A Pedagogical Approach to Rhythm in Irish Uilleann Piping<sup>1</sup>

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## Introduction

The bulk of repertoire traditionally played on the Irish *uilleann* bagpipes is dance music. For dance music to be considered danceable, the listener must at least be able to tell where to tap his or her foot in rhythm with the tune. Performers who communicate danceable rhythms usually do so by generating a consistent, underlying motor rhythm by using large muscle groups in the process of music making. By motor rhythm, I refer to a constant, predictable series of accentuated notes—a rhythmic point of reference—that communicates the dance genre to the listener. In this article, I will explain the challenges of this process for the uilleann piper and propose a method to help uilleann pipers gain better control over rhythm.

In my experience, I have found that many students of the uilleann pipes are challenged with finding methods that help them execute danceable rhythm when they play dance music. While playing Irish traditional music with excellent dance rhythm can be challenging on any instrument, it is especially so for the uilleann pipes because there are no large muscle groups directly engaged in projecting dance rhythm on the instrument. For example, flute players engage the diaphragm, a large muscle in the thorax, to play danceable music. The flute player can blow hard into the instrument to communicate downbeats and upbeats to dancers. Fiddlers use large muscle groups in the arms to emphasize rhythmic patterns, and press harder on the bow on downbeats. While the uilleann piper engages large muscle groups in the arms, shoulders, and back to operate the instrument, none of these muscle groups are directly related to producing rhythm in the playing of the tune.

When an uilleann piper plays a dance tune on the chanter (melody pipe), s/he engages only smaller muscle groups in communicating the dance rhythm: those in the fingers and hands. While the robust, regular motor rhythm of blowing through a flute or pressing on the strings with the bow help flute players and fiddlers communicate dance rhythm clearly, uilleann pipers can be at a loss without similar large muscle groups to help project danceable rhythm—when a piper feels insecure with his or her rhythm and is not achieving danceable results, what is to be done?

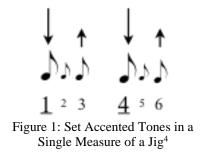
Over the past decade, I have developed a method that has proven effective for improving a student's ability to play danceable music on the instrument. Since much of the transmission in the uilleann piping tradition is done aurally/orally (in part because Irish musicians do not always read musical notation), I devised a method that does not require the student to be musically literate.<sup>2</sup> All a student needs to know in order to use this rhythm exercise are the note names and fingerings on the chanter.

The underlying principle in this exercise is to show a student not simply how to play a specific tune with rhythmic solidity, but how to play *every* tune with rhythmic solidity. If practiced well, the student will learn fundamental rhythmic patterns that can be applied to a huge portion of Irish traditional instrumental dance music. By identifying rhythmically critical pitches (and pitch positions) in a given tune, large muscle groups (the legs) can be engaged to improve rhythmic stability.

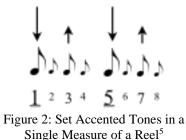
## The Method

The first step is for a student to tap the dominant foot while listening to a tune. (The student will need to be able to hear the downbeat and tap along with it before the rest of this method will be useful.) The student should either make a recording of the tune and listen back, or, listen to another musician's recording of the tune. Even if the student is musically literate, s/he should then write the note names of the tune in the order of occurrence. I recommend writing three-note letter groups for a jig and four-note letter groups for a reel, with the downbeat note at the front of each three- or four-note grouping.

Next, the student should circle the note names with which the downbeat and upbeats coincide. These circled notes are called *set accented tones*.<sup>3</sup> In a jig, a genre that I will use as an example later, the set accented tones can be diagramed in the following way (the student would circle the notes in positions <u>1</u>, 3, <u>4</u>, and 6. <u>1</u> and <u>4</u> are downbeats, while 3 and 6 are upbeats):



The same exercise could be done with a reel using the following rhythmic scheme as a guide to identify downbeat and upbeat pitch positions:



Once the note names are written down for the entire tune, and the set accented tones identified, the student should create a table of only the set accented tones. For example, from the jig "Patsy Touhey's Frolics," (Fig. 3) the student would create the following in Table 1:

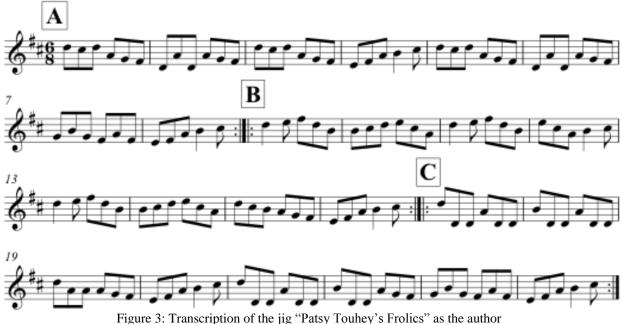


Figure 3: Transcription of the jig "Patsy Touhey's Frolics" as the autho learned it from uilleann piper John O'Brien at Scoil Éigse in 1997

Part	<b>M.</b> 1	M. 2	M. 3	<b>M.</b> 4	M. 5	<b>M.</b> 6	<b>M.</b> 7	M. 8
Α	d d A F#	D D A F#	d d A F#	EABC#	d d A F#	D D A F#	G G F# F#	EABC#
В	d e f# B	B d e A	d e f# B	e A B C#	d e f# B	B d e A	d B A F#	E A B C#
С	d D A D	B D A D	d A A F#	E A B C#	d D A D	B D A F#	G G F# F#	E A B C#

Table 1: Downbeat and Upbeat pitch content for the jig "Patsy Touhey's Frolics" (from Fig. 3)

Having identified the notes (and fingerings) of the tune's set accented tones, the student would then designate the dominant leg/foot to tap on the downbeat and other leg/foot to tap on the upbeat for every measure in the tune, and mark the table (of mm. 1-4) as such:

M. 1				M. 2			M. 3				M. 4				
d	d	Α	F#	D	D	Α	F#	d	d	Α	F#	Е	Α	В	C#
L	R	L	R	L	R	L	R	L	R	L	R	L	R	L	R

Table 2: Foot-tapping pattern applied to Downbeat and Upbeat pitch content for mm. 1-4 of the A part jig "Patsy Touhey's Frolics"

I recommend that the student practice only the set accented tones and with alternating leg movements (rather than tapping the same leg/foot twice in a row) in order to become comfortable with the synchronization that must develop between the fingers and the legs. The

student should practice the exercise for 10-15 minutes, and do so in front of a mirror. Practicing in front of a mirror can be helpful in two ways. First, a student watching him/herself practice from a teacher's outsider vantage point gives an outsider's perspective on what is done during practice. It can become much easier to identify problems with the visual distance that a mirror can provide. Second, watching oneself the way one would watch another musician play helps establish a visual-kinesthetic link that can strengthen the link between memory and muscle movement.<sup>6</sup>

In this method, it is critical for the student to use one leg for the downbeats and the other leg for the upbeats because alternating legs will fuse the pitch content of the jig with the motor rhythm of the jig. If the student uses only one leg for both downbeats and upbeats, confusion about whether a note is a downbeat or upbeat can ensue, and progress can halt.

The student benefits from this method in that when s/he can distinguish between rhythmically critical pitches and rhythmically negligible pitches in a tune, s/he can determine whether finger movements are synchronized for the desired dance rhythm. After a student uses this approach, s/he will know which notes coincide with the legs and is better able to use those large muscle groups to coordinate finger movements to produce danceable rhythm.

Professional performers whose piping is excellent rhythmically typically use ornamentation on the set accented tones—notes where the listener would tap the foot on the downbeat or upbeat. A clear understanding of a tune's set accented tones will guide a piper in the judicious application of grace notes.

Beyond playing danceable music on the chanter, this method is also useful for helping a piper determine how and where to play regulator accompaniment in traditional dance tunes.<sup>7</sup> The regulator playing of masters such as Robbie Hannan, Seán McKeon, Séamus Ennis, Johnny Doran, and Leo Rowsome contributes to the danceability of their music because they have an understanding of which notes in the tune (and their fingerings) coincide with the downbeat and can easily tell where regulators "fit" the tune from a rhythmic perspective. Regulators can then be applied to downbeat and upbeat pitch positions to create danceable music.

I have seen this method work for uilleann piping students all over the world. When applied seriously, students tend to remark that they feel more stable in their music-making, and that it also gives them a tool for analyzing and articulating aspects of their playing.

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<sup>&</sup>lt;sup>1</sup> I owe a huge debt of gratitude to Roger Landes, whose invitation to teach a class on melodic variations at ZoukFest in New Mexico many years ago prompted me to crystallize and clarify some critical insights on pedagogy in Irish traditional music. His encouragement and support have made this article possible.

<sup>&</sup>lt;sup>2</sup> Breandán Breathnach and Irish Traditional Music Society., *The Use of Notation in the Transmission of Irish Folk Music, Ó Riada Memorial Lecture* (Cork: Irish Traditional Music Society, U.C.C., 1986).

<sup>&</sup>lt;sup>3</sup> Pianist, composer, and founder of the Irish World Academy of Music and Dance, Mícheál Ó Súilleabháin, introduced this term in his Mícheál Ó Súilleabháin, "The Creative Process in Irish Traditional Dance Music," in *Irish Music Studies*, ed. Gerard Gillen and Harry White (Dublin: Irish Academic Press, 1990), 120. Ó Súilleabháin defined the set accented tone as "...certain individual tones which occur at important accentuated points" and noting that "[i]t is the occurrence, or deliberate non-occurrence, of these tones which appears to provide the necessary point of reference for the performer." See ibid., 123. Ó Súilleabháin's calls only downbeats set accented tones. I have extended Ó Súilleabháin's term to apply to both downbeat and upbeat pitches. See Eliot Grasso, "Melodic Variation in the Instrumental Dance Music Tradition of Ireland" (Dissertation, University of Oregon, 2011), 206.

<sup>&</sup>lt;sup>4</sup> Grasso, "Melodic Variation in the Instrumental Dance Music Tradition of Ireland," 190.

<sup>&</sup>lt;sup>5</sup> Ibid.

<sup>6</sup> I refer here to mirror neuron, were first described by Giacomo Rizzolatti, Fadiga, Luciano, Gallese, Vittorio, and Fogassi, Leonardo, "Premotor Cortex and the Recognition of Motor Actions," *Cognitive Brain Research* 3 (1996). Further research has been documented regarding the relationship between motor activity, and various methods of externalizing analysis with musicians (see Lutz Jäncke, "The Motor Representation in Pianists and String Players," in *Music, Motor Control and the Brain*, ed. Mario Wiesendanger Eckart Altenmüller, and Jürg Kesselring (Oxford: Oxford University Press, 2006); C Keysers, Kohler, E, Umitilà, MA, Nanetti, L, Fogassi, L, and Gallese, V, "Audiovisual Mirror Neurons and Action Recognition," *Experimental Brain Research* 153 (2003); E Kohler, Keysers, C, Umiltà MA, Fogassi, L, Gallese, V, and Rizzolatti, G, "Hearing Sounds, Understanding Actions: Action Representation in Mirror Neurons," *Science* 297 (2002); Amir Lahav, Saltzman, Elliot, and Schlaug, Gottfried, "Action Representation of Sound: Audiomotor Recognition Network While Listening to Newly-Acquired Actions," *Journal of Neuroscience* 27 (2007); Gottfried Schlaug, "Brain Structures of Musicians: Executive Functions and Morphological Implications," in *Music, Motor Control and the Brain*, ed. Mario Wiesendanger Eckart Altenmüller, and Jürg Kesselring (Oxford: Oxford University Press, 2006); Gottfried Schlaug, "Music, Music, Musicians, and Brain Plasticity," in *The Oxford Handbook of Music Psychology*, ed. Ian Cross Susan Hallam, and Michael Thaut (Oxford: Oxford University Press, 2009).

<sup>7</sup> Regulators are keyed pipes that lay across the piper's leg (opposite the bag). The piper activates the regulators by pressing on the keys with the wrist.