

Chapter One: Ornamentation and Its Notation

With the publication of *The Essential Guide to Irish Flute and Tin Whistle* in 2003, I proposed a new system of understanding and notating Irish flute and tin whistle ornamentation. In the following pages I'll discuss only the elements of that system that are necessary for making good use of the tune transcriptions in this book. For a far deeper exploration of the subject, please refer to *The Essential Guide to Irish Flute and Tin Whistle*.

WHAT IS ORNAMENTATION?

When I speak of ornamentation in traditional Irish instrumental music, I am referring to ways of altering or embellishing pieces 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."¹

Classical musicians who are newcomers to traditional Irish music naturally tend to bring this kind of thinking with them. However, as long as one overlays this "added note" model onto Irish ornamentation, it will be harder to gain fluency in the language of Irish music.

TOO MUCH BORROWING FROM CLASSICAL MUSIC

Most people who have attempted to codify traditional Irish flute and whistle playing have borrowed concepts and notation practices from classical music. This works fairly well in some areas and not well at all in others.

Ornamentation is one of the areas where such borrowing has not served us well. Over many years of teaching I have met a great number of players who are mystified by Irish ornamentation techniques. Most of them have not had personal access to good players. Struck by the beauty of what they hear but missing key knowledge, they often turn to books in their search for insight. I feel that most books published before *The Essential Guide to Irish Flute and Tin Whistle* borrowed too much from the language and notation of classical music in an attempt to define and describe traditional Irish ornamentation. While some of these efforts at explanation are helpful, many of them create and perpetuate misunderstandings.

GRACE NOTES VS. ARTICULATIONS

Most of the confusion has arisen from the liberal and often vague employment of the *grace note*, as a term, a concept and a notation practice. I feel that this has severely limited our thinking, and that such use of grace notes is the chief cause of misunderstandings about 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 *the extremely brief sound that defines the beginning or attack of a note*. To articulate a note is to create or define its first moment of sound.

TWO WAYS TO ARTICULATE A NOTE

With the flute, we can articulate a note in two ways. One is to briefly stop and restart the flow of air that we direct into the flute. We do this with our tongue or glottis and call it *tonguing* or *throating*. (The latter is my term for using articulations formed in the throat.) When we restart the flow of air, we give the sound an attack by an action of our tongue or glottis. We perceive this attack as the beginning, or articulation, of a new note. We can call these *breath articulations*.

A very different way to articulate a note is through the use of a finger movement.

¹ Valery Lloyd and Carole L. Bigler, *Ornamentation, A Question & Answer Manual* (Van Nuys, California: Alfred Publishing Co., 1995), p. 8.

Imagine these two scenarios:

- You are playing a low G on your flute. Without interrupting the flow of air *in any way*, you lift the middle finger of your top hand (the hand nearest the embouchure hole of the flute) completely off its hole, and, as quickly as possible, you put it back down onto its hole. The air has continued to flow through the flute without interruption.
- You are playing a low G on your flute. Without interrupting the flow of air *in any way*, you throw the index finger of your bottom hand (the hand nearest the foot of the flute) at its finger hole, allowing the finger to *bounce* back as quickly as possible. Again, the air has continued to flow through the flute without interruption. (In its very brief moment of contact with the flute, your index finger closed the finger hole entirely.)

The first scenario yields a *fingered articulation* called a **cut**. By lifting and replacing the middle finger of your top hand, you are, technically speaking, creating an additional note. But if that note is brief enough we cannot discern its pitch or duration. We perceive it not as a *note*, but, instead, as the articulation of the G note that follows it. *It is critically important to understand this phenomenon of perception.*

The second scenario yields a *fingered articulation* called a **strike** (also known as a *tip, tap, slap, or pat*). By bouncing the index finger of your bottom hand off of its finger hole, you are, technically speaking, creating an additional note. But if that note is brief enough, we will not discern its pitch or duration. As with the cut, we perceive it not as a note but as the articulation of the G note that follows it.

If you are having trouble following this, please be patient. It will become clear in time. The focus and scope of this book does not allow me to elaborate at length on these matters, but I devote a great deal of time and attention to them in *The Essential Guide to Irish Flute and Tin Whistle* and *The Essential Tin Whistle Toolbox*.

ROOTED IN BAGPIPE TRADITIONS

Tin whistle and Irish flute ornamentation has its origin in the tradition of the *uilleann pipes*, the current bellows-blown bagpipe of Ireland, whose techniques in turn developed from those of the older *pastoral bagpipe* and *piob mór* (Great Irish Warpipes) traditions. The capabilities and limitations of these two antecedent bagpipes shed important light upon why many uilleann pipe, Irish flute and tin whistle ornamentation techniques have evolved as they have.

While playing a tune on one of these older forms of bagpipes, there was no way to stop and restart the flow of air (i.e., there was nothing analogous to tonguing or throating). Therefore, when playing two notes of the same pitch in succession, these pipers had to use a *fingered articulation* to establish the beginning of such a repeated note. These *fingered articulations* have come down to us as the cut and the strike. They in turn give rise to the multi-note ornaments that make use of cuts and strikes, namely *rolls* and *cranns*. (Very similar finger articulation techniques have evolved within other bagpipe traditions around the world.)

Bear in mind that cuts and strikes are not used only on repeated notes. They are often used when ascending or descending to a note (though strikes are not possible when ascending to some notes). For much more on this, see *The Essential Guide to Irish Flute and Tin Whistle* or *The Essential Tin Whistle Toolbox*.

SAY GOODBYE TO GRACE NOTES

In most other books, the cut and strike have been presented and notated as *grace notes*, and this is where so much confusion arises.



Figure 3. A conventional, misleading way of notating a cut as a grace note.

Cuts and strikes are plentiful in Irish music. If you think of each cut and strike as an additional note unto itself (represented as a grace note), your thought-picture of the music will become very cluttered and rhythmically problematic.

Cuts and strikes are articulations that function in ways similar to breath articulations. But I know of no one who has suggested notating tongue or glottal articulations as grace notes. Breath articulations have no discernible duration. The same is true of well-played cuts and strikes.

A grace note, on the other hand, takes up a small but discernible amount of time, which has to be “stolen” either from the note preceding it or the note following. It also has a pitch that is meant to be identifiable, normally one of the notes of the scale in use at the time.

Neither of these properties of the grace note, i.e., discernible duration and identifiable pitch, apply to the *perceived* sounds of the cut and strike. And perception is what counts here, not scientifically measurable durations or pitches that are too brief for us to identify by ear. We hear well-played cuts and strikes as having *no* duration, as falling exactly on a beat, not before or after. They do not have an identifiable pitch, though we can perceive them as being either higher in pitch (the cut) or lower in pitch (the strike) than the notes they articulate (their parent notes).

Cuts and strikes cannot exist without their parent notes. You cannot play just a cut or just a strike, because they are not notes. They are merely the articulations of their parent notes.

When cuts and strikes are played well (and this takes practice), we don't hear music crowded and cluttered by tiny grace notes that are somehow squeezed in between the main notes of the tune. Instead, we hear rhythmic clarity. We simply hear the notes of the tune articulated in a subtle variety of ways. Some are smoothly connected to the previous note. Some are tongued or throated. Some are smoothly connected to the previous note *and* articulated with a cut. Some are tongued and cut at the same time. And so on.

A CUT NOTATION

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



Figure 4. A note that is articulated with 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 application of this symbol is similar to that of other commonly used symbols, such as staccato markings or accents, which are placed above the notes they affect.

FINGERING NOTATION

In this book I call the hand closest to the embouchure hole of the flute the **top hand**. The hand nearest the other end, the foot of the flute, I call the **bottom hand**. Either of these can be the right or left hand, though most people play with the left hand as the top hand and the right hand as the bottom hand. It seems to be in our nature to prefer using our dominant hand as the bottom hand.

I call the top hand index finger T1, the top hand middle finger T2, and the top hand ring finger T3. Similarly, I call the bottom hand index finger B1, the bottom hand middle finger B2, and the bottom hand ring finger B3. These labels works equally well for right-handed and left-handed players. See Figure 5 on the next page.

In addition to left-handedness, there may be other reasons why a person might choose to play the flute left-handed, for example due to a hand injury or other physical limitation. Or a player may have first learned to play the tin whistle before moving on to the flute, using her right hand as the top hand. (There is no intrinsic advantage to using either the right or left-handed hold on the tin whistle.) Bear in mind, however, that the flute's embouchure hole is almost always made to be blown into from the right-handed side, and keyed flutes are made to be played right-handed as matter of course. One can order a custom-made left-handed flute, but almost all the flutes already on the market are designed to be played right-handed.



Figure 5. The right-handed hold (upper photo) and the left-handed hold (lower photo), with fingering indications.

THE MOVEMENT AND FINGERING OF THE CUT

The movement of the cut is a very small and quick lift of a finger completely off its hole and the immediate replacement of that finger. When executed well it may be almost invisible to an observer. The finger barely needs to move from the hole, although it does need to completely uncover it.

In my opinion, a cut should almost always sound as well-defined and crisp as possible. Using the optimum fingerings is a great help in achieving this. To this end, I use fingerings that are somewhat different from those used by most players.

In my method, for each of the notes D, E, F#, G and A, in both low and high registers, the lowest covered hole remains covered (i.e., the covered hole that is furthest from the embouchure hole). I perform the cut by quickly uncovering and re-covering the next hole up (toward the embouchure hole). Therefore D is cut with B2, E with B1, F# with T3, G with T2, and A with T1.

The exception to this procedure occurs when cutting B. You cut B with T1, as this is the only finger available for the job.

It is very important to keep your hands relaxed when learning and using cuts. Though it seems to be human nature to do so, be sure you don't tense up while trying to make your cuts quick and crisp.

For more on cut fingering choices, see *The Essential Guide to Irish Flute and Tin Whistle* or *The Essential Tin Whistle Toolbox*.

WHY DO WE CALL CUTS AND STRIKES ORNAMENTS?

Cuts and strikes, our fingered articulations, are commonly referred to by Irish musicians as “ornaments.” Since this is such a long-established custom, I feel I must conform to it. Well-played cuts and strikes do have a fleeting pitch element. Perhaps for that reason they convey an “ornamental quality” to our ear. Other articulations that do not have a pitch element, such as tonguing and throating, do not seem to strike us as ornamental.

Still, I feel it is best to think of cuts and strikes as articulations. Since they are so central to Irish flute ornamentation, the ramifications of conceiving of them this way are quite far-reaching.

MID-NOTE CUTS

Sometimes you will want to place a cut in the midst of a note instead of at its start (in effect dividing the note into two). I call this kind of cut a **mid-note cut**. In Irish tunes that have a regular pulse, it usually sounds best to place the mid-note cut squarely on a subdivision of that pulse.

Here is an example of a mid-note cut placed halfway through a quarter note:



Figure 6. The first measure of the reel *The Cameronian*, showing a mid-note cut. CD #2, track 57. You will find the complete tune on p. 63.

In Figure 6, above, note that the cut symbol is not placed directly above the quarter note, but to its right, halfway between it and the next note. This is meant to show that the cut occurs at a point exactly halfway through the duration of the quarter note. This would sound the same as what is shown below in Figure 7.

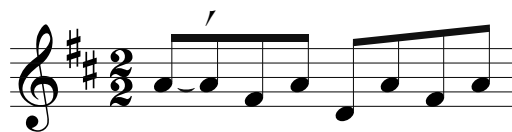


Figure 7. The same measure from *The Cameronian*, notated a bit differently. Here the measure begins with two tied eighth notes instead of a quarter note. The cut articulates the second of these eighth notes.

THE PHYSICAL MOVEMENTS AND FINGERINGS OF THE STRIKE

The strike is well named, for its crisp sound results from its percussive nature. In performing a strike you “throw” your finger at its tone hole so that it hits the instrument at a high velocity. Due to that velocity, the finger bounces back of its own accord, making it unnecessary to lift the finger off its hole. As with the cut, your fingers must be relaxed, though not limp, when performing a strike.

Unlike cut fingerings, strike fingerings seem to be universally agreed upon. As a rule, and this one has no exceptions, a strike on any given note is performed on the open tone hole closest to the embouchure hole. On the note E a strike is performed with B3. For F# you strike with B2, for G with B1, for A with T3, for B with T2, for C \flat with T1, and for C# also with T1. On Irish flute you cannot do a strike on D, and strikes are not often used on C \flat and C#.

A STRIKE NOTATION

Since a strike is an articulation, I notate it by placing a V over its parent note.

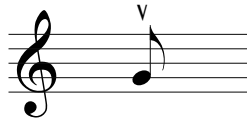


Figure 8. A note that is articulated with a strike.

This symbol graphically illustrates the downward velocity, impact and rebound of the strike. It is a simple, clean notation that reflects the reality of the strike's sound and function. Neither pitch nor duration are indicated or implied. There is only one note here, not two. Just like the cut, and for the same reasons, the strike is not a grace note. (Please don't confuse this symbol with the up-bow indication for bowed string instruments.)

MULTI-NOTE ORNAMENTS

Most **multi-note ornaments** are constructed by combining, in sequence, two, three or four articulated notes of eighth, sixteenth or, rarely, thirty-second-note durations. These notes are almost always slurred² together. The number of possible combinations is enormous, but only a fairly small number of them are used in Irish music.

In order to ensure that this tune collection is accessible to a wide range of players, I use only three of the multi-note ornaments in the transcriptions and recordings: long rolls, short rolls and long cranns. Although I do not use short cranns in this collection, I will describe them on p. 22. You may learn about all of the multi-note ornaments, including the widely-used condensed forms of rolls, in *The Essential Guide to Irish Flute and Tin Whistle*.

LONG AND SHORT FORMS OF ROLLS AND CRANNS

Rolls and cranns exist in **long form** (three eighth-note beats in duration) and **short form** (two eighth-note beats in duration). The classification of rolls as long and short is widely recognized by traditional players. The classification of cranns as long and short seems to be less widespread.

NORMAL VIEW AND EXPLODED VIEW

In the following pages you will encounter notated musical examples that are given in normal view, exploded view, or both. (For an example, see Figure 10 on the next page.)

Exploded view shows what happens inside of each multi-note ornament. Each of the ornament's constituent notes are depicted, along with each note's articulation (cut, strike; tongued/throated or slurred).

Normal view represents the multi-note ornament as either a quarter note or a dotted quarter note with a special symbol above it. This is how I represent such ornaments in the tune transcriptions.

² Here I am using the word "slur" to mean the connecting of a group of two or more notes such that only the first note of the group has a breath articulation. Thus a slurred group of notes is played using an uninterrupted, continuous stream of air. Any note in the slurred group may have a fingered articulation (cut or strike).

THE LONG ROLL

The **long roll** is the most commonly used multi-note ornament. It is something very simple and lovely: *a group of three slurred eighth notes of the same pitch, each one having a different articulation.*

- The first note is either tongued, throated, or slurred into from the preceding melody note.
- The second note is cut.
- The third note is struck.

What I have just described looks like this:



Figure 9. A long roll on G, shown in exploded view. CD #2, track 58.

USING AN ACCEPTED SYMBOL FOR THE LONG ROLL

There is already a symbol in common usage for rolls. Pat Mitchell, in his book *The Dance Music of Willie Clancy*,³ writes that Breandán Breathnach, in his influential series of tune collections *Ceol Rince na hÉireann*,⁴ devised this symbol to stand for all types of rolls and cranns.

Unlike Breathnach, I use this symbol very specifically, as shown below in Figure 10, to indicate the long roll only. I give other types of rolls and cranns different symbols, as you will soon see.

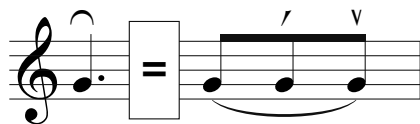


Figure 10. The symbol for a long roll on G, shown in normal view and exploded view.

Note that this crescent shaped symbol is placed above a dotted quarter note. The long roll is three eighth-note beats in duration, the same total duration as a dotted quarter note.

In some of the tune transcriptions you will see the long roll symbol placed above an eighth note or quarter note. For more on such situations, see “Rolls in Hornpipes” on p. 25 and “An Unusual Long Roll Notation” on p. 26.

CLEARING AWAY SOME FOG

Before the publication of *The Essential Guide to Irish Flute and Tin Whistle*, the long roll was almost always described and taught as a five-note ornament, due to the prevailing custom of thinking of cuts and strikes as grace notes. Add two grace notes to the three principal notes of the roll and you have five notes. Here’s the problem with the five-note concept: when you listen to a well-played long roll, *you only hear three notes.*

Remember that cuts and strikes are not to be thought of as notes. We should think of them as articulations. Once that is understood, it follows that the notion of the five-note long roll represents an unnecessary and misleading complication. (The long roll is *not* a “turn,” an ornament used in classical music traditions.)

³ Pat Mitchell, *The Dance Music of Willie Clancy*, 2nd ed. (Dublin: Mercier Press, 1977), p. 12.

⁴ Breandán Breathnach, *Ceol Rince na hÉireann*, Vol. 1 (Dublin: An Gúm, 1963).

ILL-CONCEIVED NOTATION

Figure 11 shows some examples of misleading five-note long roll notation, taken from published whistle and flute tutors.

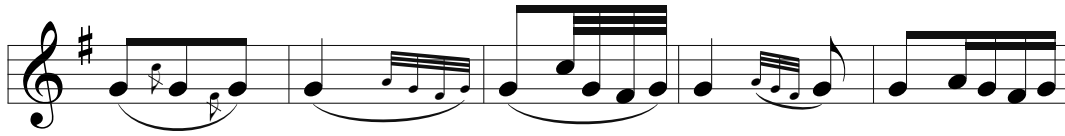


Figure 11. Examples of misleading five-note long roll notation.

None of these examples depict what a well-played long roll sounds like. None accurately convey its rhythm. All imply that the pitch of the cut and strike are identifiable and significant. None of them show that the sounds of the cut and the strike are qualitatively different from each other.

If anyone unfamiliar with the sound of a well-played long roll tried to accurately reproduce what was notated in these examples, they would not be playing a long roll.

When one is first learning cuts and strikes and cannot yet make them brief enough, a long roll will indeed sound as if it has five notes. Perhaps since everyone started out playing them that way we have retained some vestige of our old perceptions in our notation practices.

But why not notate them the way they sound when played *well*, especially since such a notation is much simpler to read and write?

THE SHORT ROLL

The **short roll** can be most easily grasped as a long roll without its first eighth note. Thus the short roll is *a group of two slurred eighth notes of the same pitch, each one having a different articulation*. The first note is cut, and the second is struck. What I have just described looks like this:

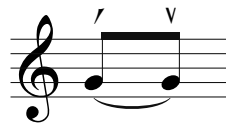


Figure 12. A short roll on G, shown in exploded view. CD #2, track 59.

It is essential to understand that the short roll occupies a total of only *two* eighth-note beats, whereas the long roll occupies three.

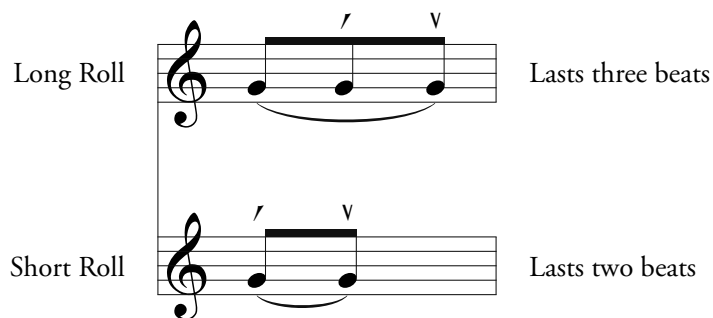


Figure 13. A comparison of long and short rolls.

A SHORT ROLL SYMBOL

I have modified the symbol commonly used for rolls to create a symbol specifically for the short roll.

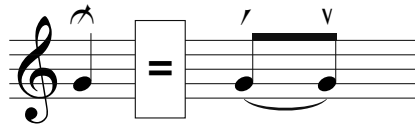


Figure 14. A short roll on G, shown in normal view and exploded view.

Note well that the short roll symbol appears above a quarter note. The short roll is only two eighth-note beats in duration, i.e., the same duration, in total, as a quarter note.

Notice that the short roll symbol is the long roll symbol with a slash through it. This shows that the short roll is a shortened form of the long roll. The slash, the symbol for the cut, also draws attention to the fact that a cut initiates the short roll.

NOW THAT THE FOG HAS CLEARED

By now you are thoroughly familiar with my opinion that cuts and strikes are articulations, not grace notes or notes of any kind. Thus you understand that the short roll is a two-note ornament, and not a four-note ornament as it has been described in most whistle and flute tutors published prior to *The Essential Guide to Irish Flute and Tin Whistle*. Figure 15, below, shows some examples of four-note short roll notation taken from these whistle and flute tutors.



Figure 15. Examples of misleading four-note short roll notation.

These examples are incorrect and misleading. None of them look like what a short roll sounds like. None accurately convey the rhythm of the short roll. They all imply that the pitch of the cut and strike are identifiable and significant. None of them show that the sounds of the cut and the strike are qualitatively different from each other. If anyone unfamiliar with the sound of a well-played short roll tried to reproduce what is notated in these examples, they would not be playing a short roll.

It's best when notation represents the actual sound, especially when that notation is much simpler to read and write.

THE RHYTHMS OF LONG AND SHORT ROLLS

When learning to play long and short rolls it is critically important to learn to play them with an absolutely dead-even rhythm. Each eighth note should be articulated right on its beat. You will not want to play rolls this evenly in every situation, but you will need to be able to do so when playing tunes at very fast tempos. The evenly-played roll is a solid base from which you can depart and experiment.

Short rolls almost always begin on a pulse or strong beat. Not so with long rolls. It is very important to know how each long roll relates to the underlying pulse of the music. When the first eighth note of a long roll does *not* fall on a pulse or strong beat, either the second or third eighth note always does. You want to be sure to place on-pulse notes accurately on their beats. For an in-depth discussion of why this is so, see *The Essential Guide to Irish Flute and Tin Whistle*.