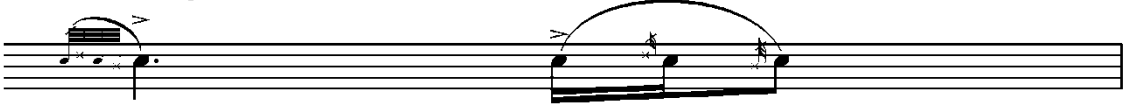
13 a.) Standard Roll

13 b.) Sliding Roll

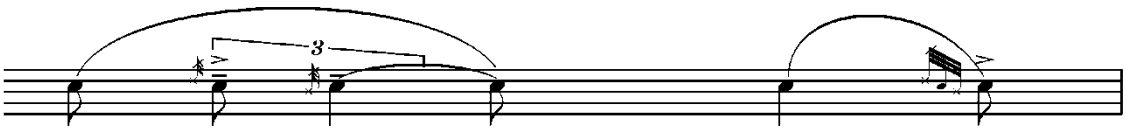


13 c.) Rapid Roll

13 d.) Treble Roll

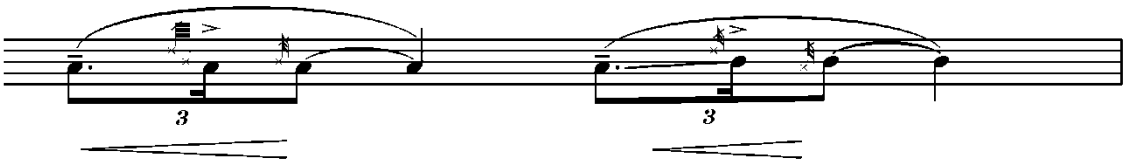


13 e.) Standard Roll variations

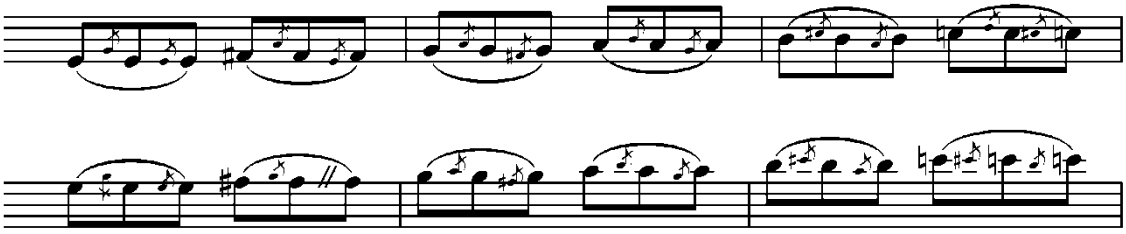


13 f.) Open String Roll

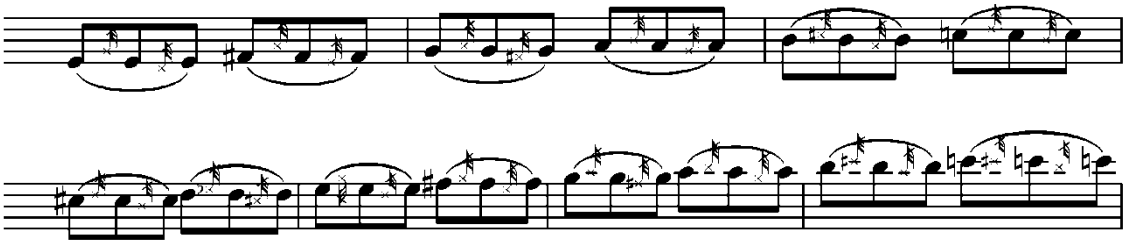
13 g.) Sliding Open String Roll



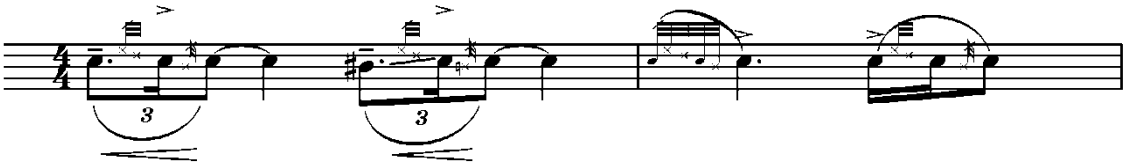
13 h.) Ennis' Piping Rolls



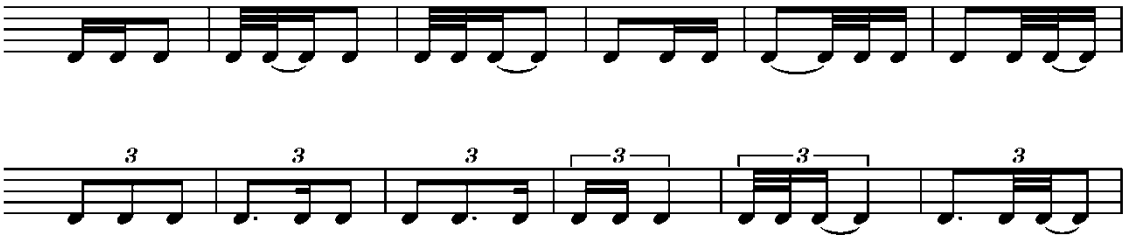
13 i.) Piping Rolls



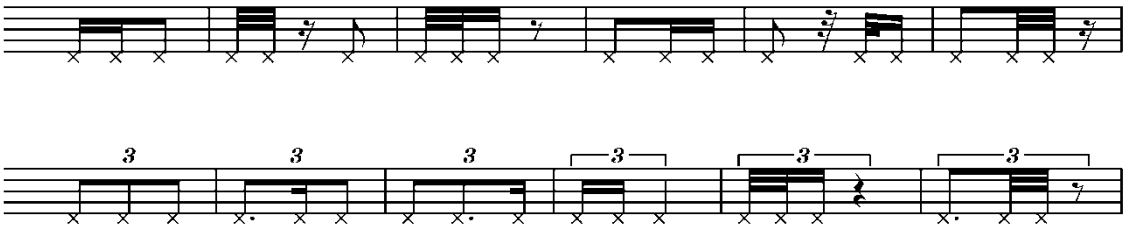
13 j.) Five Finger Rolls



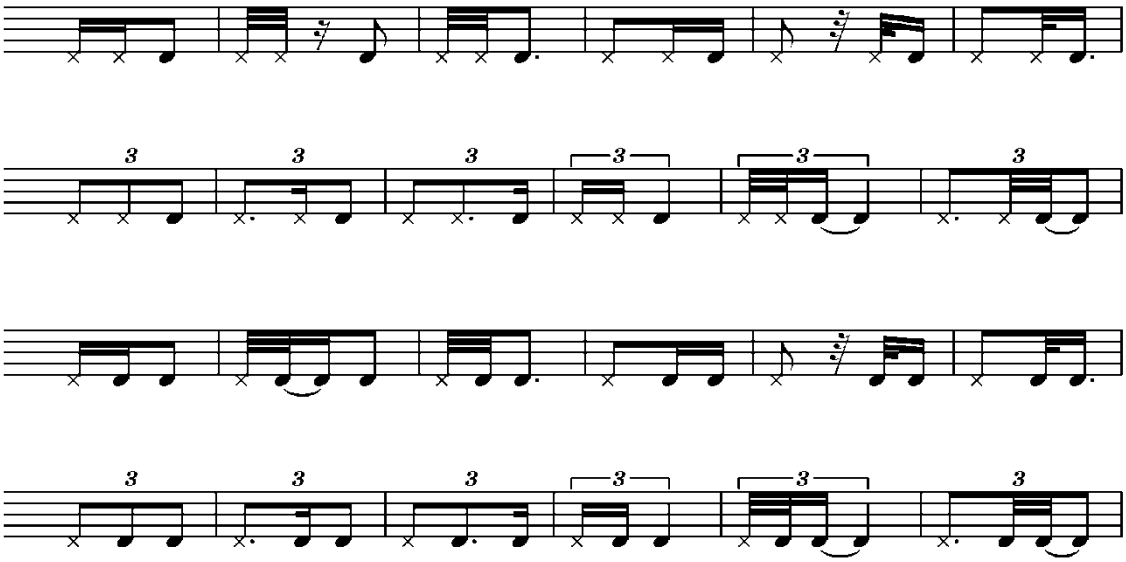
14 a.) Regular Trebles



14 b.) Scratched Trebles



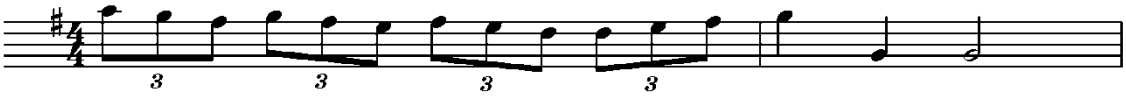
14 c.) Partially Scratched Trebles



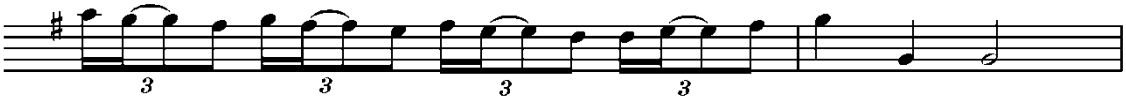
14 d.) Tommy Peoples' Crunched Treble

Flick the frog end of the bow with the little finger so the wood at the side of the bow ricochéts off the string to create a percussive scratched treble.

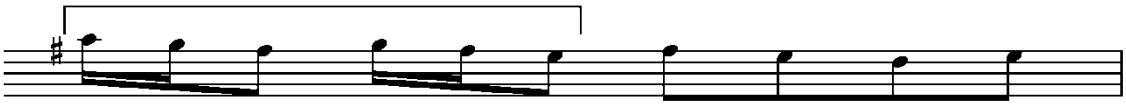
15 a.) Hornpipe Triplets



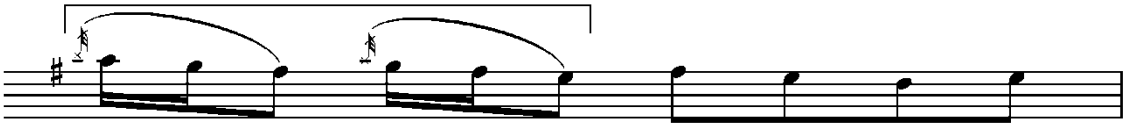
15 b.) Snapped Hornpipe Triplets



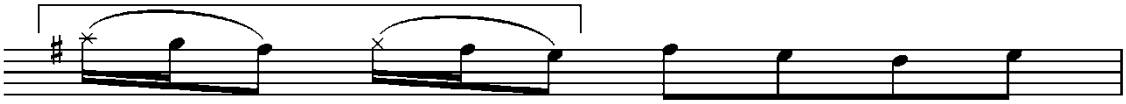
15 c.) Reel Triplets



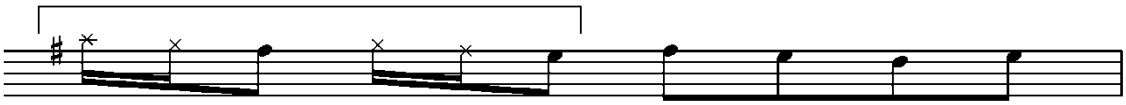
15 d.) Cut Reel Triplets



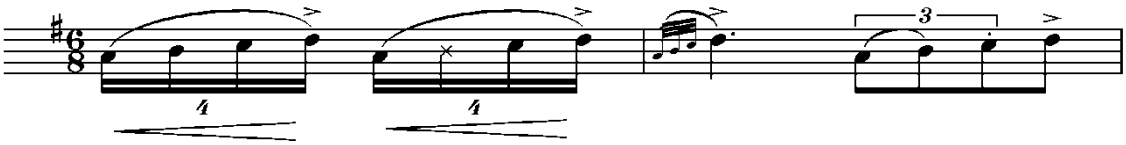
15 e.) Scratched Reel Triplets



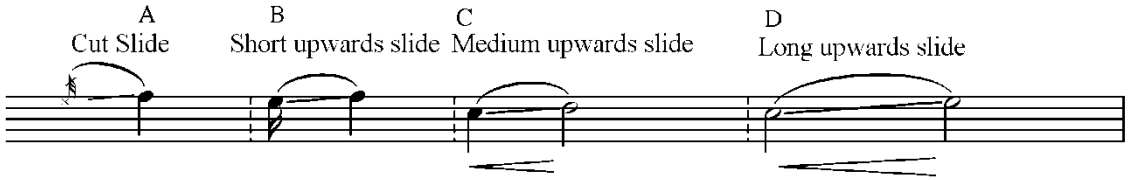
15 f.) Double Scratched Reel Triplets

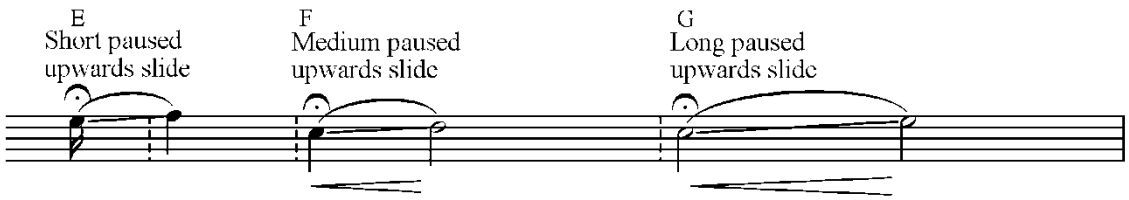


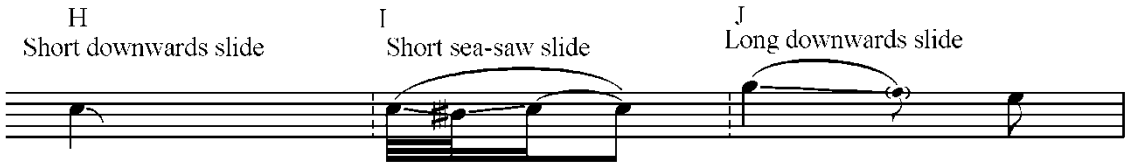
15 g.) Jig Quadruplets



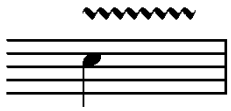
16. Slides



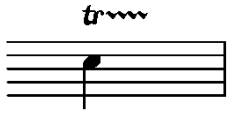




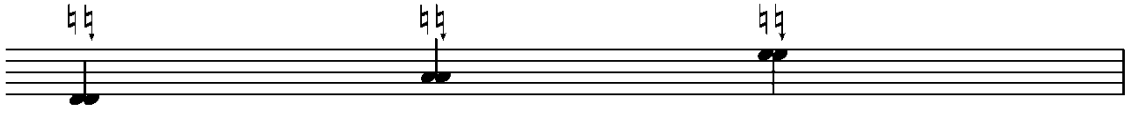
17. Vibrato



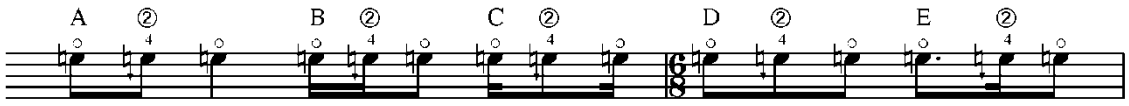
18. Trill



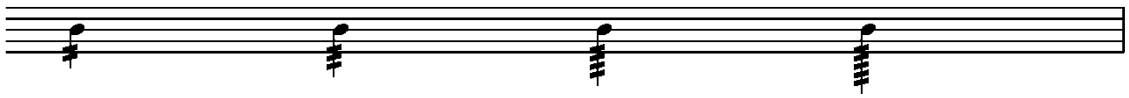
19. Unison Double Stop



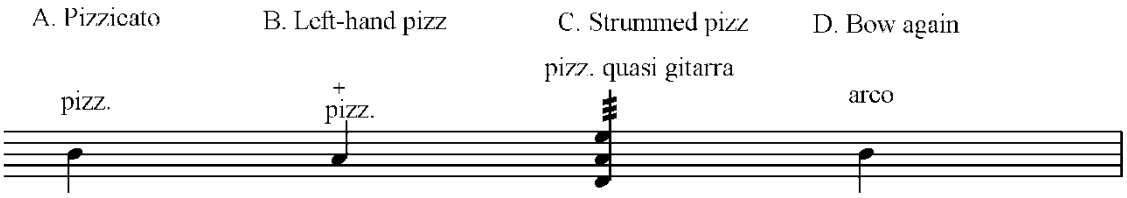
20. Microtonal treble



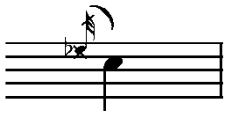
21. Tremolo



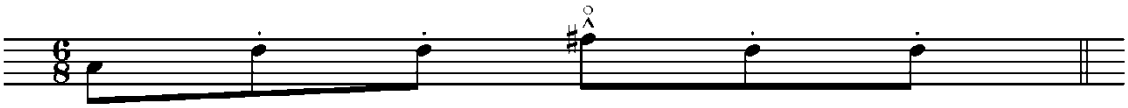
22. Pizzicato

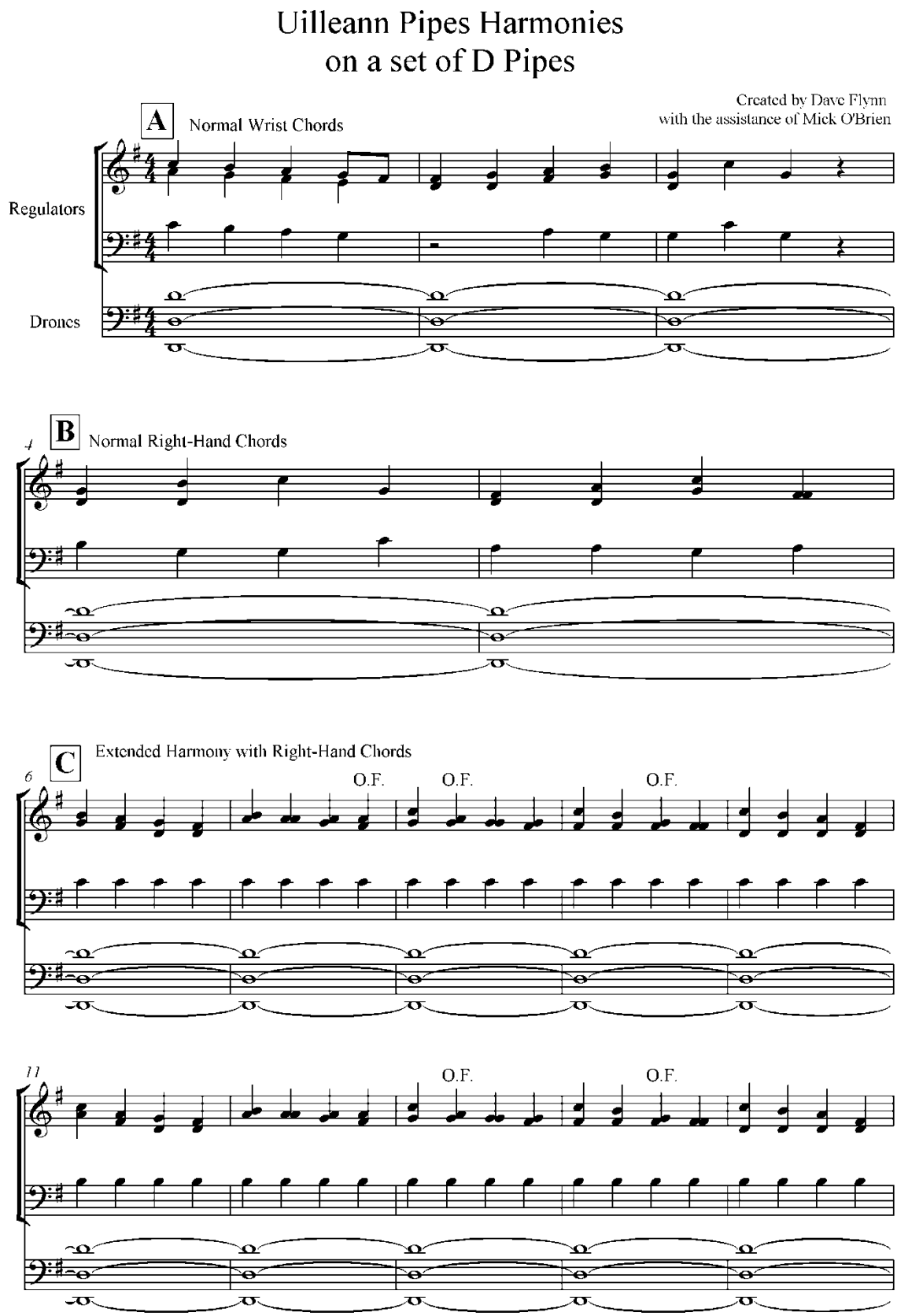


23. Ghost D



24. Pop/Bark




Uilleann Pipes Harmonies
on a set of D Pipes
Created by Dave Flynn
with the assistance of Mick O'Brien
A
Normal Wrist Chords
Regulators
Drones
B
Normal Right-Hand Chords
C
Extended Harmony with Right-Hand Chords
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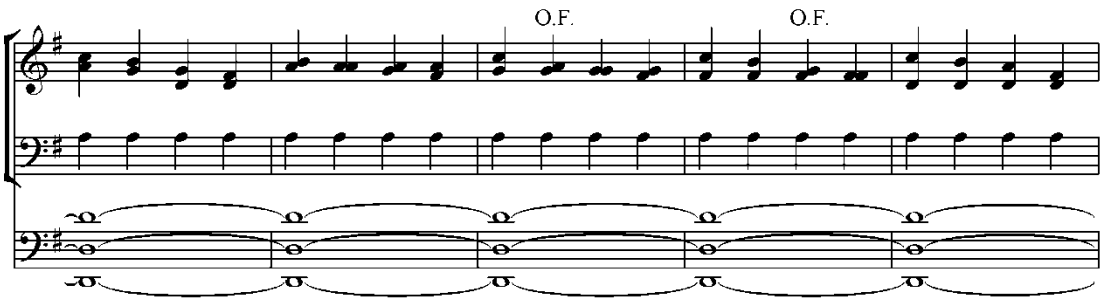
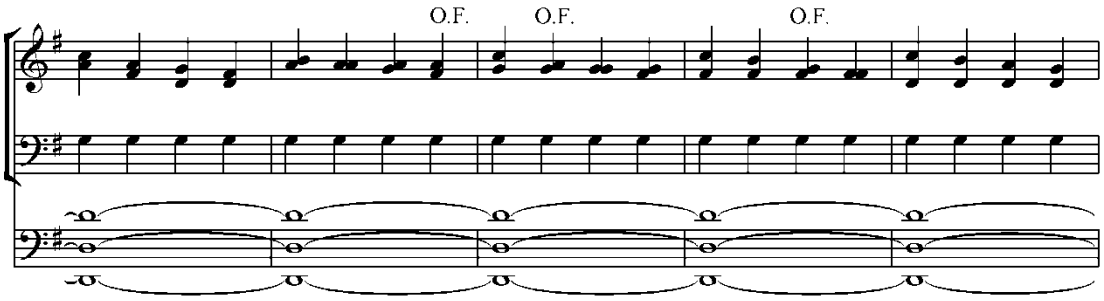
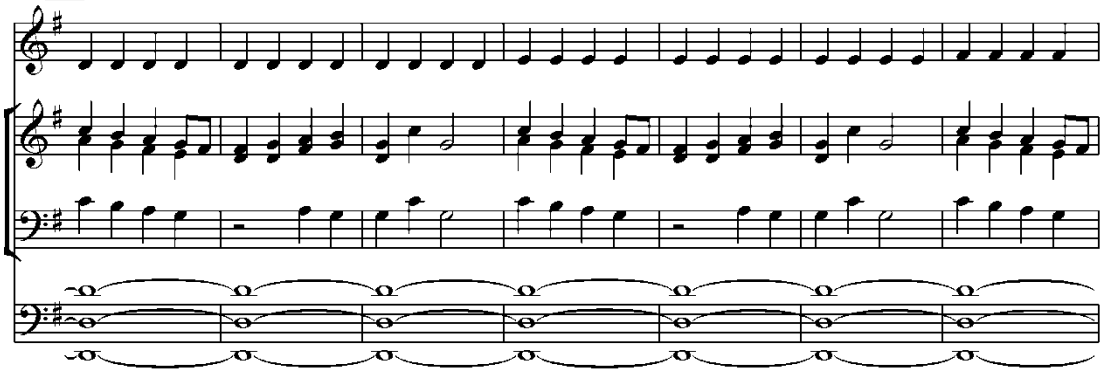
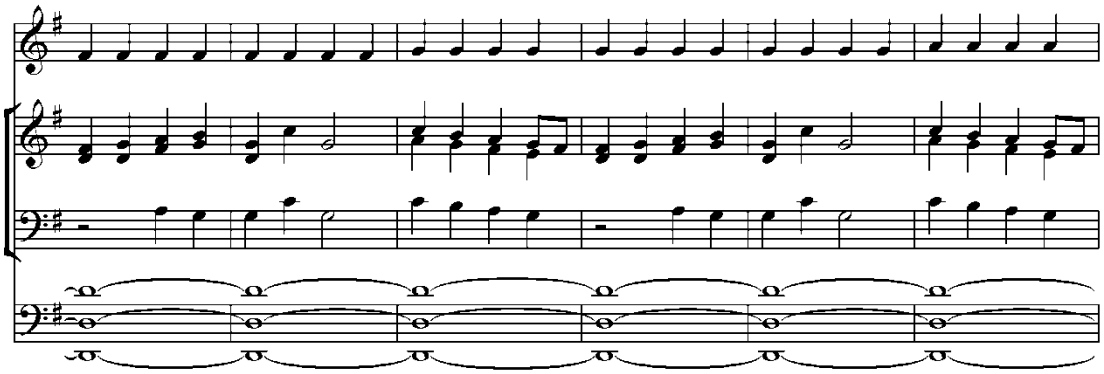
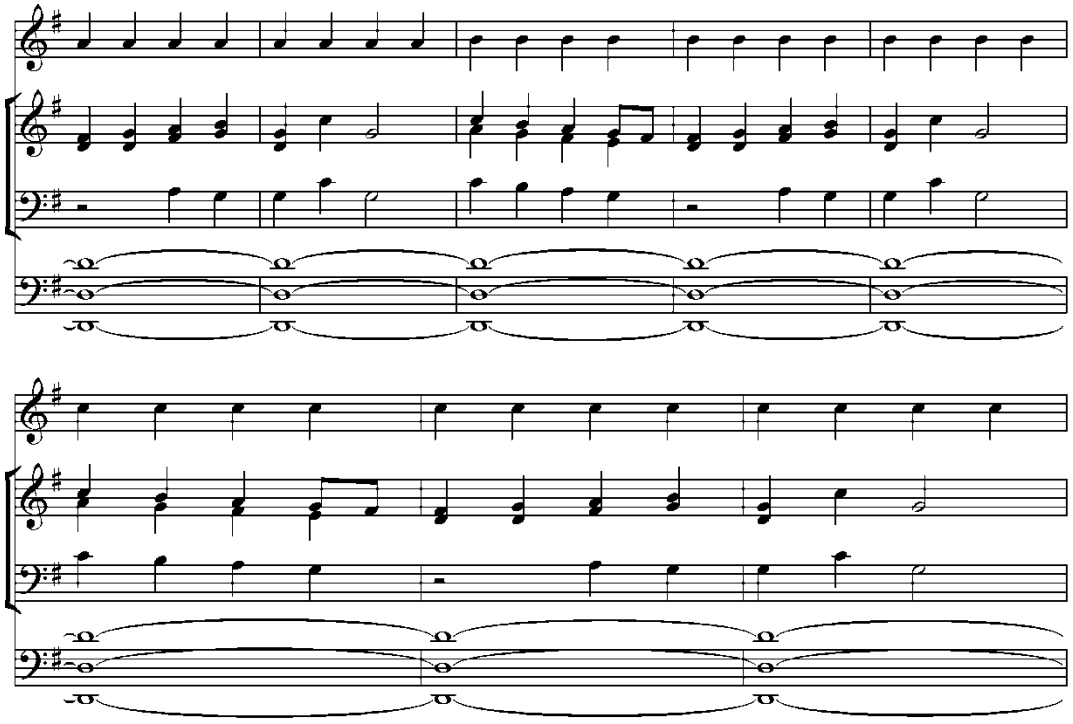




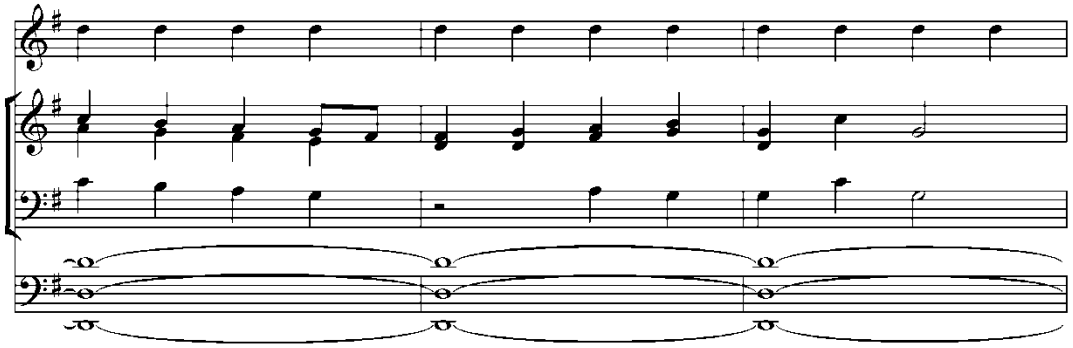
D Normal Wrist Chords with Normal Chanter Notes First Octave

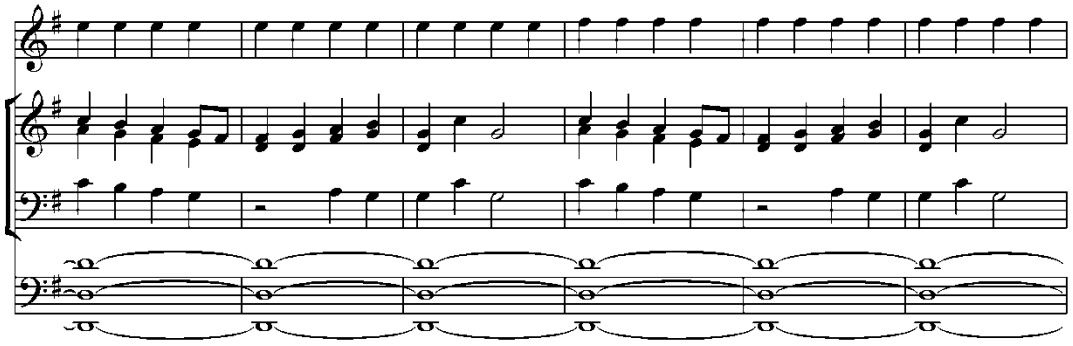


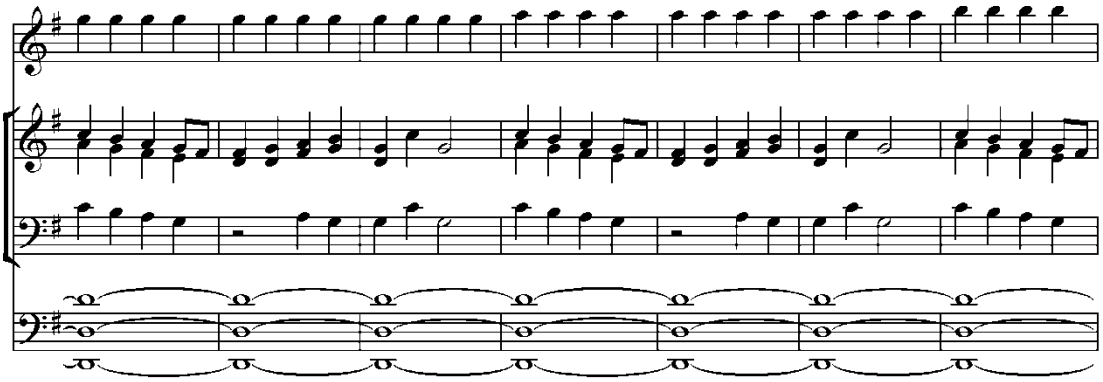


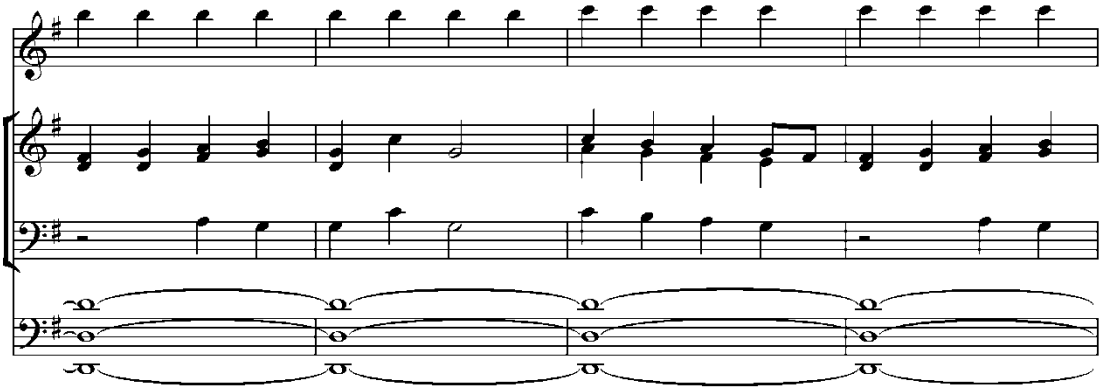


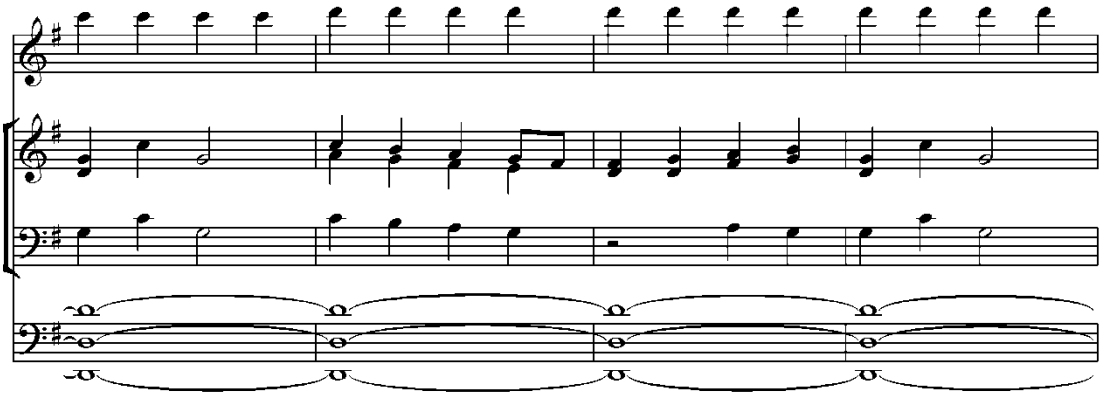
E Normal Wrist Chords with Normal Chanter Notes Second Octave

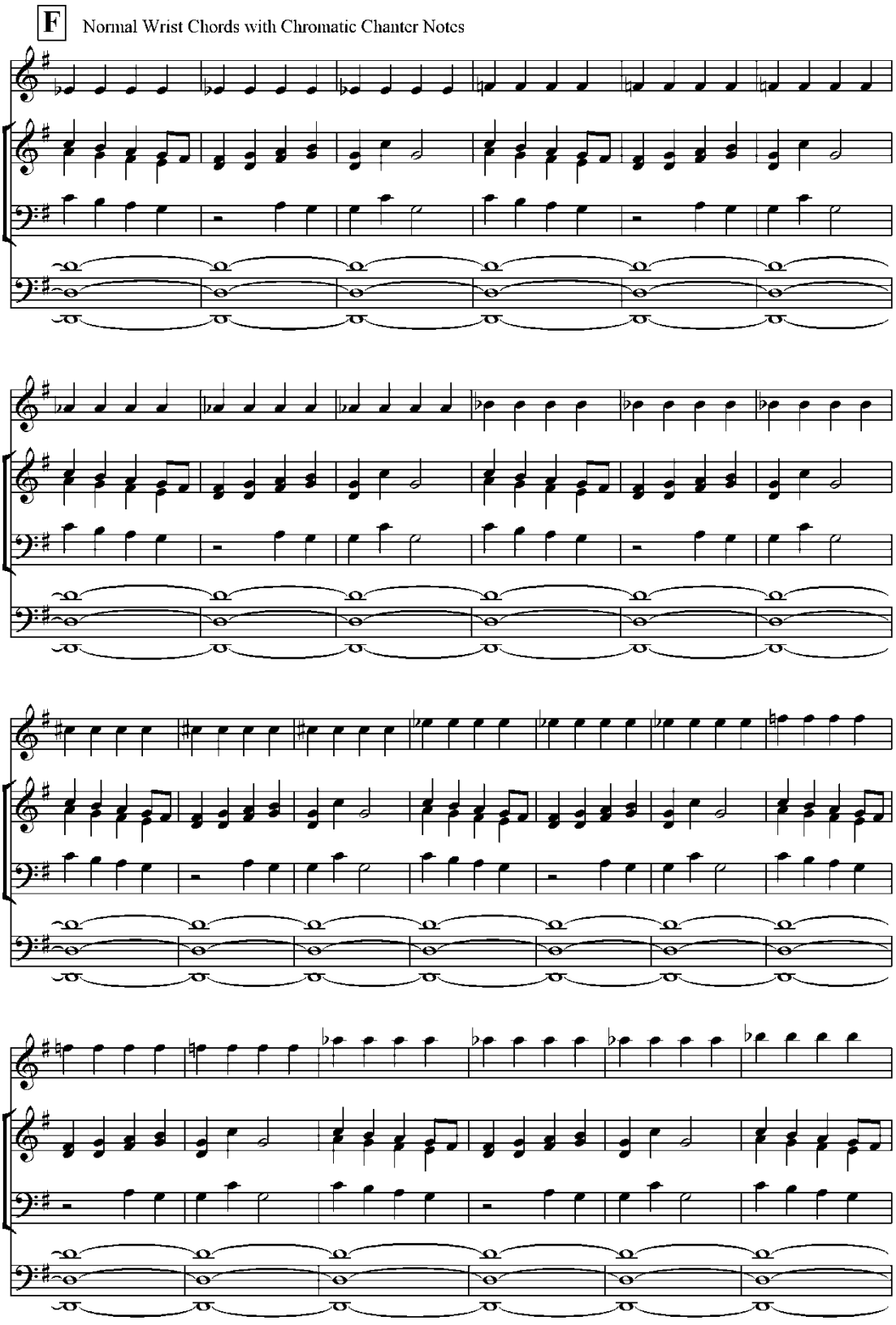


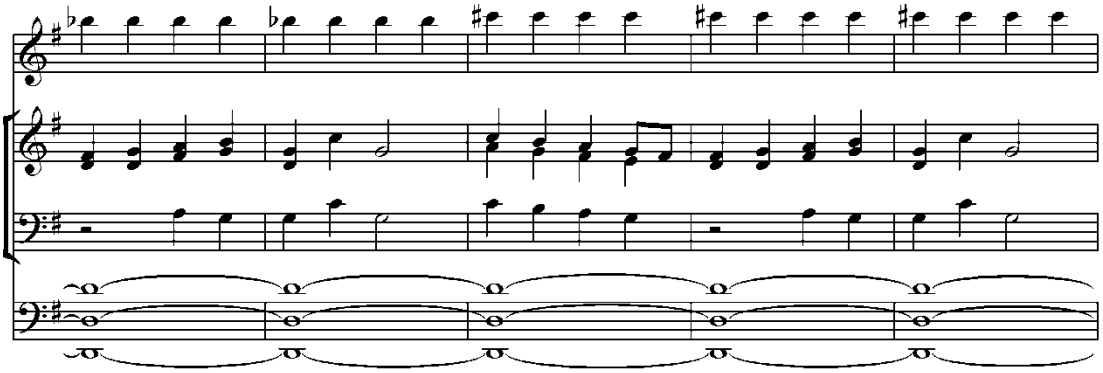




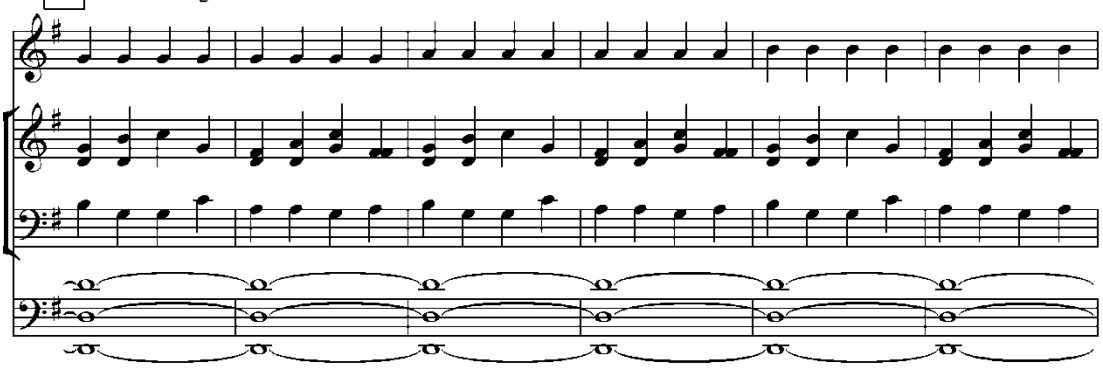


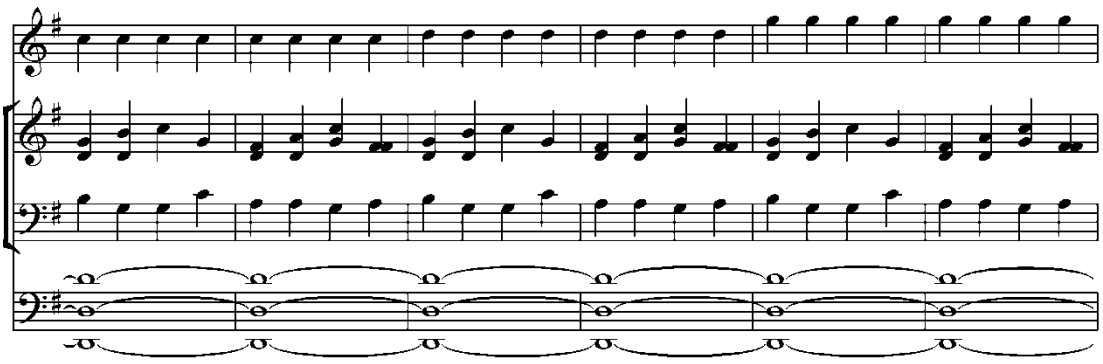


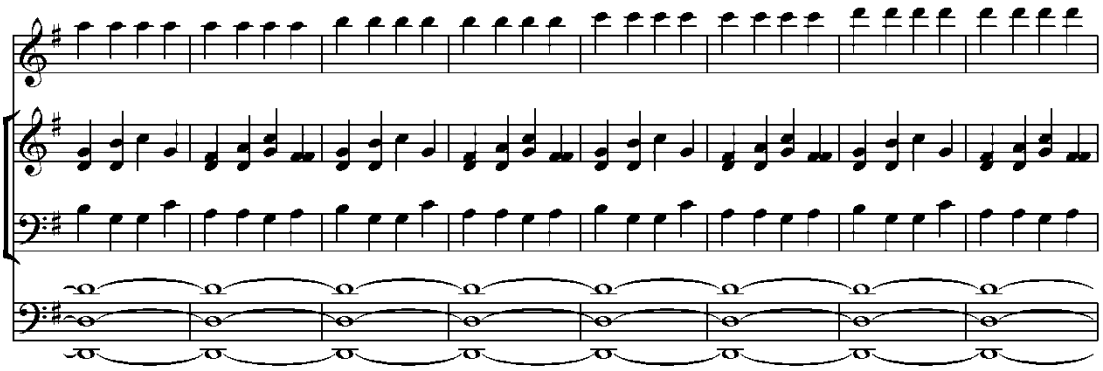

F
Normal Wrist Chords with Chromatic Chanter Notes



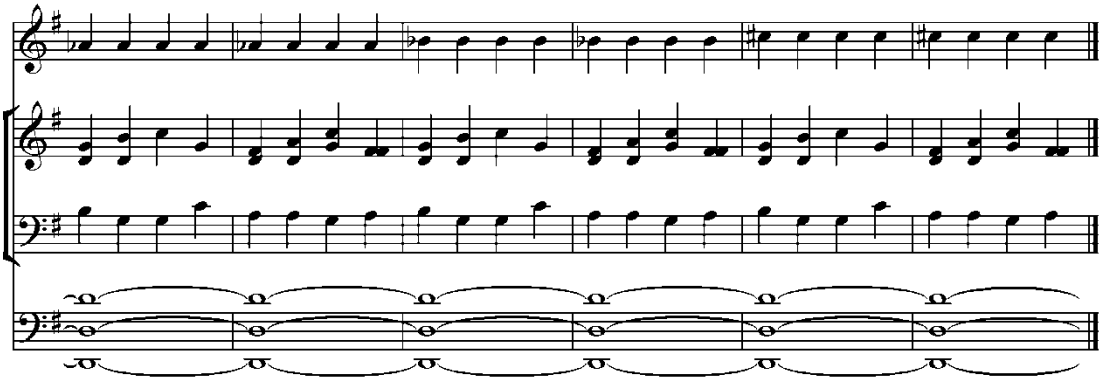
G Normal Right-Hand Chords with normal left-hand chanter notes

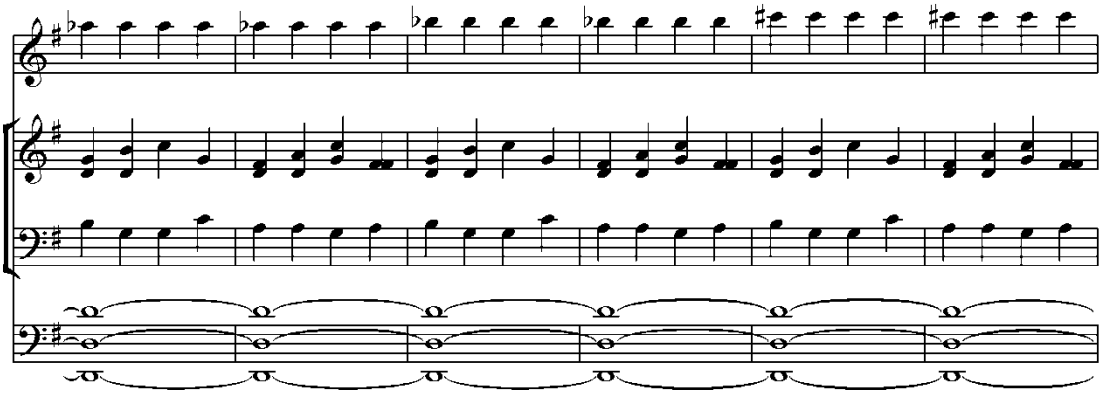




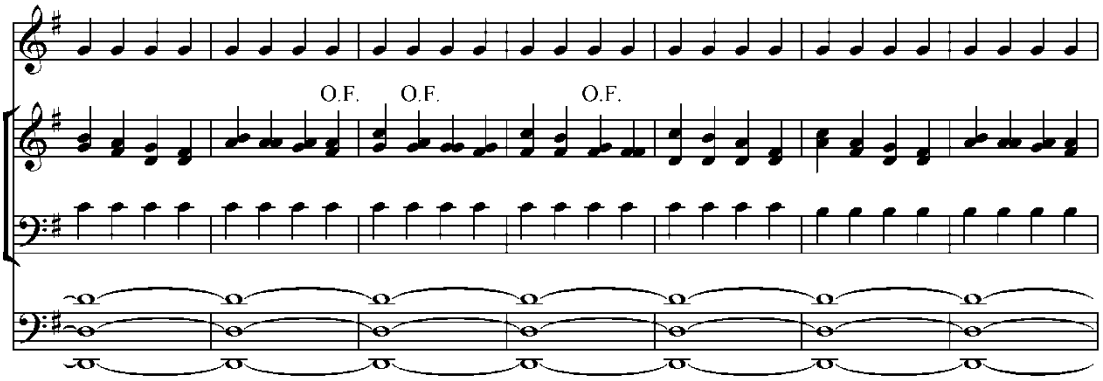


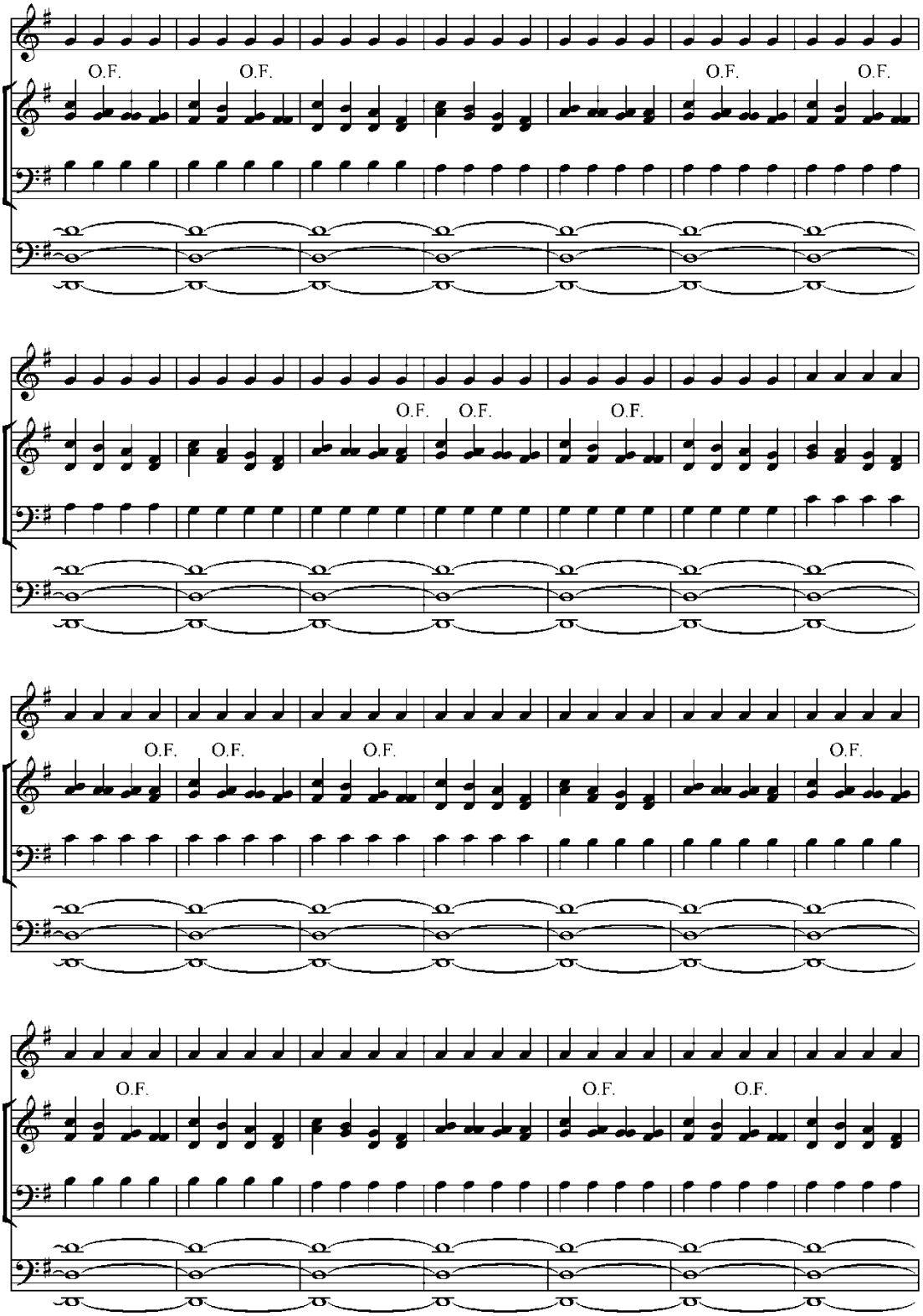
H Normal Right-Hand Chords with chromatic left-hand chanter notes





I Extended Harmony with Right-Hand Chords and Normal Left-Hand Chanter notes

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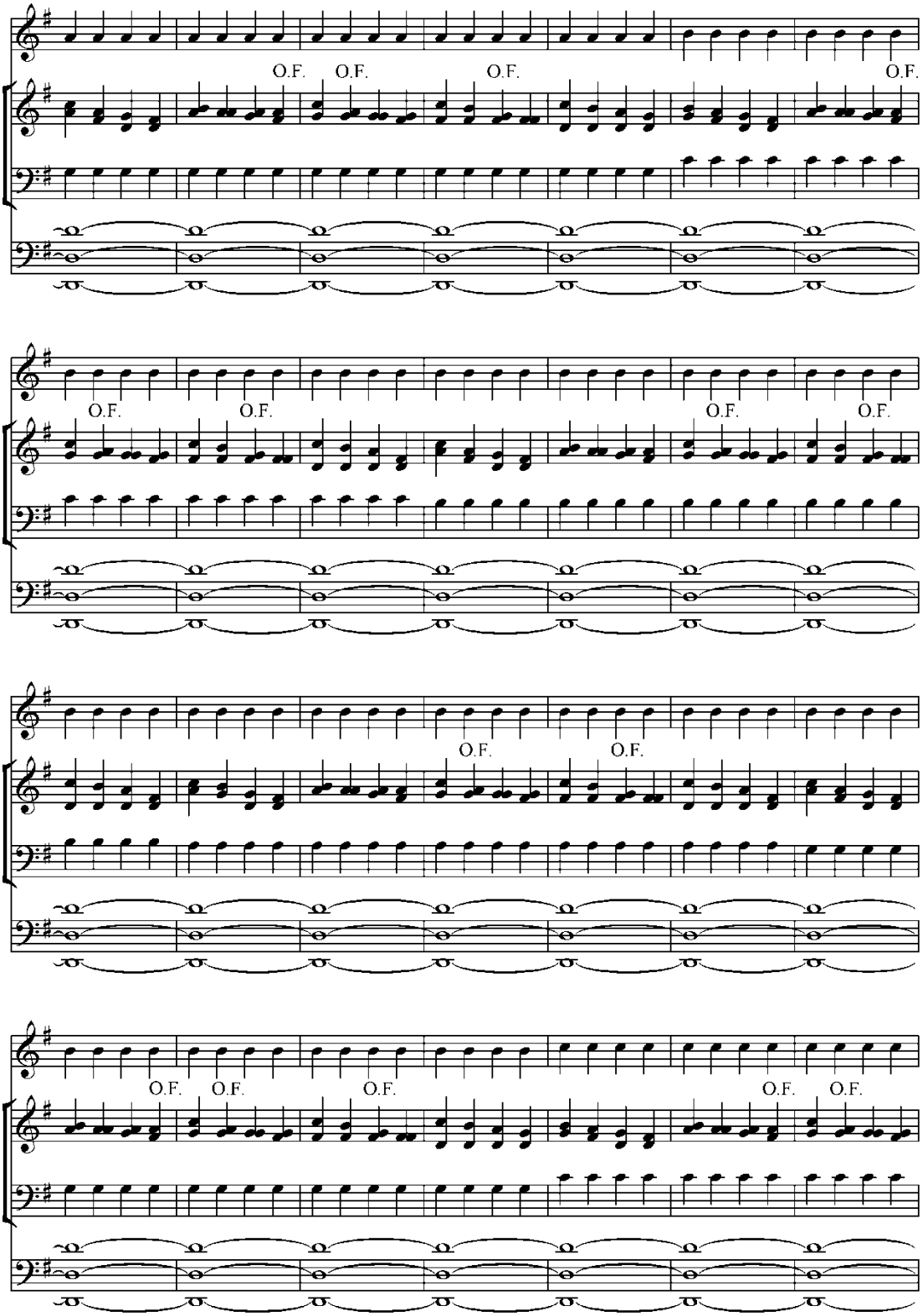
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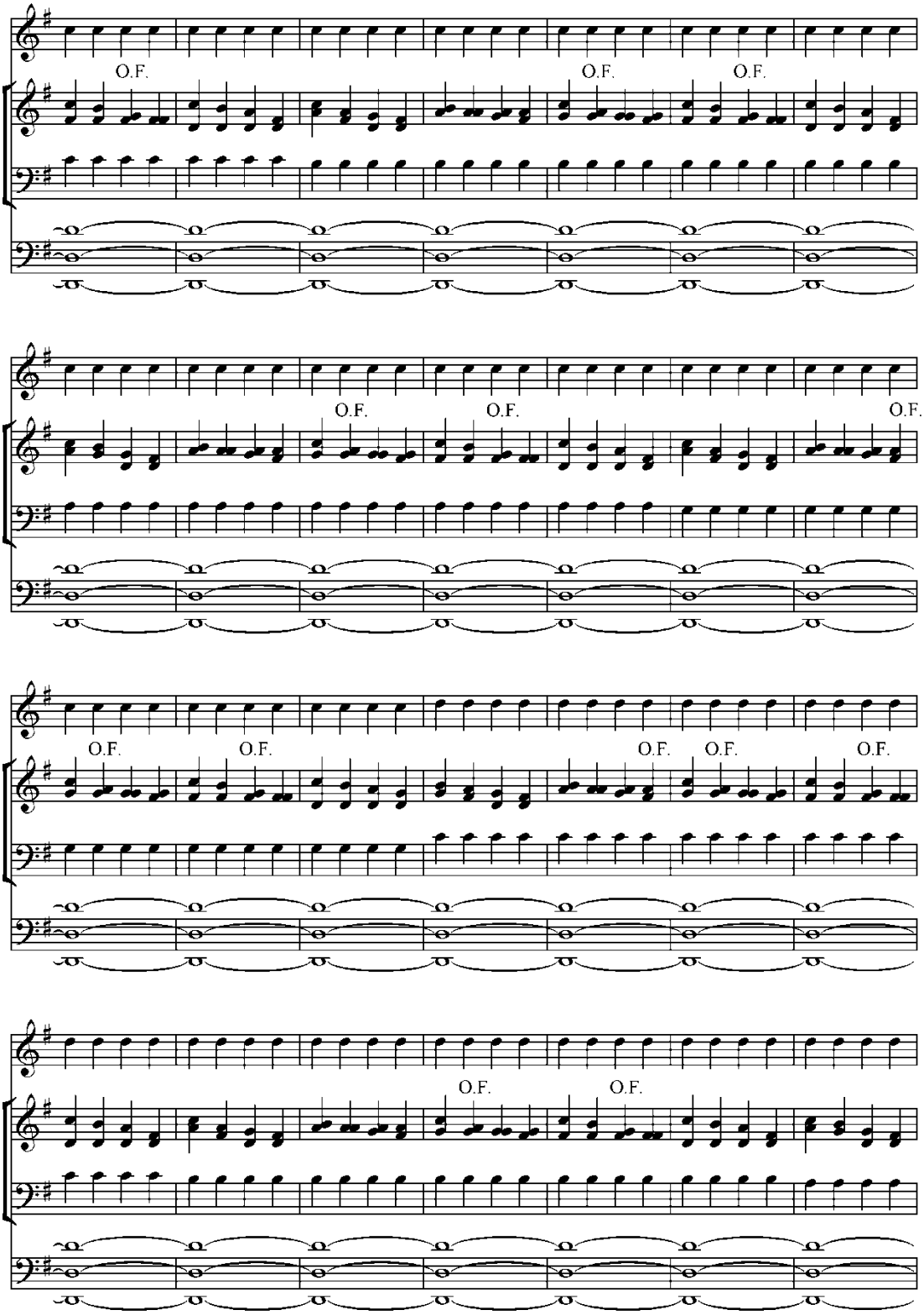
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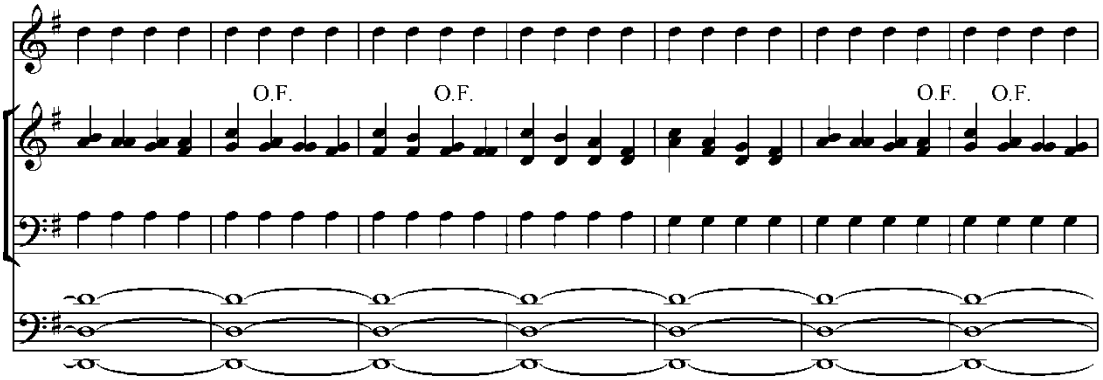
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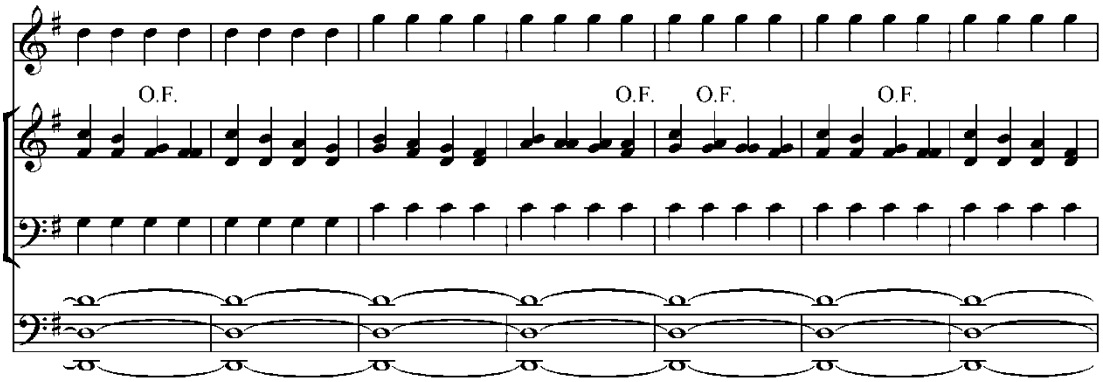
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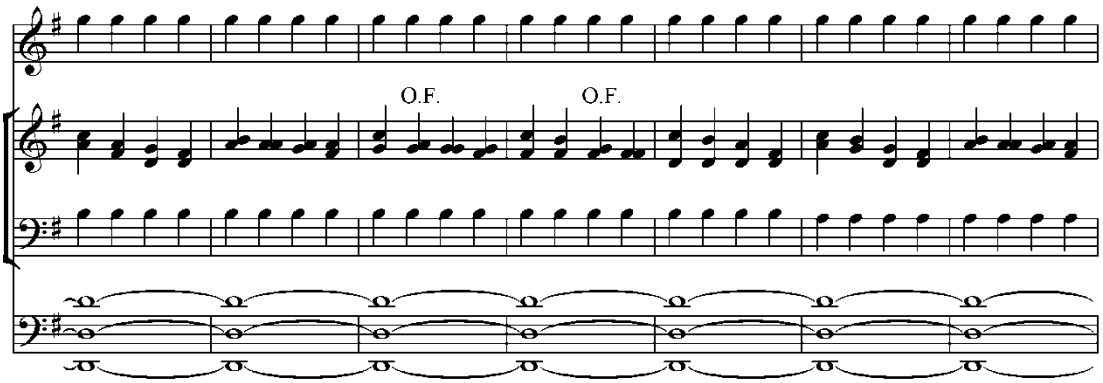
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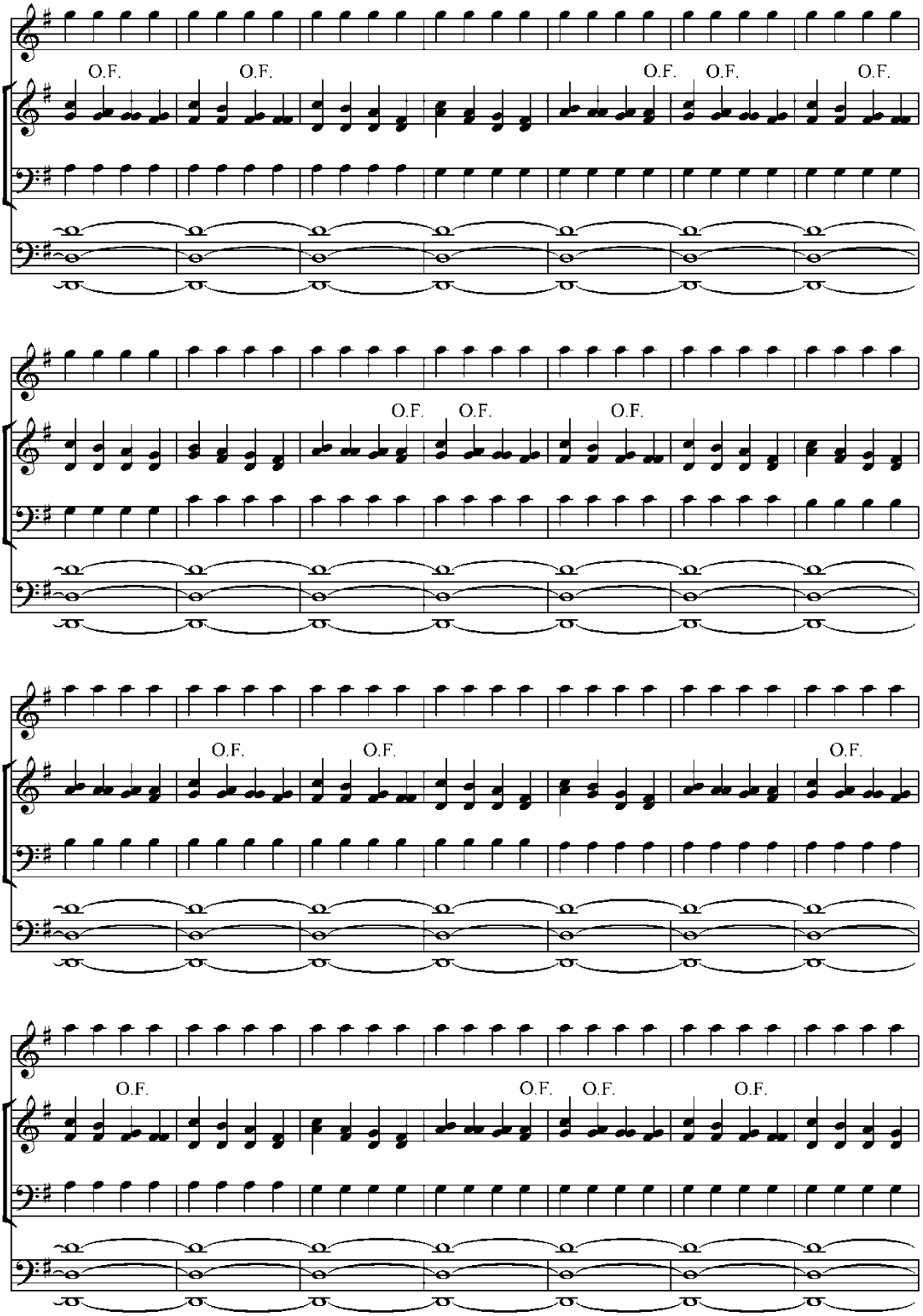
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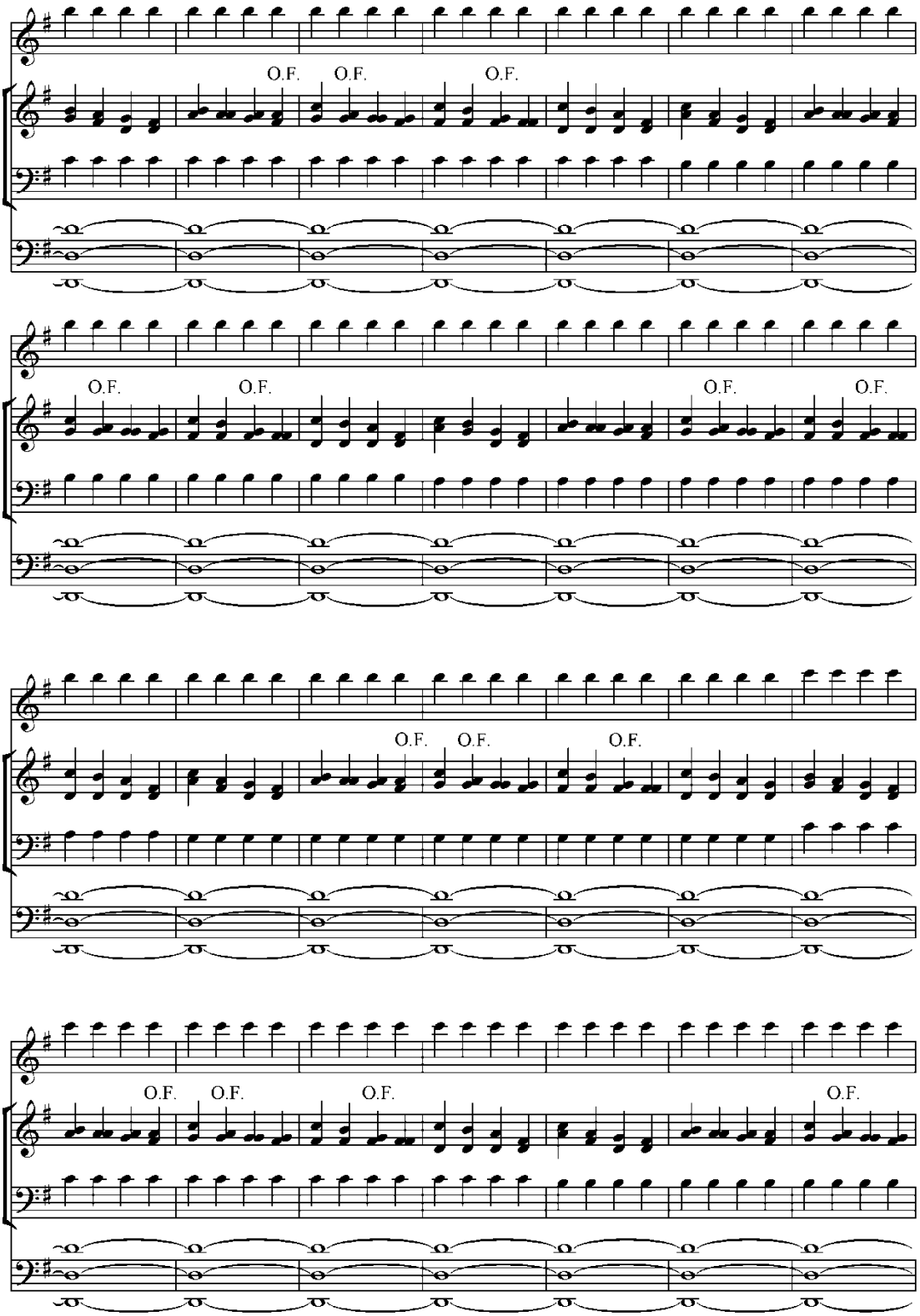
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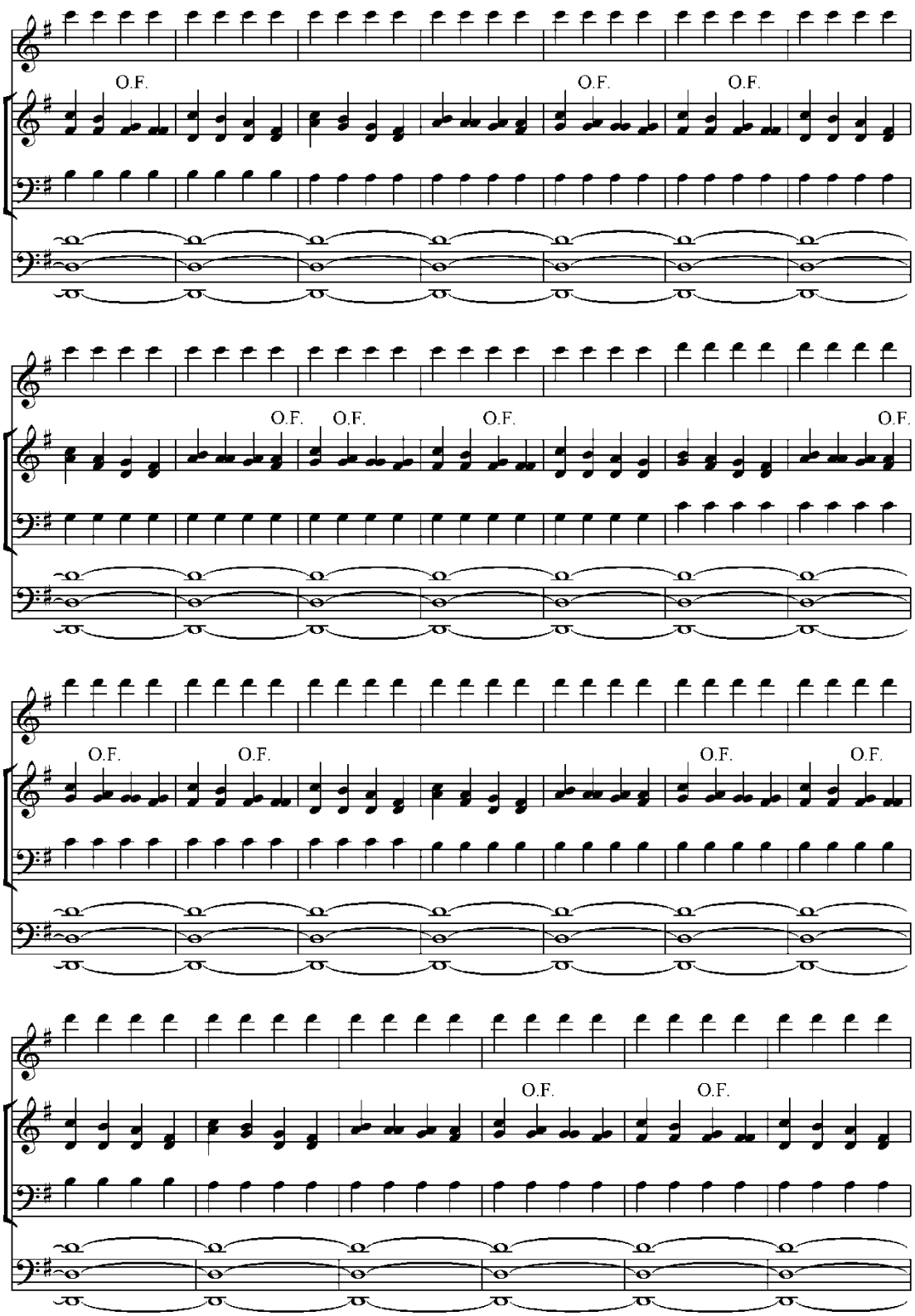
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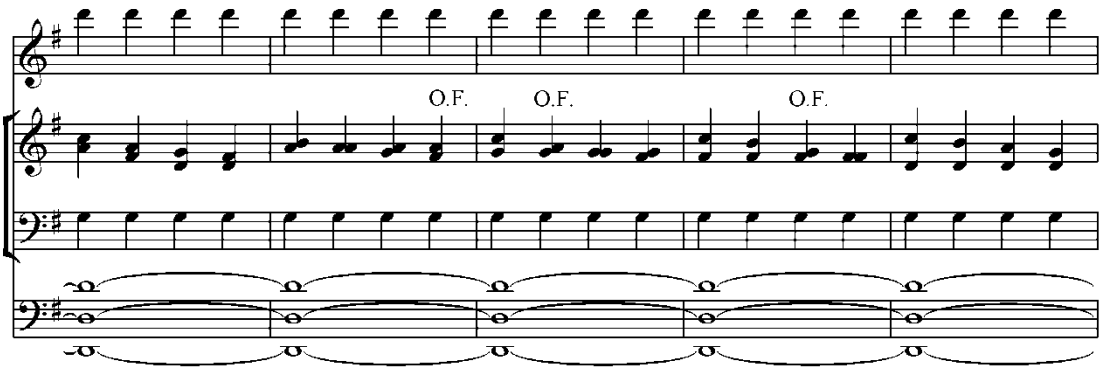
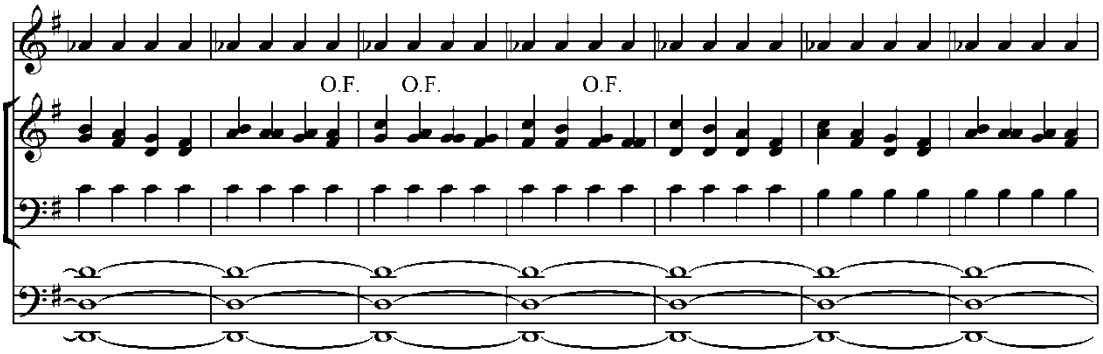
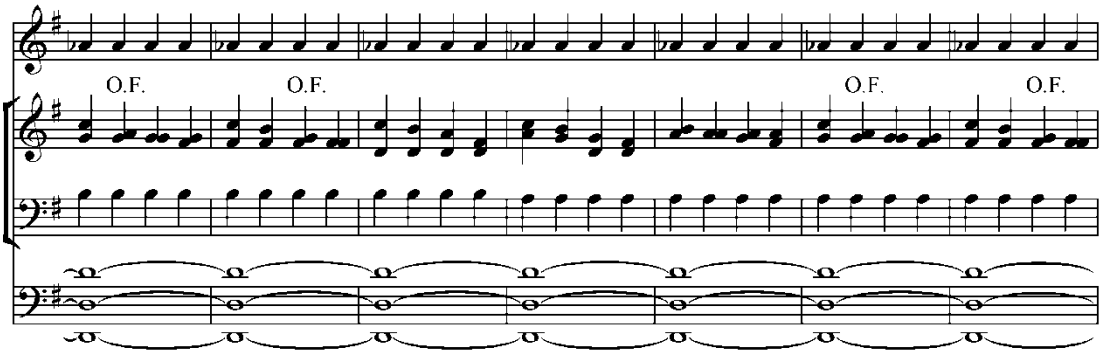
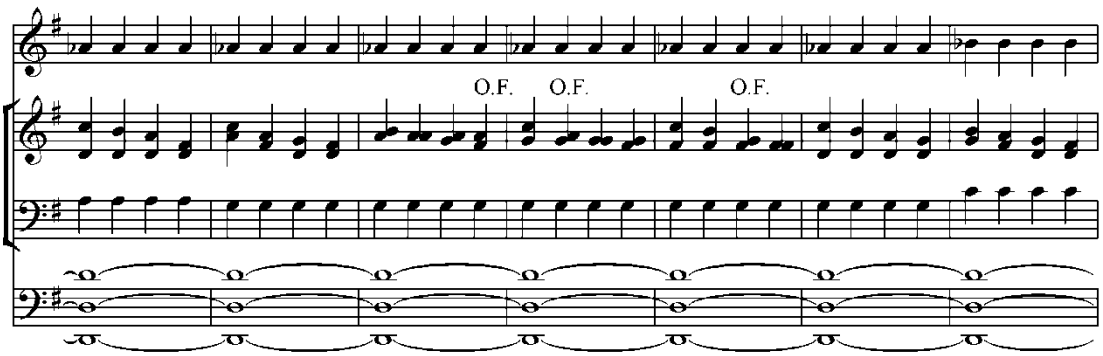
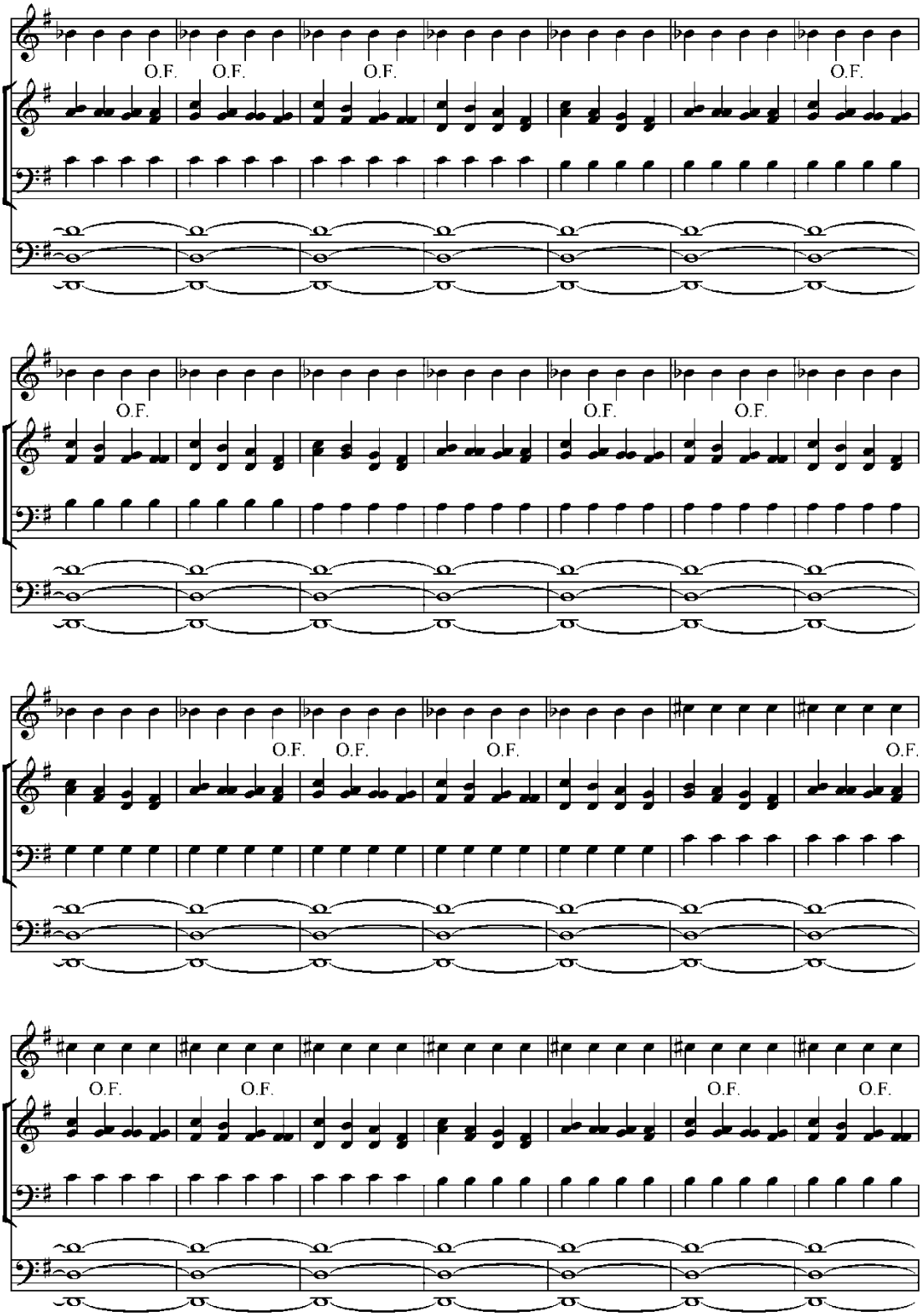


J Extended Harmony with Right-Hand Chords and Chromatic Left-Hand Chanter notes





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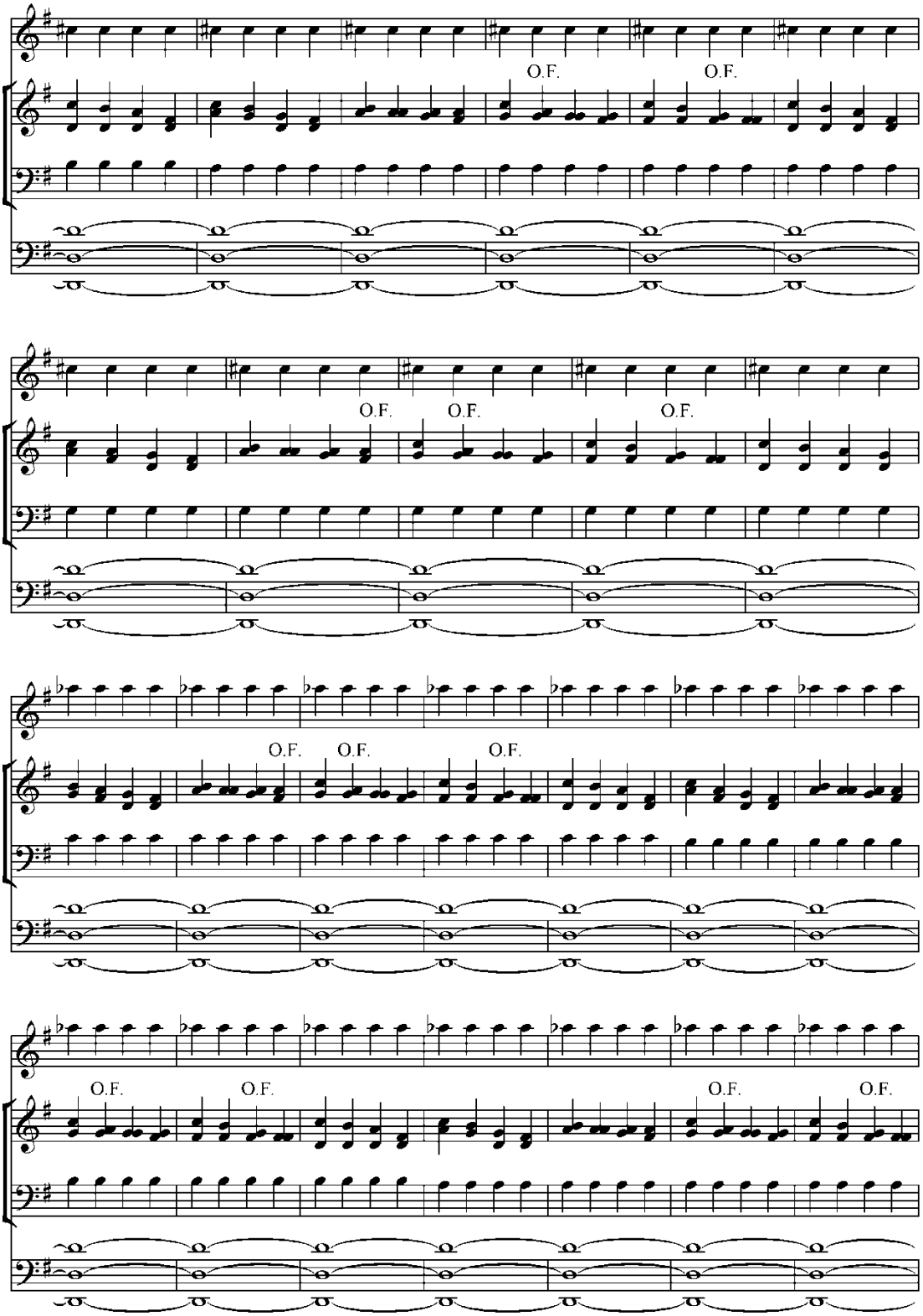
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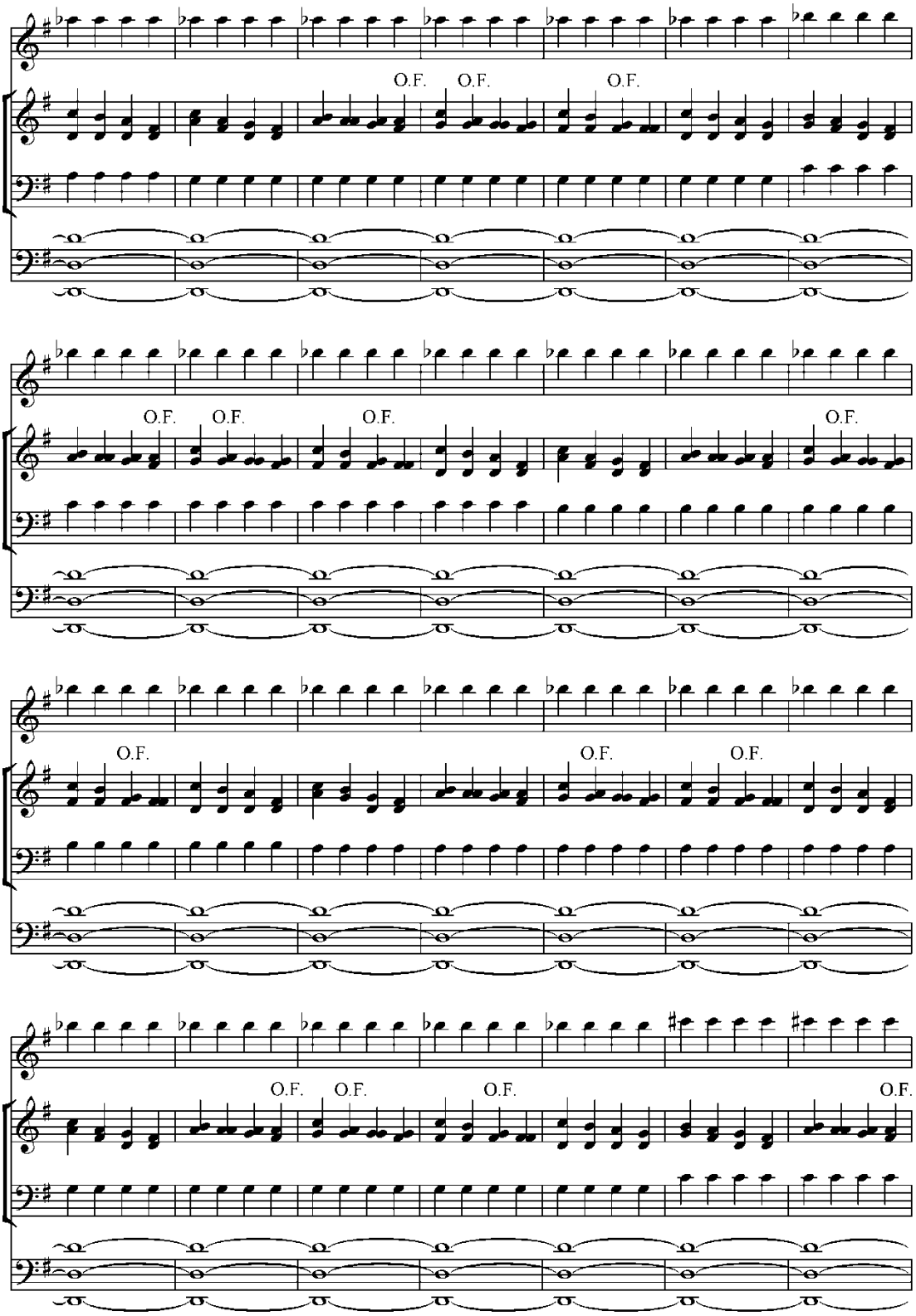
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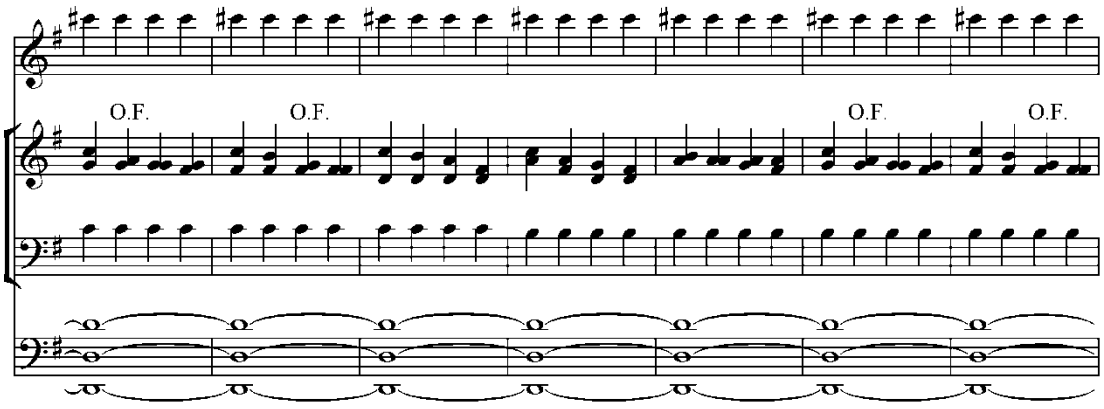
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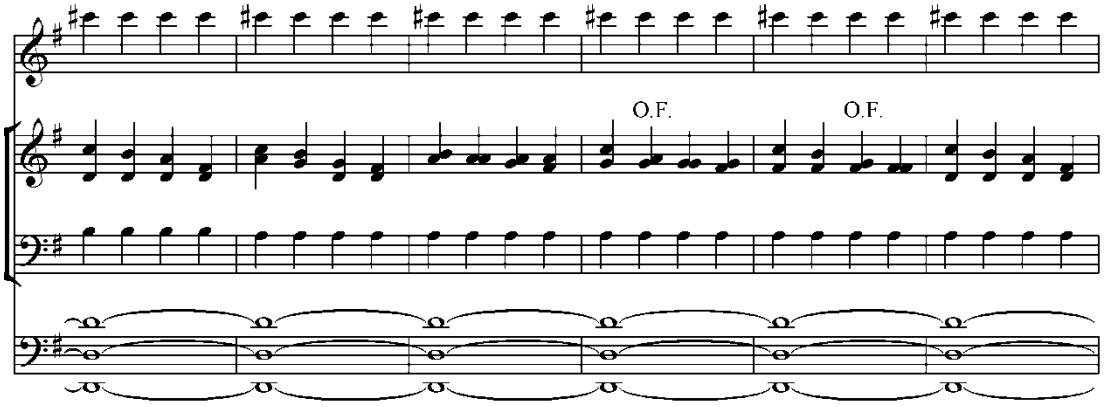
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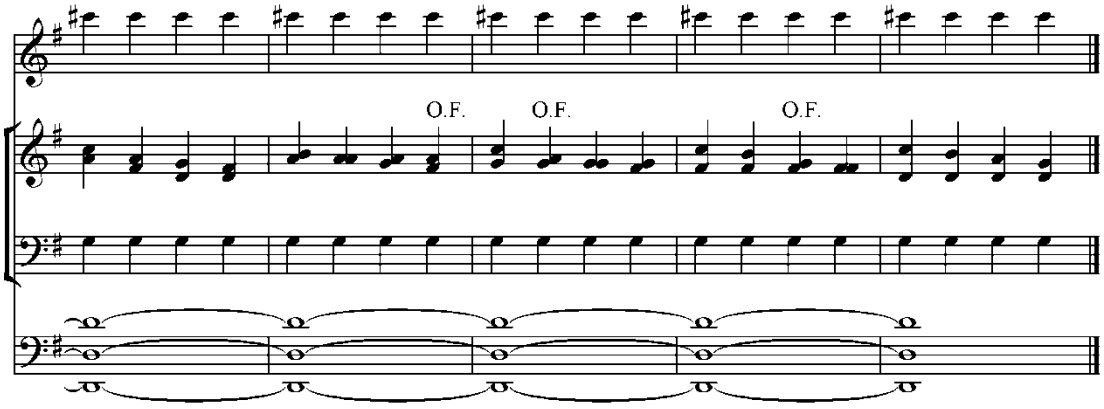
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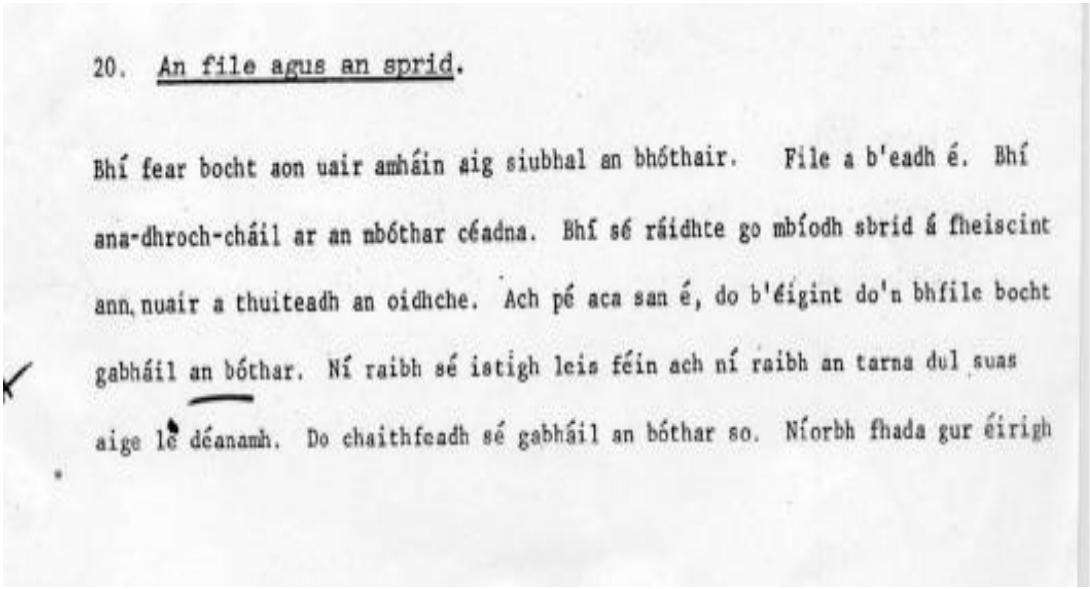
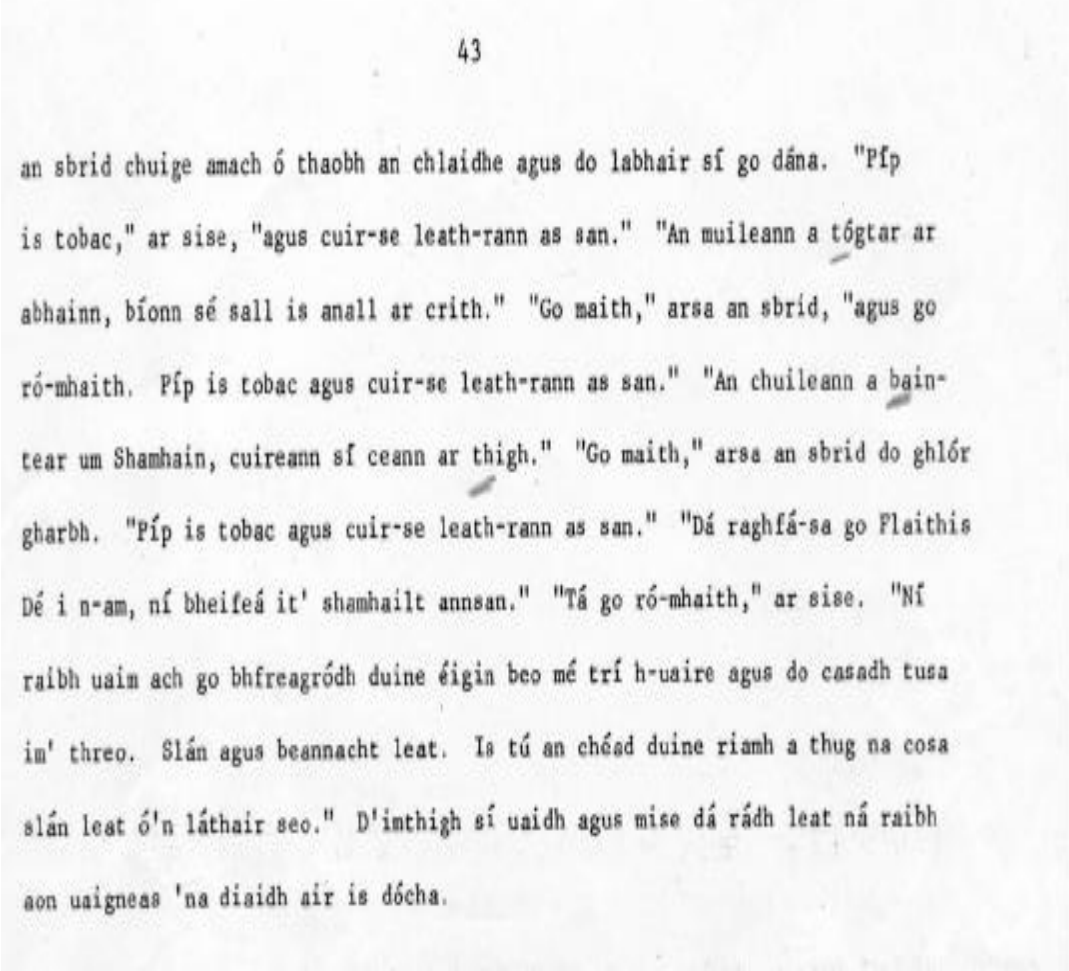


20. An file agus an sprid.

Bhí fear bocht aon uair amháin aig siubhal an bhóthair. File a b'eadh é. Bhí ana-dhroch-cháil ar an mbóthar céadna. Bhí sé ráidhte go mbíodh sbrid á fheiscint ann nuair a thuiteadh an oidhche. Ach pé aca san é, do b'éigint do'n bhfile bocht gabháil an bóthar. Ní raibh sé istigh leis féin ach ní raibh an tarna dul suas aige le déanamh. Do chaithfeadh sé gabháil an bóthar so. Níorbh fhada gur éirigh



43

an sbrid chuige amach ó thaobh an chlaidhe agus do labhair sí go dána. "Píp is tobac," ar sise, "agus cuir-se leath-rann as san." "An muileann a tógtar ar abhainn, bíonn sé sall is anall ar crith." "Go maith," arsa an sbrid, "agus go ró-mhaith. Píp is tobac agus cuir-se leath-rann as san." "An chuileann a baintear um Shamhain, cuireann sí ceann ar thigh." "Go maith," arsa an sbrid do ghlór gharbh. "Píp is tobac agus cuir-se leath-rann as san." "Dá raghfá-sa go Flaithis Dé i n-am, ní bheifeá it' shamhailt annsan." "Tá go ró-mhaith," ar sise. "Ní raibh uaim ach go bhfreagródh duine éigin beo mé trí h-uaire agus do casadh tusa im' threo. Slán agus beannacht leat. Is tú an chéad duine riamh a thug na cosa slán leat ó'n láthair seo." D'imthigh sí uaidh agus mise dá rádh leat ná raibh aon uaigneas 'na diaidh air is dócha.

Translation: The Poet and the Spirit.

Once there was a poor man walking the road. He was a poet. The same road had a bad reputation. It was said to be haunted at night by a spirit. Despite that, the poor poet needed to use that road. He wasn't happy about it but he had no choice. He had to go that way. It wasn't long before the spirit appeared out of the side ditch of the road and she spoke to him forcefully. “A pipe and tobacco,” she said, “and make a half-verse out of that.” “The mill that's built on a river, it swings back and forth shaking.” “Good,” said the spirit. “Very good. A pipe and tobacco and make a half-verse out of that.” “The holly tree that's *cut* in November, it puts a roof on a house.” “Good,” said the spirit roughly. “A pipe and tobacco and make a half-verse out of that.” “If you had gone to heaven in time, you would not be appearing there.” “That's excellent,” she said. “All I needed was someone alive to answer me three times and you came my way. Goodbye and blessings with you on your way. You are the first person ever who left this place safely.” She left him and, I tell you, I don't believe he was ever lonely again.

43. "Más le gígeog a mheallas í ...."

Do thárluigh go raibh cuideachta i dtigh áirithe fadó. Bhí buachaillí agus cailíní bailighthe i dteannta chéile ann. Bhí ceol agus rinnce agus éirghe i n-áirde aca. Nuair a bhí cuid aca tuirseach ó bheith a' rinnce do shuidheadar ar shuidheacháin a bhí réidh fé n-a gcómhair. Ní fada bhíodar suidhte nuair a thánaig sraoth go dtí cailín mór-chúiseach bhí 'na suidhe ann. Ach ba mheasa ná san é, mar d'éaluigh dígeog bhrama uaithe leis an strus a chuir an tsraoth uirthe. Do las sí lé náire is do shíl sí go raibh an chuideachta go léir aig magadh fúithe. Ach ba mhaith an mhaise di é, mar bhí buachaill óg meisneamhail 'na shuidhe i n-aice léi. D'éirigh sé 'na sheasamh is thóg suas a lámh agus dubhairt as árd: "Faighin párdún agaibh, a chuideachta an tighe. D'éaluigh mo gígeog uaim i ganfhios don. Ní raibh leigheas agam air, mar tá sé ráidhte an rud ná beidh id' láimh gur deacair greim a choinneáilt air." Thánaig scón agus lúthgháir air an gcailín chionn a rádh gur thóg an buachaill an botún air féin. Agus sular fhágadar an tigh an oidhche sin, do bhí a geallamhaint pósta tabhartha aice dó. I gcionn mí nó mar sin, nuair a bhí gach ní réidh aca dhó do phósadar. Ach, a mhic ó mo chroidhe, ní fada bhíodar pósta

nuair a thárluigh go raibh a fear ar deoch nó rud éigint. I lár na h-oidhche siar d'éaluigh rúisceoig bhrama uaidh. Nuair a chualuigh an bhean é: "Náire chút a ruidín shaluigh, cad san déanta agat?" "Faigh mo leath-scéal," ar seisean, "níorbh fhéidir liom greim a chimeád air." "Ní gheobhaidh mé leat lá ná oidhche eile." "Is féidir leat, a nighean ó." Ar maidean lá ar n-a bháireach do ghaibh sí suas í féin agus ní dh'fhág slán ná beannacht aige. Ach nuair a d'airigh na buachaillí eile gur imthigh a bhean uaidh, sé an rud a deireadh sé leo: "Mo chuid dem' tuibist léi, a mhic ó, más lé gígeog a mheallas í, is lé gígeog a chailleas í." Bhí an scéal breallach go leor aig an fear bocht.

Translation: ‘It it was with a fart I won her….’

Long ago there was a crowd gathered in a house. There were boys and girls gathered there together. There was music and dancing and great sport. When some of them were tired they sat down on a bench there. It wasn't long before one of the more popular girls sneezed. But worse than that, she farted from the pressure of the sneeze. She became very embarrassed thinking they were all laughing at her. But a young man sitting beside her, stood up and announced: “Pardon me, people of the house. I farted by mistake. I couldn't help it for it is said what the hand cannot hold cannot be held on to.” The girl was very impressed with the boy taking the blame and so, before they left the house that night, she promised to marry him. They were married a couple of months later. However, they weren't long married when, one night as they were in bed together and the man being somewhat intoxicated with drink, he farted loudly. When his wife heard this she said, “You dirty thing, you should be ashamed of what you have done.” “Forgive me,” said the man, “I couldn't hold on to it.” “Well,” she said, “I will not stay with you another day or night.” “Suit yourself, daughter,” he replied. And the following morning, without any goodbyes, she left. When the other boys heard of this, they said, “Our sympathies are with her, for if it was with a fart you won her, it was with a fart you lost her!” It was a foolish story for the poor man.

37. An píobaire agus bean an tábhairne (Amhrán).

Bhíos-sa lé dealbh taisteal an bhóthair,
Gan pingin im' póca ná cuideachta puinn.
Ghaibheas chuin tigh leanna mar ar shíligheas gur dhóigh liom
Go bhfliuchfainn mo scórnach lé siolladh as mo phíop.

Seo lán an mhála ar lán an chnagaire!
Éist, a bhleagáird, ach cuir amach an t-airgead.
Do phreab sí ar an dtairsing is sciob mo hata dhíom
Is pingin ní thabharfadh ar a raibh d'acfuinn im' píop.

D'éirigheas im' sheasamh is do theannas mo mháilín
Is do sheinneas gach sár-phort a b'aite lé mnaoi;
Tiúna, tairne, bairne bána
Is casmairt Fionn Trágha mar ar leagadh mac Fhinn.

Dá seinnfinn na táinte ar mhálaí leathair di
Tiúna táine is trácht ar ??
Máirseáil Árd Phádraig, Mhagh Cártha is na nGearaltach
An tairsing ní fhágfadh mo landlady liath.

Fear eile:
Náire agus aithis chuin aon fhear maith id' dheallramh,
A bhèadh gabhtha i dtigh tábhairne i ngeall le cnagaire dighe,
Ná béarfadh ar an ainnir is í a tharrac ar lámh leat,
Fé bhratacha bána ar leabaidh 'na luighe;
Í a fháscadh go ciúin is go dlúth mar nár thaithigh sí;
Is a gheallamhaint do'n gcúilfhionn go ndíolfá ar maidin í.
Dá n-ólfá púintsiún dar liom do bhí maithte dhuit,
Is go bráthach ní sciobfadh sí an hata dod' mhaoil.

Translation: The Piper and the Landlady.

One day I was travelling the road

Without a penny in my pocket or company

I went into an alehouse where I thought

That I would wet my throat by playing my pipes.

Here is the full of my bag for a full shot of whiskey!

Listen, you blackguard, let me see the money.

She banged on the counter and knocked off my hat

And not a penny would she allow for the music of my pipes.

I stood up and filled my bag

And played every fine tune most peculiar to women;

Jigs and reels and hornpipes

And the Battle of Ventry where Fionn was slain.

I played the great gatherings on the leather bag for her

Driving tunes of great battles waged

The Great Marches of Patrick, McCarthy and Fitzgerald

But no good did it do to the grey landlady.

Another: Shame and reproach to any man like you

To be stuck in an alehouse for a measure of drink

You wouldn't know a nice girl if she took you by the hand

Under the white blankets where she lay in bed

And she quietly exerting and pressing as never before

While you promised to pay her in the morning.

If you drank a full cask it would be forgiven

And she would never knock the hat off your bald head.

100. Na seana-chailleacha

Do bhí lánamha ann fadó agus 'sé an áit do chómhnuigheadar istigh san Oileán Thiar agus ní raibh aon tigh ann san am san ach é. Do theastuigh ó fhear a' tighe dul 'o'n Daingean agus thánaig sé amach agus chuaidh sé 'o'n Daingean agus ní fhéad sé dul isteach 'o'n Oileán. Agus do bhí sí 'n-a h-aonar agus do bhí sí priocadh olann agus dhá snímh. I gcaitheamh na h-oidhche, do bhuail an seana-chailleach isteach chúiche. 'Sláimhín dá chíoradh, sláimhín dá chárdáil agus, a bhean an tighe, tabhair dúinn ár scruig áirneain.' 'Tabharfad,' arsa bean a' tighe, 'ach a mbeidh sé seo déanta agam.' Ní bh'fhada dhi do thánaig an tarna cailleach. ['Sláimhín dá chíoradh, sláimhín dá chárdáil agus, a bhean an tighe, tabhair dúinn ár scruig áirneáin.'] 'Geobhair,' a dubhairt sí, 'ach a mbeidh sé seo déanta agam.' As san do thánaig an dá chailleach déag. ['Sláimhín dá chíoradh, sláimhín dá chárdáil agus, a bhean an tighe, tabhair dúinn ár scruig áirneain.'] 'Geobhaidh sibh ach a dhéanfaidh mé an plainnín.' D'fháscadar chuige agus níor mhór a' mhoill aca é a dhéanamh. Dubhairt sí leo nuair a bhí an plainnín déanta aca, dubhairt sí go gcaithfidís é a reamhrú. Ní mhór a' mhoill aca. Nuair a bhí san déanta aca do lorguigheadar an scruig áirneáin. Dubhairt sí go bhfaighidís é ach go dtabharfadh sí léithe canna uisce. Ach thug sí léithe an canna. 'Sé an t-árus a thug sí léithe chuin a' channa do líonadh criathar agus

ní choineodh an criathar an t-uisce. Do thánaig an t-aingeal chúiche. 'Craobhaí, dubhairt sí lé criathar. Do chuir sí an chraobh fé'n gcriathar. Do líon sí an canna. Nuair a bhí an canna lán annsan aice dubhairt an t-aingeal léi nuair a raghadh sí go dtí an doras, 'Cuir cois leat istigh is cois leat amuigh. Cuir a' míle liúgh is béic asat go bhfuil bárr a' dúna ar lasadh. Nuair a gheobhair amuigh iad cuir tlúgh na teine mar bhollta ar an doras. Ná fág bamhla ná corcán ná má thá críste déanta agat, bain smut as. Ná fág aon rud 'n-a chan féin ach a bhéal a bhualadh fé.' Nuair a chuaidh sí go dtí an doras do chuir sí scréach mhór groidhe aiste, bárr a' dúna a bheith ar lasadh. Seo amach an chéad chailleach. 'Tón mo leinbh tá dóighte, aillilliú, aillilliú, tón mo leinbh-se.' Seo amach an tríomhadh ceann. Dubhairt sí an rud céadna, an ceathramhadh ceann . . . Nuair a fuair sí amuigh annsan iad do dhein sí fé mar dubhairt an t-aingeal léi agus ní bh'fhada dhi go dtánaig na cailleacha thar n-ais. 'Oscail, oscail!' a dubhradar. Nuair a dubhairt bean a' tighe, 'Nuair a bhís istigh, níor dh'fhanais istigh.' 'Oscail, a bhéidrigh!' a dubhairt sí. Níor thug sí aon tor uirthe. 'Oscail, a thlúgh!' dubhairt sí. 'Ní fhéadfainn é déanamh mar bhollta an doras (sic).' Ghlaoidh sí ar an ainm gach rud dá raibh sa tigh ach níor bh'fhéidir leo aon cabhair a thabhairt dóibh. Bhí a mbéal fútha. Nuair ná raibh faic lé déanamh aca chuadhadar ar dhrom a' tighe agus do réabadar é agus lé linn díreach an scraithín a bheith tógtha aca do léim an coileach agus do dhein sé dhá ghlaodh déag agus do bhí na cailleacha bailiú leotha. Ach dubhairt sí an dá lá déag agus mhairfeadh sí arís. Nuair a thánaig a fear abhaile dubhairt sí leis ná fanfadh sí 'n-a dhiaidh agus ní chaithfeadh an fear aon phioc do'n bplainnín i dtaobh gur bh'iad (?) na cailleacha a dhein é. Agus sin é mo scéal san. Má tá bréag ann ní mise a chuir ann í.

Translation: The Old Hags.

There was a couple living in the Island long ago and there were no other houses there but the one. The man of the house had to go to Dingle one day, but he was unable to return to the Island before nightfall. His wife was alone that night and was carding and spinning wool. During the night an old hag called into her and said, "While you are carding and spinning, woman of the house, give us out supper." "I will," she said, "when I have finished this work." Not long after another hag came in and said, "While you are carding and spinning, woman of the house, give us out supper."

"You will get it when I have this done." Then the twelve hags came and said, "While you are carding and spinning, woman of the house, give us out supper." "You will have it when I have made flannel of this." They all gathered in and were not long in making the flannel together. She told them that when the flannel was made it had to be thickened. They did this also without delay. When done they again asked for their supper. She said she had to go to the well for water and she took a can with her. She took a sieve with her to fill the can but the sieve would not hold the water. An angel appeared and she put some heather under the sieve and the can was filled. She told the woman to go back to the house and to have one foot in the door and the other outside. She should then shout as loudly as she could until the top of the Island was on fire. When the hags would run out she was to bolt the door with one of the fire irons. She should break up the two cakes she had made and empty the can of water upside down. When she returned to the house, she did as she was told and let out a great scream which set the top of the Island on fire. The hags ran out one by one until the woman could slam the door shut and bolt it with the fire iron. The hags tried to return and pleaded to be let in. She said she couldn't as the door was now bolted. They called on everything by name in the house to remove the bolt, but there was nothing left to do that as everything had been destroyed. The hags then climbed up on the back of the house

and awakened the cock who crew out announcing the morning and the hags all disappeared. When the man returned to the Island the woman said she would never spend another night alone on the Island, and the man never wore any of the flannel as it had been made by the hags. And that's my story. If there is a lie there, I didn't make it.

Appendix IV - Contemporary Irish Concert Compositions Which Feature Traditional Irish Instruments and Musicians

I compiled the following list mostly with the aid of the *Contemporary Music Centre* library catalogue. There are a number of works also included which are not in this catalogue. It is likely there are more contemporary Irish works featuring traditional instruments that I have not discovered. Therefore my list should be considered a strongly representative rather than absolutely definitive list. The composers represented are all Irish or Irish residents. In some cases I was unable to find the date of composition or the duration of the piece.

Fiddle

1. Derek Ball 'Celtic Whale' (2006) fiddle, clairseach. 10'
2. Derek Ball 'Passing Places' (2007) tin whistle, bagpipe, bodhrán, Irish harp, fiddle and orchestra. 9'
3. Roger Doyle 'Babel' (1981, 1983-86 and 1988-1999) Tape (at different times : electronic sounds, vocals, Fairlight Computer Music Instrument, pianos, synthesizers, digital sampler, electric guitars, clarinets, saxophones, French horn, violins, bassoon, trumpet, uilleann pipes, low whistle, accordion, flute, fiddle, spoken texts). 6 hours 15'
4. Roger Doyle 'The Atlantean (Concert version)' 1990 fiddle, percussion, strings. 11'
5. Dave Flynn 'Aontacht – Concerto for Traditional Irish musician and Orchestra' (2008) fiddle (or other traditional instruments) orchestra. 30'
6. Dave Flynn 'Music for the Departed' (2006) fiddle, violin, guitar. 22'
7. Dave Flynn 'Music for the Departed' (2006/2010) fiddle, violin, guitar, strings. 22'
8. Dave Flynn 'The Valley of the Lunatics' (2009) 2 scordatura fiddles, digital loop pedal. 15'

9. Dave Flynn ‘Le Cheíle is in Aonar’ (2009) Uilleann pipes, 3 tin whistles, 2 fiddles, 2 Irish flutes. 25’
10. Dave Flynn ‘Taibhreamh Ó Ríada’ (2007) ssa choir, 2 flutes+2 tin whistles, accordion, Irish harp, 2 fiddles. 10’
11. Rachel Holstead ‘The Tune Ship: Longphort: Tuneskipet’ (2004) *Seán-Nós* voice, Irish flute, button accordion, fiddle, 3 violins, viola, cello, double bass. 14'
12. Rachel Holstead ‘Thar an bhfarraige gheal’ (2003) *Seán-Nós* voice, fiddle, 3 violins, 2 violas, 2 cellos, tape. 11’
13. Rachel Holstead ‘Ardee Dances’ (2005) fiddle, baroque violin, baroque strings. 17’
14. Charlie Lennon ‘Flight from the Hungry Land’ (1996) uilleann pipes, Irish harp, Irish flute, fiddle, double bass, bodhrán, oboe, orchestra.
15. Charlie Lennon ‘Island Wedding’ (1986) uilleann pipes, Irish flute, fiddle, bodhrán, orchestra.
16. Charlie Lennon ‘The Emigrant Suite’ (1985) uilleann pipes, Irish flute, fiddle, piano, 2 fiddles, 2 violas, guitar.
17. Philip Martin ‘Thalassa’ (1991 – 1992) Baritone solo, children's, chamber & satb choirs; flute, 2 horns, 2 trumpets, string quintet, traditional musicians [tin whistle, bodhrán, fiddle, harp, accordion]. 75'
18. Mary McAuliffe ‘The Fiddler of Dooney’ (2006) satb, fiddle, bodhrán. 3'
19. Micheál Ó Súilleabháin/Donal Lunny ‘A River of Sound’ (1995) Strings, percussion, bodhrán, saxophone, keyboards, 2 koras, Irish harp, fiddle and bouzouki. 11’
20. Bill Whelan ‘Carna’ (n.d.) fiddle, 2 voices, percussion, strings. 19’
21. Bill Whelan ‘Inishlacken’ (n.d.) fiddle, violin, strings. 17’

22. Bill Whelan ‘Errisbeg’ (n.d.) fiddle, Irish harp, strings. 19’
23. Bill Whelan ‘The Seville Suite’ fiddle, uilleann pipes, button accordion, bodhrán, orchestra. 37’
24. Bill Whelan ‘Timedance’ (1982/1992) fiddle, uilleann pipes, bodhrán, 2 bouzoukis, guitar, mandolin, piano, keyboard, percussion, strings. 6’

Uilleann Pipes

1. Shaun Davey ‘The Relief of Derry Symphony’ (1990) *Sean-Nós* voice, soprano saxophone, uilleann pipes, organ, bands, orchestra. 54'
2. Shaun Davey ‘Concerto for Uilleann Pipes’ (1986) uilleann pipes, orchestra.
3. Shaun Davey ‘Granuaile’ (1985) *Sean-Nós* voice, uilleann pipes, orchestra. 45'
4. Shaun Davey ‘The Brendan Voyage’ (1979) uilleann pipes, orchestra, speaker. 41'
5. Raymond Deane ‘Thresholds’ (1987 rev. 1991) orchestra including uilleann pipes. 19'
6. Raymond Deane ‘Mórchuid cloch is gannchuid cré’ (1987) concertina, uilleann pipes, percussion, 2 harps, guitar, mandolin, orchestra. 25'
7. Roger Doyle ‘Tradarr’ (1999) *Sean-Nós* voice, uilleann pipes, flute, oboe, clarinet, trumpet, saxophone, bassoon, French horn, trombone, tuba, percussion, double bass, tape, electronics. 22'
8. Roger Doyle ‘Under the Green Time’ (1995) uilleann pipes, low whistle, Irish flute, tape. 19’
9. Roger Doyle ‘Babel’ (1981, 1983-86 and 1988-1999) Tape (at different times : electronic sounds, vocals, Fairlight Computer Music Instrument, pianos, synthesizers, digital sampler, electric guitars, clarinets, saxophones, French horn, violins, bassoon, trumpet, uilleann pipes, low whistle, accordion, flute, fiddle, spoken texts). 6 hours 15’

10. Roger Doyle ‘Ceol Sidhe’ (1973) uilleann pipes, Irish harp, tin whistle. 5’
11. Ciarán Farrell ‘Shell - Challenge I’ (1998) Soprano solo, uilleann pipes, percussion, strings. 1'
12. Dave Flynn ‘Five Études for Uilleann Pipes’ (2009) Uilleann pipes. 25’
13. Dave Flynn ‘Le Cheíle is in Aonar’ (2009) Uilleann pipes, 3 tin whistles, 2 fiddles, 2 Irish flutes. 25’
14. Dave Flynn ‘Stories from the Old World’ (2008) uilleann pipes, *Sean-Nós* singer, narrator, string quartet. 20’
15. Stephen Gardner ‘Crécht Mór’ (1996) satb choir, uilleann pipes, speaker. 55'
16. Deirdre Gribbin ‘His Eyes’ (1993) violin, cello, uilleann pipes, percussion [tabla, bones, kanjira, bodhrán, drum].
17. Ronan Guilfoyle ‘Foundation Garment’ (2003) uilleann pipes, saxophone, guitar, bass guitar, piano, percussion. 8'
18. Paul Hayes ‘The Wounds of Art’ (1990) percussion, uilleann pipes, tape. 60'
19. Michael Holohan ‘A Snail in My Prime’ (2000) Bronze Age horns and bells, Iron Age trumpa créda, bodhrán, cello, uilleann pipes, marimba, flute and voice.
20. Michael Holohan ‘An Fear as an Fine Gall’ (2003) uilleann pipes. 3'
21. Michael Holohan ‘Ár nAthair’ (2001) soprano solo, flute, bronze-age horns, violin, cello, guitar, uilleann pipes, percussion. 4'
22. Michael Holohan ‘Ár nAthair’ (2001) voice, uilleann pipes. 4'
23. Michael Holohan ‘The Road to Lough Swilly’ (2001) uilleann pipes. 15'
24. Michael Holohan ‘The Road to Lough Swilly’ (2001) uilleann pipes, strings.
25. Michael Holohan ‘The Dream of Aengus’ (1997) voice, 2 bronze age horns, flute, violin, percussion, uilleann pipes.
26. Michael Holohan ‘The Lost Land’ (1996) Soprano solo, uilleann pipes, orchestra, speaker, dancer. 10'

27. Michael Holohan ‘Mass of Fire’ (1990) choirs, 4 *Sean-Nós* voices, 2 Irish flutes, uilleann pipes, bronze-age horns, concertina. 15’
28. Charlie Lennon ‘Flight from the Hungry Land’ (1996) uilleann pipes, Irish harp, Irish flute, fiddle, double bass, bodhrán, oboe, orchestra.
29. Charlie Lennon ‘Island Wedding’ (1986) uilleann pipes, Irish flute, fiddle, bodhrán, orchestra.
30. Charlie Lennon ‘The Emigrant Suite’ (1985) uilleann pipes, Irish flute, fiddle, piano, 2 fiddles, 2 violas, guitar.
31. Neil Martin ‘No Tongue Can Tell’ (2004) uilleann pipes, orchestra.
32. Robinson McClellan ‘Flight of the Earls: Concerto for Uilleann pipes’ (2007) uilleann pipes, orchestra. 23’
33. Gerry Murphy ‘Dialects’ (1993 – 1994) uilleann pipes, orchestra. 21'
34. Adele O’Dwyer ‘Bímis Dílis’ (1999) *Sean-Nós* voice, uilleann pipes, children’s choir, orchestra. 9'
35. Micheál Ó Súilleabháin (1991) ‘flowansionnamare’ uilleann pipes, piano, strings, percussion. 20’
36. Declan Townsend ‘Songs of Farewell’ (1989) uilleann pipes, orchestra. 7'
37. Bill Whelan ‘Riverdance’ (1995) Soprano solo, satb choir, uilleann pipes orchestra, 6' Bill Whelan ‘The Spirit of Mayo’ (1993) Soprano solo, satb choir, violin, uilleann pipes+tin whistle, orchestra. 44'
38. Bill Whelan ‘The Seville Suite’ (1992) fiddle, uilleann pipes, button accordion, bodhrán, orchestra. 37’
39. Bill Whelan ‘Timedance’ (1982/1992) fiddle, uilleann pipes, bodhrán. 2’ bouzoukis, guitar, mandolin, piano, keyboard, percussion, strings. 6’

Irish Flute

1. Elaine Agnew ‘mf’ (2003) Ensemble including Irish flute. 11’
2. Ciarán Farrell ‘Lament’ (1995) tin whistle, low whistle, Irish flute, harp, bodhrán, violin, viola and cello. 8'
3. Ciarán Farrell ‘Macalla’ (1994) satb choir, Irish flute, tin whistle, low whistle, bodhrán, harp and strings. 6'
4. John Gibson ‘Sliabh Luachra’ (1996-1997) Irish flute, piano, violin, cello. 10’
5. Dave Flynn ‘The Forest of Ornaments’ (2009) Irish flutes in C and D, fife, shakuhachi, fujara, tape. 12’
6. Dave Flynn ‘Ómos do Frankie Kennedy (2004) Irish flute, guitar. 8’
7. Dave Flynn ‘Le Cheíle is in Aonar’ (2009) Uilleann pipes, 3 tin whistles, 2 fiddles, 2 Irish flutes. 25’
8. Dave Flynn ‘Taibhreamh Ó Ríada’ (2007) ssa choir, 2 flutes+2 tin whistles, accordion, Irish harp, 2 fiddles. 10’
9. Michael Holohan ‘Mass of Fire’ (1990) choirs, 4 *Sean-Nós* voices, 2 Irish flutes, uilleann pipes, bronze-age horns, concertina.
10. Rachel Holstead ‘The Tune Ship: Longphort: Tuneskipet’ (2004) *Seán-Nós* voice, Irish flute, button accordion, fiddle, 3 violins, viola, cello, double bass. 14'
11. Charlie Lennon ‘Flight from the Hungry Land’ (1996) uilleann pipes, Irish harp, Irish flute, fiddle, double bass, bodhrán, oboe, orchestra.
12. Charlie Lennon ‘Island Wedding’ (1986) uilleann pipes, Irish flute, fiddle, bodhrán, orchestra.
13. Charlie Lennon ‘The Emigrant Suite’ (1985) uilleann pipes, Irish flute, fiddle, piano, 2 fiddles, 2 violas, guitar.

14. Neil Martin ‘The Guiding Moon’ (2003) Irish flute, string quartet.
15. Peadar Ó Riada ‘Laoi na Carraige Báinne’ (2008) Irish flute, *Sean-Nós* voice, string quartet.
16. Micheál Ó Súilleabháin ‘Oileán/Island’ (1988) Irish flute, strings. 19’
17. C.S.L Parker ‘Earth Waltz’ (2007) sa choir, Irish flute. vibraphone, piano, 2 violins, bass guitar. 3’

Tin Whistle

1. Derek Ball ‘Passing Places’ (2007) Tin whistle, bagpipe, bodhrán, Irish harp, fiddle and orchestra. 9’
2. Roger Doyle ‘Ceol Sidhe’ (1973) tin whistle, Irish harp, uilleann pipes. 5’
3. Ciarán Farrell ‘Lament’ (1995) tin whistle, low whistle, Irish flute, harp, bodhrán, violin, viola and cello. 8'
4. Ciarán Farrell ‘Macalla’ (1994) satb choir, Irish flute, tin whistle, low whistle, bodhrán, harp and strings. 6'
5. Dave Flynn ‘Le Cheíle is in Aonar’ (2009) Uilleann pipes, 3 tin whistles, 2 fiddles, 2 Irish flutes. 25’
6. Dave Flynn ‘Taibhreamh Ó Ríada’ (2007) ssa choir, 2 flutes+2 tin whistles, accordion, Irish harp, 2 fiddles. 10’
7. John Kinsella ‘The Splendid Years’ (1990) tin whistle, string quartet, speaker. 10’
8. Philip Martin ‘Thalassa’ (1991 – 1992) Baritone solo, children's, chamber & satb choirs; flute, 2 horns, 2 trumpets, string quintet, traditional musicians [tin whistle, bodhrán, fiddle, harp, accordion]. 75'
9. Bill Whelan ‘Dún Briste’ (1992) tin whistle, keyboard, strings. 4’
10. Bill Whelan ‘The Spirit of Mayo’ (1993) Soprano solo, satb choir, violin, uilleann pipes+tin whistle, orchestra. 44'

Low Whistle

1. Roger Doyle ‘Under the Green Time’ (1995) uilleann pipes, low whistle, Irish flute, tape. 19’
2. Roger Doyle ‘Babel’ (1981, 1983-86 and 1988-1999) Tape (at different times : electronic sounds, vocals, Fairlight Computer Music Instrument, pianos, synthesizers, digital sampler, electric guitars, clarinets, saxophones, French horn, violins, bassoon, trumpet, uilleann pipes, low whistle, accordion, flute, fiddle, spoken texts). 6 hours 15’
3. Ciarán Farrell ‘Lament’ (1995) tin whistle, low whistle, Irish flute, harp, bodhrán, violin, viola and cello. 8'
4. Ciarán Farrell ‘Macalla’ (1994) satb choir, Irish flute, tin whistle, low whistle, bodhrán, harp and strings. 6'
5. Michael McGlynn ’Shining Water’ (2006) Soprano solo, satb choir, low whistle viola, harp, percussion. 5’

Traditional Percussion - Bodhrán, Spoons and Bones

1. Derek Ball ‘Passing Places’ (2007) Tin whistle, bagpipe, bodhrán, Irish harp, fiddle and orchestra. 9’
2. Siobhán Cleary ‘Mis’ (2008) Orchestra with bodhrán in percussion section. 12'
3. Ciarán Farrell ‘Lament’ (1995) tin whistle, low whistle, Irish flute, harp, bodhrán, violin, viola and cello. 8'
4. Ciarán Farrell ‘Macalla’ (1994) satb choir, Irish flute, tin whistle, low whistle, bodhrán, harp and strings. 6'
5. Eibhlis Farrell ‘Windfalls’ (1990) soprano solo, flute, clarinet, violin, Irish harp, percussion [bodhrán, bones and woodblock]. 5'

6. Eibhlis Farrell ‘Now is a Moveable Feast’ (1979) soprano solo, clarinet, violin, guitar, percussion [tambourine, woodblock, cymbal, bodhrán]. 40'
7. Deirdre Gribbin ‘His Eyes’ (1993) violin, cello, uilleann pipes, percussion (tabla, bones, kanjira, bodhrán, drum).
8. Michael Holohan ‘A Snail in My Prime’ (2000) Bronze Age horns and bells, Iron Age trumpa créda, bodhrán, cello, uilleann pipes, marimba, flute and voice.
9. Michael Holohan ‘The Legend of Fraoch’ (2006) 3 bronze-age horns and percussion [crothal, timpani, bodhrán, cymbal, guiro, gong, snare, side drum, 2 bongos]. 9'
10. Michael Holohan ‘Knowth’ (1999) carynx, trumpa creda, bronze age horn, large bodhrán, crothal. 3'
11. John Kinsella ‘A Selected Life’ (1973) Tenor solo, satb choir, orchestra with bodhrán in percussion section and speaker. 27
12. Charlie Lennon ‘Flight from the Hungry Land’ (1996) uilleann pipes, Irish harp, Irish flute, fiddle, double bass, bodhrán, oboe, orchestra.
13. Charlie Lennon ‘Island Wedding’ (1986) uilleann pipes, Irish flute, fiddle, bodhrán, orchestra.
14. Charlie Lennon ‘Island Wedding’ (1986) uilleann pipes, Irish flute, fiddle, bodhrán, orchestra.
15. Charlie Lennon ‘The Emigrant Suite’ (1985) uilleann pipes, Irish flute, fiddle, piano, 2 fiddles, 2 violas, guitar.
16. Philip Martin ‘Thalassa’ (1991 – 1992) Baritone solo, children's, chamber & satb choirs; flute, 2 horns, 2 trumpets, string quintet, traditional musicians [tin whistle, bodhrán, fiddle, harp, accordion]. 75'
17. Mary McAuliffe ‘An American Odyssey’ (2006) Tenor solo, satb choir, orchestra with bodhrán in percussion section. 30'

18. Mary McAuliffe ‘The Fiddler of Dooney’ (2006) satb, fiddle, bodhrán. 3'
19. Mary McAuliffe ‘Aililiú na Gamhna’ (2003) Soprano solo, satb choir, 2 flutes, violin, hammer dulcimer, bodhrán, piano. 3'
20. Mary McAuliffe ‘Irish Blessings’ (1999) satb choir bodhrán, piano and orchestra. 6'
21. Mary McAuliffe ‘Return to Old Ireland’ (1998 – 1999) orchestra with bodhrán in percussion section. 14'
22. Mary McAuliffe ‘Irish Suite’ (1998) ssa choir, 2 flutes, violin, hammer dulcimer, bodhrán, piano. 33'
23. Mary McAuliffe ‘Báidín Fheilimí’ (1997) ssa choir, 2 flutes, violin, hammer dulcimer, bodhrán, piano. 4'
24. Gerry Murphy ‘Tá Ann’ (2000) 8 timpani, 3 percussionists [snare drum, bass drum, cymbals, tenor drum, wood-block, tam-tam, whip, rainstick, bodhrán].
25. Ailís Ní Ríain ‘Down the Rabbit Hole’ (1995) flute, piano, bodhrán.
26. Micheál Ó Súilleabháin ‘Brian Boru’ (1995) piano, traditional percussion, strings.
27. Micheál Ó Súilleabháin ‘Christmas Eve’ (1995) piano, traditional percussion, strings.
28. Micheál Ó Súilleabháin ‘Heartwork’ (1989) piano, traditional percussion, strings. 3’
29. Micheál Ó Súilleabháin ‘Hup’ (2000) piano, traditional percussion, strings.
30. Micheál Ó Súilleabháin ‘(Must be more) Crispy’ (1995) piano, traditional percussion, strings.
31. Micheál Ó Súilleabháin ‘Idir Eatarthu/Between Worlds’ (1995) piano, traditional percussion, strings. 4’

32. Micheál Ó Súilleabháin/Donal Lunny ‘A River of Sound’ (1995) Strings, percussion, bodhrán, saxophone, keyboards, 2 koras, Irish harp, fiddle and bouzouki. 11’
33. Micheál Ó Súilleabháin ‘Session* 1’ (1992) Strings, piano, traditional Irish percussion.
34. Bill Whelan ‘The Seville Suite’ (1992) fiddle, uilleann pipes, button accordion, bodhrán, orchestra. 37’
35. Bill Whelan ‘Timedance’ (1982/1992) fiddle, uilleann pipes, bodhrán, 2 bouzoukis, guitar, mandolin, piano, keyboard, percussion, strings. 6’

Irish Harp

1. Elaine Agnew ‘John de Courcy's Travels’ (1992) violin, bassoon, Irish harp. 7'
2. Derek Ball ‘Of Caílte's Time’ (2010) Irish harp. 15'
3. Derek Ball ‘Ballooning and Bathyscaphing’ (2007) flute, Irish harp. 5'
4. Derek Ball ‘Passing Places’ (2007) Tin whistle, bagpipe, bodhrán, Irish harp, fiddle, timpani, percussion, strings. 9'
5. Derek Ball ‘Gothic Horror’ (2002) 3 Irish harps, organ, percussion. 15'
6. Derek Ball ‘The Anti-Gravity Machine’ (2002) flute, trombone, harp, cello, tape. 6'
7. Derek Ball ‘Sans embellisement’ (2001) Irish harp. 10'
8. Derek Ball ‘Cláirseoireacht’ (1999) voice, Irish harp. 2'
9. Derek Ball ‘Draperies et Broderies’ (1998 – 1999) 7 - 13 Irish harps. 4’
10. Seóirse Bodley ’10 Songs for Mezzo-soprano and Irish harp’, (1988) Mezzo soprano, Irish harp. 20’
11. Seóirse Bodley ‘Scintillae’ (1968) 2 Irish harps. 6'
12. Brian Boydell ‘An Album of Pieces for the Irish Harp’ (1989) Irish harp. 20'
13. Brian Boydell ‘A Pack of Fancies for a Travelling Harper’ (1970) Irish harp. 16’

14. Brian Boydell ‘Musician's Song’ (1965) Soprano solo, Irish harp. 2'
15. Brian Boydell ‘Three Yeats Songs’ (1965) Soprano solo, Irish harp. 11'
16. Brian Boydell ‘Four Sketches for Two Irish Harps’ (1961 – 1962) 2 Irish harps. 10’
17. Rhona Clarke ‘Sympathy’ (2000) Medium voice, flute, percussion, Irish harp. 7'
18. Rhona Clarke ‘Liadáin’ (1988) Mezzo soprano solo, Irish harp. 6’
19. Roger Doyle ‘Ceol Sidhe’ (1973) uilleann pipes, Irish harp, tin whistle. 5’
20. Eibhlis Farrell ‘Fáinne Geal an Lae’ (1995) 2 Sopranos, Irish harp. 3’
21. Eibhlis Farrell ‘The Queen of Connemara’ (1995) Baritone solo, ss choir, violin, Irish harp.
22. Eibhlis Farrell ‘The Star of the County Down’ (1995) Baritone solo, ss choir, violin, Irish harp.
23. Eibhlis Farrell ‘Thugamar Féin’ (1995) Soprano solo, sa choir, violin, percussion, Irish harp. 5'
24. Eibhlis Farrell ‘Windfalls’ (1990) soprano solo, flute, clarinet, violin, Irish harp, percussion [bodhrán, bones and woodblock]. 5'
25. Aloys Fleischmann ‘Ballinderry’ (n.d.) Irish harp. 3'
26. Aloys Fleischmann ‘An Cóitín Dearg’ (1950) Irish harp. 3’
27. Dave Flynn ‘Taibhreamh Ó Ríada’ (2007) ssa choir, 2 flutes+2 tin whistles, accordion, Irish harp, 2 fiddles. 10’
28. Joseph Groocock ‘Six Pieces for Harp’ (1962) Irish harp.
29. Janet Harbison ‘Carillon’ (1992). 4+ Irish harps. 5'
30. Janet Harbison ‘Walk in Belfast’ (1996) Irish harp-solo, 1-2 Irish harps. 3'
31. Janet Harbison ‘Bright New Morning’ (1995) 3 Irish harps. 4'
32. Janet Harbison ‘Earth Water Wind and Fire’ (1992) 2 Irish harp solos, 6+ Irish harps.

33. Paul Hayes ‘Little Red Riding Hood and the Wolf’ (1990) Mezzo solo, Irish harp, tape. 8'
34. Paul Hayes ‘The Writer's Farewell’ (1990) Mezzo solo, Irish harp, tape. 7'
35. Rachel Holstead ‘Air-drawn Curves’ (2005) 4+ Irish harps. 7'
36. Fergus Johnston ‘The Wisdom of the World’ (1990) Mezzo solo, Irish harp. 5'
37. Mary Kelly ‘Two Songs on Words of Love’ (1988) Tenor solo, Irish harp. 3'
38. Mary Kelly ‘Poems from Connemara’ (1984) Mezzo-solo, Irish harp. 14'
39. John Kinsella ‘Allegro Giocoso’ (1966) Irish harp. 5'
40. Charlie Lennon ‘Flight from the Hungry Land’ (1996) uilleann pipes, Irish harp, Irish flute, fiddle, double bass, bodhrán, oboe, orchestra.
41. Philip Martin ‘Thalassa’ (1991 – 1992) Baritone solo, children's, chamber & satb choirs; flute, 2 horns, 2 trumpets, string quintet, traditional musicians [tin whistle, bodhrán, fiddle, harp, accordion]. 75'
42. Mary McAuliffe ‘Mass of the Irish Martyrs’ (1992 rev. 1997) satb choir, flute, oboe, piano, guitar, Irish harp. 13'
43. John McLachlan ‘Double Portrait’ (1994) 2 Irish harps. 5'
44. Anne-Marie O’Farrell ‘Étude for Three Irish Harps’ (1998) 3 Irish harps. 3'
45. Anne-Marie O’Farrell ‘Prelude’ (1996) Irish harp. 3'
46. Anne-Marie O’Farrell ‘The Knappogue Medley’ (1990) Irish harp. 4'
47. Anne-Marie O’Farrell ‘Passacaglia for Two Irish Harps’ (1989 rev. 1994) 2 Irish harps. 5'
48. Anne-Marie O’Farrell ‘Chorale Variations on 'Deus Meus Adiuva Me' (1989) Irish harp. 4'
49. Anne-Marie O’Farrell ‘Don Oíche úd i mBeithil’ (1988) Mezzo soprano, Irish harp.

50. Martin O’Leary ‘By Tears of Sorrow Shaded’ (1995) satb choir, flute, Irish harp, violin, cello.
51. Martin O’Leary ‘Leaves Lie’ (1991) Mezzo soprano, Irish harp. 8'
52. Martin O’Leary ‘Three Lyrics’ (1986) Mezzo soprano, Irish harp. 10'
53. Kevin O'Connell ‘Kolor’ (1999) Irish harp. 10'
54. Micheál Ó Súilleabháin/Donal Lunny ‘A River of Sound’ (1995) Strings, percussion, bodhrán, saxophone, keyboards, 2 koras, Irish harp, fiddle and bouzouki. 11’
55. A. J. Potter ‘Étude Bitonal’ (1968) Irish harp. 4'
56. A. J. Potter ‘Teach Lán le Cruiteoírí’ (1963) Irish harp ensemble, concert harp. 15'
57. Joan Trimble ‘Introduction and Air for Two Harps’ (1969) 2 Irish harps. 4'
58. Gerard Victory ‘Scénario’ (1983) Irish harp. 12'
59. Gerard Victory ‘Three Pieces for the Irish Harp’ (1966) Irish harp. 8'
60. Bill Whelan ‘Errisbeg’ (n.d.) fiddle, Irish harp, strings. 19’
61. James Wilson ‘Three Poems by Susan Connolly’ (1991) Mezzo soprano, Irish harp.
62. James Wilson ‘A Woman Young and Old’ (1966) Soprano, Irish harp. 25'
63. James Wilson ‘Spanish Arch’ (1966) 2 Irish harps. 8'

Button or Piano Accordion

1. Derek Ball ‘Visions de l'accord’ (2002) 6 button accordions. 6'
2. Dave Flynn ‘Taibhreamh Ó Ríada’ (2007) ssa choir, 2 flutes + 2 tin whistles, piano accordion, Irish harp, 2 fiddles. 10’
3. Rachel Holstead ‘The Tune Ship: Longphort: Tuneskipet’ (2004) *Seán-Nós* voice, Irish flute, button accordion, fiddle, 3 violins, viola, cello, double bass. 14'

4. Philip Martin ‘Thalassa’ (1991 – 1992) Baritone solo, children's, chamber & satb choirs; flute, 2 horns, 2 trumpets, string quintet, traditional musicians [tin whistle, bodhrán, fiddle, harp, button accordion]. 75'
5. Peadar Ó Riada ‘Port do Tony agus Kronos’ (2005) button accordion, string quartet.
6. Peadar Ó Riada ‘Bould Doherty’ (2008) button accordion, string quartet.
7. Bill Whelan ‘The Seville Suite’ (1992) fiddle, uilleann pipes, button accordion, bodhrán, orchestra. 37’

Concertina

1. Raymond Deane ‘Mórchuid cloch is gannchuid cré’ **(**1987) concertina, uilleann pipes, percussion, 2 harps guitar, mandolin, orchestra.
2. Michael Holohan ‘Mass of Fire’ (1990) choirs, 4 *Sean-Nós* voices, 2 Irish flutes, uilleann pipes, bronze-age horns, concertina.
3. John Wolf Brennan ‘Air (cut)’ (n.d.) concertina, melodica. 3'

Sean-Nós Voice

1. Shaun Davey ‘The Relief of Derry Symphony’ (1990) *Sean-Nós* voice, soprano saxophone, uilleann pipes, organ, bands, orchestra. 54'
2. Shaun Davey ‘Granuaile’ (1985) *Sean-Nós* voice, uilleann pipes, orchestra. 45'
3. Donnacha Dennehy ‘Grá agus Bás’ (2007) *Sean-Nós* voice, flute+piccolo, clarinet+bass clarinet, trombone, electric guitar, percussion, violin, viola, cello, double bass, live electronics. 28'
4. Donnacha Dennehy ‘Aisling Gheal’ (2007) *Sean-Nós* voice, flute, clarinet, vibraphone, electric guitar, violin, viola, cello, double bass, electronics. 9'
5. Roger Doyle ‘Ámhrán Mhuighinnse’ (2002) *Sean-Nós* voice, tape. 3'

6. Roger Doyle ‘Tradarr’ (1999) *Sean-Nós* voice, uilleann pipes, flute, oboe, clarinet, trumpet, saxophone, bassoon, French horn, trombone, tuba, percussion, double bass, tape, electronics. 22'
7. Dave Flynn ‘Stories from the Old World’ (2008) uilleann pipes, *Sean-Nós* singer, narrator, string quartet. 20’
8. Michael Holohan ‘Mass of Fire’ (1990) choirs, 4 *Sean-Nós* voices, 2 Irish flutes, uilleann pipes, bronze-age horns, concertina.
9. Rachel Holstead ‘The Tune Ship: Longphort: Tuneskipet’ (2004) *Seán-Nós* voice, Irish flute, button accordion, fiddle, 3 violins, viola, cello, double bass 14'
10. Adele O’Dwyer ‘Bímis Dílis’ (1999) *Sean-Nós* voice, uilleann pipes, children’s choir, orchestra.

Miscellaneous Instruments

1. Shaun Davey ‘The Pilgrim’ (1983 rev 1990/2000) Traditional group, narrator, Pipe band, choir, Orchestra. 1 hour 30’
2. Eibhlis Farrell ‘Kilbroney Set’ (1995) traditional group, orchestra.
3. Bernard Geary ‘Pléaráca an Ghaorthaigh’ (2005) traditional group, jazz group, orchestra.
4. Donal Lunny ‘Mo Bhealach Féin’ (2009) choir of traditional singers and ensemble.
5. Micheál Ó Súilleabháin ‘Concerto for Traditional Irish Musician and String Orchestra’ (1979) unspecified traditional instrument, string orchestra.
6. Micheál Ó Súilleabháin ‘Eklego’ (1984) tape and traditional musicians.

Appendix V - Track Listing for Audio CD 1

1. ‘The Kid on the Mountain’ performed by Kevin Burke.
2. J.S. Bach ‘Double’ from *Partita in B minor for Solo Violin* (BMV 1002) performed by Rachel Podger.
3. ‘My love is in America’ performed by Con Cassidy.
4. ‘My love is in America’ performed by Martin Hayes and Dennis Cahill.
5. ‘My love is in America’ performed by Tommy Potts.
6. ‘Gol na mban san ár’ performed by Paddy Glackin.
7. ‘The Top of Maol’ performed by Pádraig O’Keeffe, Dennis Murphy and Julia Clifford.
8. ‘John Doherty’s Reel’ performed by Paddy Glackin and Donal Lunny.
9. ‘Top it Off’ performed by Tommy Potts.
10. ‘The Guns of the Magnificent Seven’ performed by Altan.
11. ‘The Galway Reel’ performed by Dave Flynn.
12. ‘Paddy Fahey’s Reel’ performed by Dave Flynn.
13. ‘An Chúilfhionn March’ peformed by Harry Bradley and Paul O’Shaughnessy.
14. ‘John Doherty’s Mazurka’ performed by John Doherty.
15. ‘The Silver Slipper’ performed by John Doherty.
16. ‘Bruckless Shore’ performed by Paddy Glackin.
17. ‘Sporting Paddy’ performed by Paddy Glackin and Donal Lunny.
18. ‘Drowsy Maggie’ performed by Altan.
19. ‘Drowsy Maggie’ performed by Matt Molloy and Donal Lunny.
20. ‘Drowsy Maggie’ performed by Dave Flynn and Ciarán Swift.

Appendix VI – Contents of DVDR 1

Audio Recordings of Compositions and PDF versions of each score

1. *Tar Éis an Caoineadh.* Recording performed live by Ioana Petcu-Colan (violin).
2. *The Longest Reel.* Recording performed by Dave Flynn (fiddle).
3. *String Quartet No.3 'The Keening.'* Recording performed live by the ConTempo Quartet.
4. *Aontacht – A Concerto for a Traditional Musician.* Recording performed live by Martin Hayes (fiddle) and the RTÉ Concert Orchestra, conducted by David Brophy.
5. *Stories from the Old World.* MIDI recording with narration by Áine Moynihan and Malachi Mac Amhlaoibh and singing by Dave Flynn.
6. *Five Études for Uilleann Pipes*. Recordings of *Études 1* and *4* performed by Mick O'Brien (uilleann pipes). *Études 2, 3* and *5* are MIDI versions.
7. *The Forest of Ornaments.* Recording performed by Harry Bradley (flutes, fifes, shakuhachi and fujara).
8. *The Valley of the Lunatics*. Recording performed by Dave Flynn (multi-tracked fiddles).
9. *Le Chéile is in Aonar.* Recording performed by Harry Bradley (flute/tin whistle), Mick O'Brien (uilleann pipes/tin whistle/flute), Caoimhín Ó Raghallaigh (fiddle/tin whistle) and Siobhán Peoples (fiddle).

Appendix VII – Contents of DVDR 2 - Audio Recordings and Transcripts of Interviews

1. Recording of Interview with Harry Bradley.
2. Recording of Interview with Peter Browne.
3. Recording of Interview with Donnacha Dennehy.
4. Recording of Interview with Claire Duff.
5. Recording of Interview with Paddy Glackin.
6. Recording of Interview with Martin Hayes.
7. Recording of Interview with Rachel Holstead.
8. Recording of Interview with Claire Keville.
9. Recording of Interview with Michael Holohan.
10. Recording of Interview with Mick O'Brien.
11. Recording of Interview with Caoimhín Ó Raghallaigh.
12. Recording of Interview with Siobhán Peoples.
13. Transcript of Interview with Harry Bradley.
14. Transcript of Interview with Peter Browne.
15. Transcript of Interview with Donnacha Dennehy.
16. Transcript of Interview with Claire Duff.
17. Transcript of Interview with Paddy Glackin.
18. Transcript of Interview with Martin Hayes.
19. Transcript of Interview with Rachel Holstead.
20. Transcript of Interview with Claire Keville.
21. Transcript of Interview with Caoimhín Ó Raghallaigh.
22. Frank Corcoran questionnaire.
23. Roger Doyle questionnaire.
24. Ioana Petcu-Colan questionnaire.

25. Eric Sweeney questionnaire.

Appendix VIII – List of Submitted Music Scores

1. *Tar Éis an Caoineadh* (2007).
2. *The Longest Reel* (2009).
3. *String Quartet No.3 'The Keening'* (2007).
4. *Stories from the Old World* (2008).
5. *Five Études for Uilleann Pipes* (2009).
6. *The Valley of the Lunatics* (2010).
7. *Le Chéile is in Aonar* (2010).
8. *Aontacht – A Concerto for a Traditional Musician* (2008). (Bound separately on A3 paper).