The Piper's Corner: Understanding Bagpipe Music

by Peter Walker, PVSFC Board Member

Fiddlers often find themselves playing bagpipe music. As a piper myself, I can't for the life of me think why! Seriously, though, there are a lot of good marches, and plenty of other tunes and airs that are worthy of being in a fiddle player's repertoire (and many more that...well, my mama said if you can't say something nice...). In this series of columns, I hope to shed some light on the whats, whys, and wherefores of bagpipe music, so this music becomes less opaque to the fiddler. In future installments, I intend to address bagpipe ornamentation, principles of stress (called pointing), different types of bagpipe tunes, and eventually the nature of piobaireachd. But for now, we'll start with two simple concepts.

"The Nine-Note Party Favor"

At my first bagpipe lesson, this is what my instructor called the thing. He even denied it was a musical instrument at all - no rests, no dynamic range, a single key signature. But he was just making a point - you'll have bagpipers (usually people who've never touched another instrument) claiming it's the pinnacle of difficulty and expression in music. Clearly these people have never seen a pipe organ played! But really, it is a nine-note party favor, one that comes with a colorful costume.

The nine notes of the bagpipe form a simple Mixolydian scale with a flattened 7th on top and bottom. We write these notes G, **A**, B, C, D, E, F, G, and A. I boldfaced the first A because it's the tonic. Now, strictly speaking, that C and F are sharp, but for some reason it's suppressed in printed pipe music. Don't be fooled! Add two sharps in your head when you're looking at tunes in pipe collections. Old pipe music was largely dual-tonic; that is, often it would have a phrase in A, followed by a phrase in G (think "The Devil in the Kitchen"). Sometimes this role was reversed (G Lydian mode, like "The Bob of Fettercairn"), or the two keys would be in B minor and A (like "The Ale is Dear"). The scale of the bagpipe is ideal for this kind of music, but it is pretty limiting to the modern ear. Recently, more and more music has been written for the bagpipes in the key of D major, forcing a retuning of the chanter's D (which used to be sharp relative to most intonation systems, but has come down to make tunes in this key seem more melodically satisfying).

So every bagpipe tune you see will have these nine notes. If you see a tune with

more than these, it's already been adapted for fiddle. Similarly, tunes and songs adapted for the bagpipes will be "squished" to fit this scale, and though they may be popular on the pipes, the squishing gives the adaptation away. Examples are Scotland the Brave, Amazing Grace, Auld Lang Syne, and The Londonderry Air (aka Danny Boy). Many is the tune in A major that saw its G# (e.g., "Highland Whisky" flattened to fit the pipes And others saw a high B turned into an ornament, or a low F-sharp turned into a low G.

But wait! I've been fibbing to you. Because though pipe music is written as if it's in the key of two sharps, it's now played somewhat sharp of three flats! So our scale really is 25 cents sharp of Ab, **Bb**, C, D, Eb, F, G, Ab, Bb.

Why do we write it one way and play it another? It is because the pitch of the instrument has come up in the last couple of centuries relative to most other instruments. When Joseph MacDonald - a trained violinist who studied the pipes as a young adult - wrote his manuscript on the Highland pipes in 1759, he felt the scale of the bagpipes was close enough to call its tonic "A." But A drifted pretty high in Victorian times, with the "Queen's Hall" standard, A became more than half-way to what we now call Bb. When it drifted back down, the Highland pipes stayed up there. For a while, then, it was in vogue to play with brass bands, so Bb was a perfect key for the instrument. But that fell out of fashion at a time when competition judges and pipe majors were looking for a "brighter" sound for bands. So mistaking "sharp" for "bright," up the pitch climbed almost to halfway between Bb and B. Sanity has crept over the community in the last few years, and now it's just sharp of Bb now. At the same time, a movement to "play in A" began, and so you're seeing more solo and "Celtic" pipers having chanters made in concert A to be more fiddle friendly. Sorry we can't do more about the volume!

One more slight fib must be revealed. It's really not nine, but more like eleven and a half notes. Many chanter/reed combinations can play a note close to C-natural and F-natural as well, and a very few can play something close to G#, with an alternate cross-fingering. Even fewer can play a high B! But the tuning on these notes is usually suboptimal, so they're better for passing tones than notes one holds on. And formal bagpipe music never uses these notes; woe upon you if you actually play "Lochiel's awa' to France" in a proper A minor in competition.

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The first time fiddlers crack open a bagpipe book, they are often struck by the sheer number and complexity of grace notes. "How do you read all of these?" is a common question I hear. The simple answer is: I don't. I play all of them, of course, but I don't read them as individual notes. Bagpipe ornaments come in only a few, highly formalized figures, and over the next few columns, I hope to demystify them a bit, explain how they're executed, describe their musical function, and suggest possible means for a fiddler to interpret them.

Do You Hear an Echo, Grace: The Simplest Ornaments

The basic ornament of bagpiping is a single grace note. The grace note is effected by the very brief lifting of a single finger; this is in contrast with melody notes, which use more complex fingerings. Because of how it's executed, a grace note can only be played at a higher pitch than the melody notes it's played between. But it can also be almost imperceptibly brief. Any note except low G can be used as a grace note, but by far the most common are the high G, D, and E, a fact that makes the music easier to read. High G is overwhelmingly the most common, and it is prevalent on downbeats, especially the first beat of a measure.

If it's necessary to play multiple grace notes in rapid succession on a low melody note (low G through C), the pattern is often G-D-E, or if necessary a G-D-E-D pattern. The reason for this is ergonomic. It's easier to play multiple grace notes fast if you have a practiced sequence of fingers to work through. Figure 1 shows a representative sample of grace note figures. The first bar demonstrates a G-D-E-D pattern and high A grace notes. The second bar features some G grace notes, a typical G-D pattern in a snap (called a "tachum"), and a G-D-E pattern seen in a jig-style triplet.

Similar to the grace note, and notated identically, is the echo beat. Where grace notes briefly lift a finger to play above the melody pitch, echo beats briefly slap down fingers to play a brief moment of lower pitch. For notes lower than D, the echo beat is low-G. For E, the echo beat is low A. For notes above E, the echo beat is the note below. D is a special case: it has two echo beats, a "light" to C, and a heavy to G. Figure 2 shows a number of examples of echo beats. Note that a gracing can be identified as an echo beat because it is lower in pitch than the two adjacent melody notes. While much rarer, echo beats are used similarly to grace notes, but only rarely at the start of a bar. They have a more percussive sound than a grace note, and are often used to go from one note to a lower one, especially from B to low A (the echo beat between them being a G), and there especially at the end of a phrase.

Grace notes and echo beats are principally articulatory in nature. That is, their primary purpose is to create a stronger separation between notes. An open-end chanter like that on the Highland pipes is necessarily a legato instrument. Grace notes permit a more staccato-like sound to be achieved. Most simple gracing of these two types occurs on a down beat, though they will less frequently be seen on an upbeat, and sometimes to articulate the two notes in a Scottish snap-like figure (see Figure 1).

A fiddler looking to replicate the sound of a simple gracing may use a tap on a note change, though usually a brisk change of bow direction (as opposed to a slur) achieves an equivalent level of articulation.

Shake Your Doublings: Two-Pulse Emphatics

Building on the simple gracing is a family of two types of compound ornament: shakes and doublings. Both are formed similarly. On the note change (usually on the downbeat, but sometimes the upbeat), a G-grace note is sounded. Some time after a brief interlude of the melody note, a second grace note or an echo beat is sounded, and then one holds the melody note for the remainder of the nominal value of the note. In the case of a shake, the second pulse is an echo beat (Figure 3), and in the case of a doubling, the second pulse is another grace note (D when the melody note is G, A, B, or C; the note above the melody note for E and F).

These ornaments normally imply an accent on a note. As bagpipes can not play dynamically, doublings and shakes are one mechanism by which stress is implied. Doublings are by far the more common of the two. Shakes, on the other hand, tend to be associated with a repeated note at the end of a phrase, especially in tunes in the key of D. In the first few bars of Figures 3 and 4, I demonstrate how shakes and doublings, respectively, are approximately played, and how they are actually notated in bagpipe music. Having established the pattern, the remainder of the bars in each figure show the bagpipe notation only. In both cases, note that the middle grace note actually lasts a perceptible amount of time, while the initiating G and subsequent grace note are ideally imperceptibly short.

Marches, even ones played by beginners, can be thickly populated with doublings, and even a few shakes. These ornaments appear complicated in print, and one wonders, "how can you read them at tempo?" But shakes and doublings on a note are always formed the same way, so a doubling on D is always a doubling on D, and a shake on F always a shake on F. One need not read the ornament while playing so much as recognize it, then execute the finger movements you've drilled. In a sense, a piper shape-reads the ornament and plays by reflex. The ornament is recognized as a 2-pulse emphatic by the first two grace notes, and distinguished between a doubling and a shake by noting whether the third grace note is higher or lower on the staff than the second grace (and melody) note.

How might a fiddler interpret these ornaments? The most literal interpretation would be to perform a tap on the note change, and a second (delayed) tap a brief moment later: a double-tap. However, as mentioned above, a briskly articulated bow change usually achieves the same effect as the initial G-grace note, so a delayed tap is usually enough to imply this type of ornament. How long should

the delay between the note change and the delayed tap last? Pipers speak of this in terms of the "openness" of the doubling or shake. It depends on the tune's tempo. Faster tunes like reels will see very "closed" doublings (with a short delay), marches and airs might see more open doublings. But this holds true: if the smallest basic note on which a doubling or shake might occur is an eighth note, then the delay should be less than a sixteenth note, so that the most open possible doubling will bisect the note it's occurring on. Furthermore, with some exceptions, doublings and shakes should be "balanced" in a given tune, or set of tunes of the same rhythmic type. That is, if you're playing a set of 4/4 marches, all doublings and shakes in all the tunes should be of the same size; and hence the delay in the delayed tap would also be balanced across the tunes.

But what about shakes and doublings to and from high G and high A? This and more, next time when we discuss Advanced Emphatics: High A and Half-doublings, Fake Shakes, Jig Shakes, and other oddities.

Half on the High Hand

In my last column, I discussed basic articulatory grace notes, and the workhorses of bagpipe emphatic ornamentation, shakes and doublings. But note that I only discussed shakes and doublings up to the melody note F. What about the high G and high A? Well, these are necessarily special cases. As two-pulse emphatic ornaments generally start with a G grace note, a note unavailable when playing notes higher than F, these shakes and doublings must be formed differently. The simplest case is shakes and doublings from high A to a note lower than F. In this case, the initial G-grace note is simply left off. We call these "half-shakes" and "half-doublings". Other than the missing initial grace note, they are timed exactly as any other shake or doubling would be. In the case where there is a shake or doubling from high G to a note lower than F, there are two possibilities. Either one could, as with coming from high A, perform a half-doubling or half-shake, or alternatively, one could use a high A grace note in the place of the high G grace note that usually initiates these ornaments. The choice is left to the composer or arranger, and is indicated in the music. If the high A grace note is used, it's called a "High A doubling or shake" or a "Thumb doubling or shake".

In the case of going to high G and high A, the situation is similar: to high A, one performs a half-shake, and to high G one performs either a half-shake or a shake with an initial high A grace note in place of the high G. The nomenclature, however, is somewhat confusing, though. Though performed as shakes to high G

and high A, these are called "doublings". Figure 5 shows, in the first bar from left to right, a high-A doubling from C to high G, a high-A doubling from high G to C, then half-doublings to and from the same. The second bar shows half-doublings from and to high A. The third bar shows a half-shake from high A and a high-A shake from high G. For a fiddler, the most literal translation of these ornaments is a delayed tap.

Cadences

In our last installment, I discussed grace notes, simple gracings higher in pitch than the melody notes they separate, and echo beats - simple gracings lower in pitch. There is, though rare, a third category, called a "cadence", where the melody is falling down the scale, and there is a grace note of intermediate pitch inbetween. Cadences in "light music" (marches, airs, dance tunes) are a holdover from piobaireachd, usually start on an E melody note, and the cadence will typically be a D grace note. In this case, the cadence acts like a very short melody note taken from the time of the previous melody note. I've shown a cadence in the first bar of Figure 6. How they appear in "light music" is different from how they're written in piobaireachd, so we will one day visit cadences again.

Sometimes a Shake Isn't a Shake

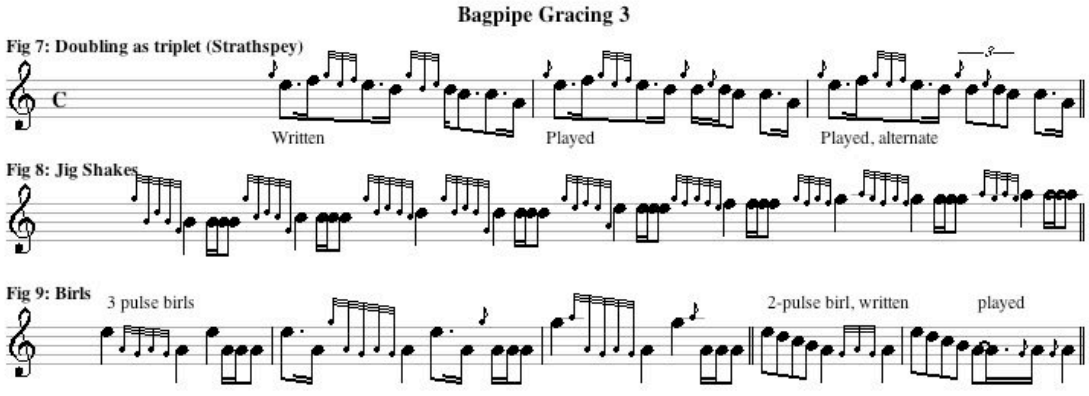
Once in a while, bagpipe notation is sloppy, and one sees ornaments that aren't ornaments at all. One prominent case of this is seen in the last two bars of Figure 6. In reels, sometimes one will see a half-shake that comes from a note other than high G. Though notated as such, this is not a half-shake at all, but rather an idiomatic way of writing a melody then grace note. The second bar shows an example of this as one might see written. If one were to literally interpret this, one would play a quarter note E, then a half-shake on the B dotted eighth, followed by an A sixteenth. But that's not what's meant. A half-shake begins on the beat,

but this "fake shake" ends on it! The third bar indicates how it should be written; as a standard swung reel rhythm. How does one tell the difference from a "fake shake" and a real half-shake? There are two clues: first, the "fake shake" appears almost exclusively in reels, and it is characterized by a half-shake that comes from a quarter note that's not high G or high A.

In our last installment, we began discussing some oddities in two-pulse emphatics like shakes and doublings; we'll wrap that discussion up here, and dip our toes in the waters of our next subject: anticipatory ornaments

Sometimes a Doubling Is A Triplet

There's another wrinkle that usually appears in Strathspeys, but occasionally appears in other tunes. When a doubling is applied to a snapped figure (sixteenth-dotted eighth), the intent is to form a triplet, similar in rhythm to a birl. Figure 7 shows an example of this from the Strathspey "Susan McLeod". The first bar shows how the tune is written, and the subsequent bars how it is played. Note that the first doubling is a true doubling, while the second is a triplet. This is the exception to the "all shakes and doublings should be balanced" rule. In the case of a tune with both doublings and doublings-as-triplets, the regular doublings should be played fairly closed, and the doublings-as-triplets should resemble, and be balanced against, birls, which will be fairly open. Doublings-as-triplets may be better performed by a fiddler with a birl-bowing rather than by taps, though it takes some practice to change notes for the third pulse of the birl.



Doubling + Shake = Birl

To a fiddler a birl is simply a bow movement, so birls can be performed on any note, but to a bagpiper, the birl is an ornament peculiar to the low A. Bagpipers have several ways to perform birl-like rhythms on notes other than low A, and the Jig Shake is one of them. A Jig Shake is a doubling followed by an echo beat to create a three pulse emphatic. One can almost see it as a doubling and shake combined. The Jig Shake is a newer ornament, similar to the Irish piper's cran, and will be seen mainly in recent compositions or arrangements, like those of Gordon Duncan. Figure 8 shows Jig Shakes from B on up, including two options for D and high G, paired with the equivalent birl the fiddler would play.

Speaking of Birls…

This leads us to the actual birl. Bagpipe birls are executed by playing a low A, and then twice swiping the right pinkie over the G hole in rapid succession. This is why bagpipe birls sound so distinct. I have illustrated several bagpipe birls, as written and played, in the first three bars of figure 9. Bagpipers call these “three pulse birls”, as there are three distinct A melody notes, and are identical in rhythm to those with which fiddlers are familiar. Sometimes, as in the second or third example, the birl is initiated by a high G or high A grace note, especially, as in the second example, one is needed to separate a previous A from the birl proper (as in *Crossing the Minch* and *Devil in the Kitchen*), but also to simply make a crisper beginning to the birl.

The last two bars show a different beast entirely! This is what pipers call a two-pulse birl. Mechanically, it is executed identically as the three-pulse birl, but the initial A is not part of the birl, but part of a melody note. Very common to end phrases, this sort of birl is anticipatory - that is, the movement completes on the beat. As the last bar of figure 9 shows, this sort of birl creates a particular rhythm that might be sung Ah… ta-Dah, with the capital letters falling on the beats.

This is just the first of several bagpipe ornaments that end, rather than start, on the beat. Next time, we discuss the world of anticipatory ornaments in: Get a Grip!

The Piper's Corner

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In our last several columns, we discussed emphatic ornaments; that is, ornaments that either occur on a beat, or begin on them, such as the shake or doubling, or most occurrences of the simple grace note. But in our discussion of birls, we came across a version of that ornament that, rather than beginning on the beat, ended on it.

We call these ornaments “anticipatory”, and they make up a major part of the bagpiper’s repertoire.

Get a Grip

In light music (aka, marches, dance tunes, and slow airs, as opposed to piobaireachds), the fundamental family of ornaments of this type is called a “grip”. It is so named, presumably, because to execute them, the piper “grips” the chanter, closing all the holes and going down to low G, and then executes one or more gracenotes while on low G, before returning to the next melody note. Figure 10 shows the most basic forms of grip.

The first example gives a grip from B to C. This form, called a leumluath, consists of a D grace note bisecting two low Gs; the total length of the grip being approximately a sixteenth note, each low G in isolation must then be approximately a thirty-second note in length. The second example is of a grip from high A to high A, formed similarly. Both of these would be examples of a very “open” grip. In reality, they would be played tighter; the low Gs shrinking, and the preceding melody note expanding to fill the time.

Some contexts require an even smaller grip. Bar three of figure 10 shows a grip occurring in a run up to a melody note. This figure is quite common in simple time marches, like Leaving of Liverpool. In this case, the grip is stealing its time from a sixteenth note B. So in actual execution, the B must become approximately a thirty-second note to make room for the grip, and each of the Gs in the grip will become a sixty-fourth note. When a grip is this closed, it begins to sound like a ripple.

How is the grip to be interpreted? In the first two bars, the grip is essentially substituting for a melody note around a sixteenth note in length. I tend to interpret grips of this form in this way on fiddle, and play an adjacent melody note in place of the grips. For example, in bar 1, I might try an A in place of the grip; in bar 2, a high B. Though one loses the double-pulse ripple effect of the grip simply playing a single melody note, its melodic function is preserved. If one wanted to be more literal, one could subdivide the note with a tap. In the third bar, the grip has taken on a purely ornamental function; it is creating an emphasis on the following melody note. In this instance, I would play a hammer-on to the following melody note in place of the grip, or possibly a hammer-on followed by a tap, to achieve an equivalent effect on fiddle.

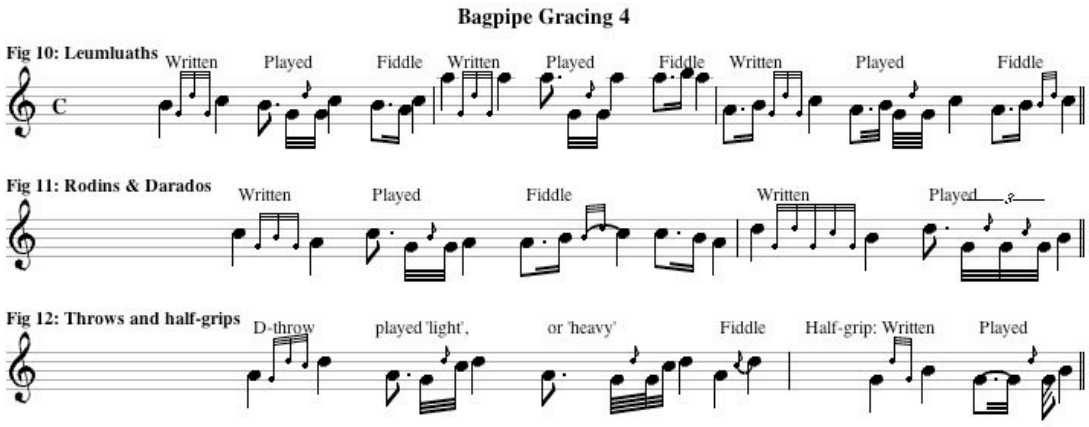
The first bar of figure 11 shows the simplest variation on a grip. Grips can occur from any note to any other note, but their form changes in certain instances. For example, there is no grip from low A to low A in light music. Furthermore, when executing a grip from D or C to low A, or from D to E or higher, an alternate form is used. In this alternate form, often called a “rodin”, a B grace note is used to separate the two low Gs in the grip rather than a D grace note, but the ornament is otherwise executed identically. I tend to interpret the rodin the same way I would a leumluath in the same place. A more interesting variation is the “darado”, a triple-pulse grip that occurs from D or C to B, shown in the last bar of figure 11. The darado is sometimes used, not as an anticipatory ornament, but as the equivalent of a birl on B.

When a grip is performed to D, the form is known as a D-throw, illustrated in the first bar of figure 12. The more elaborate form, known as a heavy D-throw, is essentially a leumluath to C, which then serves as a hammer-on to D. The “light” form of the D-throw, which may well be the more historical form, omits the second low G in the grip. The D-throw is usually played very closed, as a ripple, and is almost never played as a substitution for a melody note. In either case, the “light” form is what is usually written, regardless of what is played. As a fiddler, I tend to translate the d-throw as a hammer-on from C-sharp to D.

Grips can also come from low G. Since the first note of the grip is already on low G, it is skipped, and only the last portion of the ornament is played, as shown in the last bar of figure 12.

The term leumluath refers to the name of the variation in piobaireachd where this ornament, plus a connective note, separates the theme notes. Both the rodin and darado are comparatively rare ornaments in light music, and their names are

from the canntaireachd (sung form of piobaireahd) for these ornaments. Throws, in the piobairechd idiom, are a family of ornaments unto themselves – more on that later!



Taorluath – (Almost the) Biggest Ornament

In previous sections, we have discussed anticipatory ornaments, like the 2-pulse burl, and the family of grips and Leumluaths. The final common ornament in the "light music" portion of the Bagpipe repertoire is called the Taorluath, shown in figure 11. Possibly a corrupted form of the Gaelic for "twice quickly", this ornament is closely related to the Leumluath but uses an E grace note to transition between the second low G in the ornament and the next melody note. The second E grace note gives this ornament a more chirpy, distinct sound than the leumluath, but the distinction is subtle. Because of the E grace note, a Taorluath can not go to a note higher than D, although in practice, Taorluaths only go to melody notes below C, though they may start from any melody note. In the singular case of a Taorluath from D to low A, a B grace note, rather than the usual D grace note, is used to bisect the low G in the Taorluath. It is also possible to play a half-Taorluath from low G, as with a leumluath or grip from low G.

The Taorluath is generally used emphatically, though it can be often interpreted in a semi-melodic capacity, especially in compound time tunes. This ornament is also used frequently to separate two notes of the same pitch. And it's a very

common ornament in piobaireachd, with whole variations named after this ornament.

There is another ornament, called the Crunluath, and high hand throws, that are used almost exclusively in piobaireachd, and we will bisit them another day. For now we have all our pieces to play light music. Next time, we'll look at a bagpipe tune and put it all together!

Putting it All Together

For the last several columns, we've discussed the range of bagpipe ornaments, contrasting how they're written with how they're played; but until we put them into context, it's all squiggly lines on a page. So it's time to start looking at a few bagpipe tunes. Starting next fall, each column will start with a basic tune, beginning with 4/4 marches, and break down the usage of ornamentation. But I though I'd send you off for the season with something fun. The tune I've chosen to look at is a hornpipe called *Rathven Market*, by Iain Duncan of Pitlochry. It's been included as an insert to the newsletter; on one side the pipe version as published, and on the back, the literal interpretation of the rhythms and a fiddler's interpretation.

The tune was written in 2/4, but I've changed it to cut time to make it easier on the eyes. Note that the swing is all literally expressed – that's because pipers have two forms of hornpipe; what they call a "round hornpipe" is what we fiddlers would call a double reel. So to distinguish the two, the traditional hornpipe is written with swing. I personally prefer this tune in the slower Newcastle style of hornpipe playing. It's unusual for a bagpipe tune in that it is in A major; avoiding

all G notes except for as passing tones, and a single excursion into a G-chord at the end.

So let's look at the first part; most of the noteworthy ornamentation in this part, especially its end phrases, are repeated throughout the tune. In bar 1, we see a jig shake on a quarter note C. As we will recall, a jig shake divides a note into three parts; so this ornament is to be interpreted as either a triplet or a birl on that C. The rest of the bar contains single grace notes; these can be included or omitted as the fiddler prefers as taps on the note change or beat – though a sharp bow attack is all that's needed to imply the chirp of a single grace note. In the second and fourth bars, we see doublings on a quarter note B. As a fiddler, I tend to approach those as a delayed tap on B; executing the note change, and a brief time later, tapping the 3rd finger on the string.

The 4th bar also contains a grip from a quarter note C to a dotted eighth note. The prevailing rhythm in a dotted hornpipe is dotted eighth-sixteenth-dotted eighth-sixteenth. Since the grip is an anticipatory ornament that takes its time from the previous note, one might suspect that it's simply filling in the role of a missing 16th note. And that's the best interpretation, I think; I would render this passage as a dotted eighth C, sixteenth D, to the dotted eighth E.

The 5th and 6th bars begin similarly, and bar 7 contains a grip identical in context to that in bar 4, and I interpret it identically.

But what about the beast of an ornament at the end of bar 7? That's a darodo, a unique member of the grip family. Not only does the darodo have three pulses (rather than the usual two), in many contexts, it straddles the beat. Here, the beat occurs on the D grace note; leaving one semi-melodic G before the beat, and two semi-melodic Gs after. The first G takes its time from the sixteenth note C before; both effectively becoming thirty-second notes. After the beat, then, there are two thirty-second note Gs before the B, which must now (because of the time it's lost to the Gs in the darodo) must become a dotted eighth note. What does a fiddler make of this? I would tend to interpret that figure, starting from the E before it, as a dotted eighth E, a run of two 32nd notes from C to B, and then a tight birl on B.

This brings us to the 8th bar of the tune: a doubling on C followed by two As separated by a two pulse birl. The doubling I again render as a delayed tap, while the two pulse birl, being anticipatory, I recast as a dotted eighth A, a sixteenth A, leasing to the quarter note A.

And that's most of the tune right there; since last two bars of the first two lines are repeated in almost every part, except for the fancy ending. Because of this recycling, there are only a couple more noteworthy moments in the tune for ornamentation. Note all the sixteenth note high-As in the 2nd part (and their reprise for the fancy ending of the 4th part). These are an example of the "disappearing high A effect", where a sequence of very short high-A notes effectively blend into the drones, and seem somewhat inaudible. This creates the illusion of rests. As a fiddler I might play the sixteenth note high As quietly (maybe not at all sometimes!), and emphasize the dotted eighth melody notes.

In the third part, we see in bars 25 & 26 doublings on C, which I would render as a delayed tap; and in bar 26, a d-throw, which I would interpret as a hammer-on from C to D.

And that's pretty much it. Again, treat as many or as few of the single grace notes as you like as either sharp bow attacks or simple taps on the note change, and happy hornpiping!

Rathven Market - Pipe Version

Iain Duncan, Pitlochry

Rathven Market - Literal Transcription of Pipe Version

Iain Duncan, Pitlochry

Rathven Market - Fiddle Version

Iain Duncan, Fiddler

T = tap on the bow change, D = delayed tap

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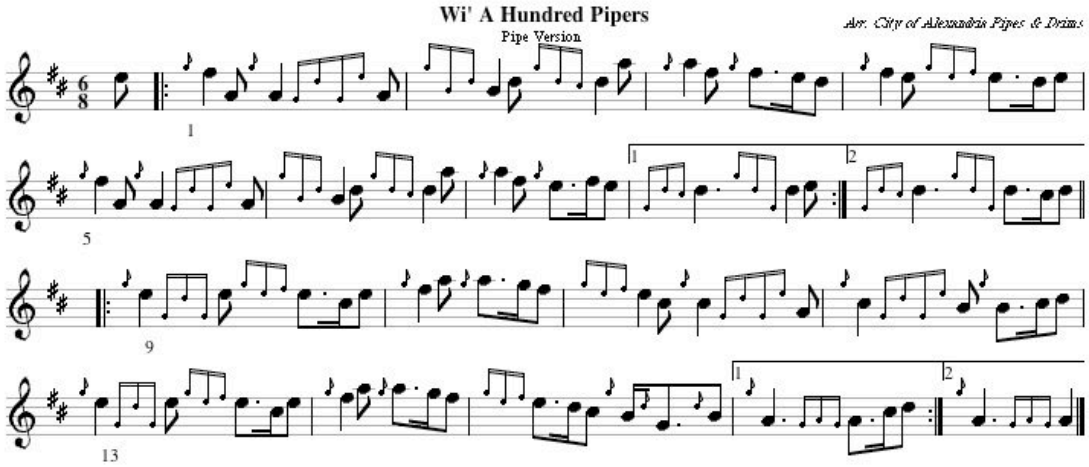
By PVSFC Board Member Peter Walker

We left our survey of bagpipe music last year with the notion of putting the ornaments together into a tune. This year, I'm going to present various types of bagpipe tune, demonstrate a few, and show how the ornamentation and idiom of the instrument come together to create the melody, and how a fiddler might try to capture aspects of "pipey-ness" in a performance

We'll begin with the 6/8 Quick March. Many of these tunes are sped up to become jigs, but we'll focus on them in the march context for now. Compound time tunes are a good way to begin in that there is very little flexibility in the interpretation of time. There are three prevailing rhythmic figures in a 6/8 quick march, which my own pipe major has us sing as vocables: the dotted quarter ("ah"), the quarter-eighth ("dai-do"), and the dotted eighth-sixteenth-eighth ("rum-pa-di"). Other figures, where they may appear, tend to be one of these rhythms in disguise. And they're always played literally as written. The tune I've chosen to explore is "Wi' a Hundred Pipers". We've had this in A-major in fiddle club before, and it takes advantage of the wider range available to the fiddle. I will give the tune in within the pipes' range, D-major in the first part and A-major(ish) in the second part. Here it is, as played by the City of Alexandria Pipes & Drums:



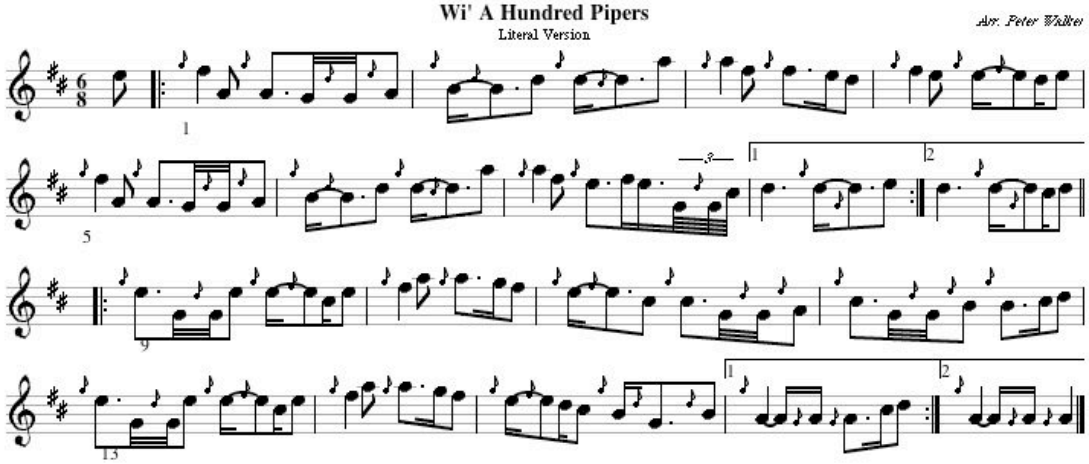
Let's first take note of the articulatory grace notes. There are numerous high

"g" gracings through the tune. These are single grace notes, or in the case of grace notes between two high "a"s, echo beats. These serve to articulate the adjacent notes, in some cases especially because they separate notes of the same pitch. A fiddler could choose to adapt these with a tap on the beat, or just an extra bit of pulse on the bow when changing notes. Note especially the "d" grace notes in bar 15. The snap figure, ornamented like this ("g" grace note before the sixteenth, "d" before the dotted eighth) is called a "tachum" in the piping world. The extra articulation, beyond that already present in a snap, is what makes this figure so characteristically pipe-like. Now I want to call your attention to the emphatic ornaments. These begin with a "g" gracing, and follow on with a second grace note delayed a bit after the beat. As discussed in previous columns, this gracing serves to emphasize a note. We see doublings paired with shakes in bars 2 & 6, doublings (the first beat of bars 11 & 15 and the second beat of bars 4, 9, & 13), a shake in the second beat of bar 8. A fiddler might emphasize these a bit more with a delayed tap.

Now comes the real fun! Look at the taorluaths in bars 1, 5, 11 & 12, and the leumluaths in bars 9 & 13. Notice how they always occur between a quarter note and an eighth note? If you'll recall my previous columns, these types of ornaments take time from the previous note (in this case, the quarter), and take up appreciable time. So what's happening here? Well, what you're really looking at is a dotted eighth-sixteenth-eighth rhythm in disguise. The quarter note loses a sixteenth's worth of time to the ornament, which becomes two 3nd low "g"s, bisected by a "d" grace note, sometimes with an "e" grace note to the next melody note. A fiddler would find a clever melody note to play in place of the ornament.

Finally, each part ends with an ornament. The first part ends with a d-throw, a leumluath-like ornament that bubbles from low "g" through "c". I'd play that as a hammer-on from "c" to "d". The second part ends with a birl, but not the kind fiddlers are used to. It's a 2-pulse burl, basically stealing a little time from the end of the first beat to give to the second.

Here's what my "literal" rendering of this tune looks like.

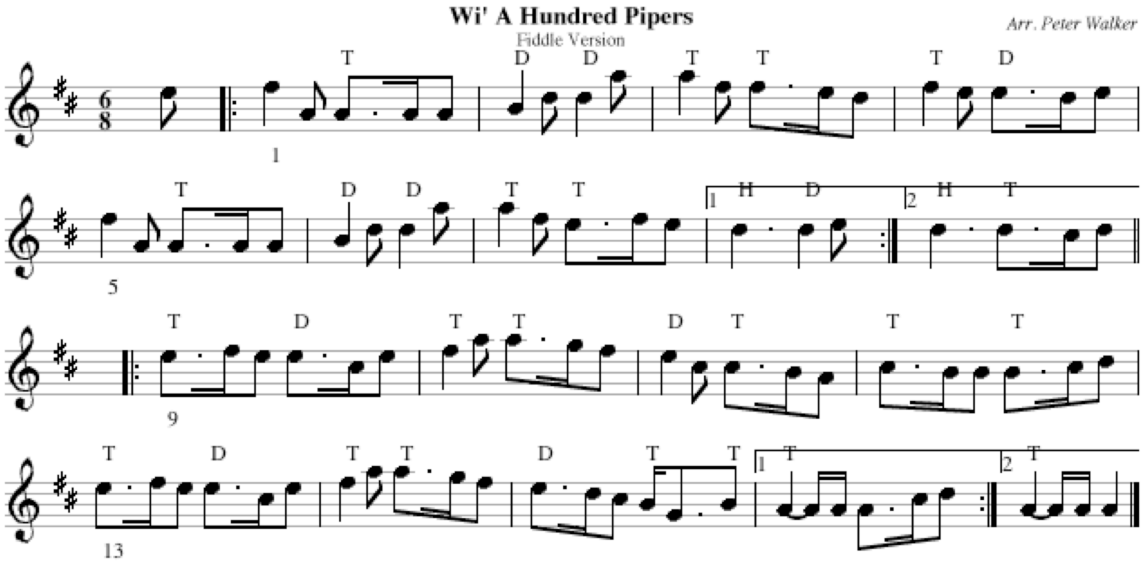


What might the fiddle adaptation look like? Check in next time and see.

The Piper's Corner

By PVSFC Board Member Peter Walker

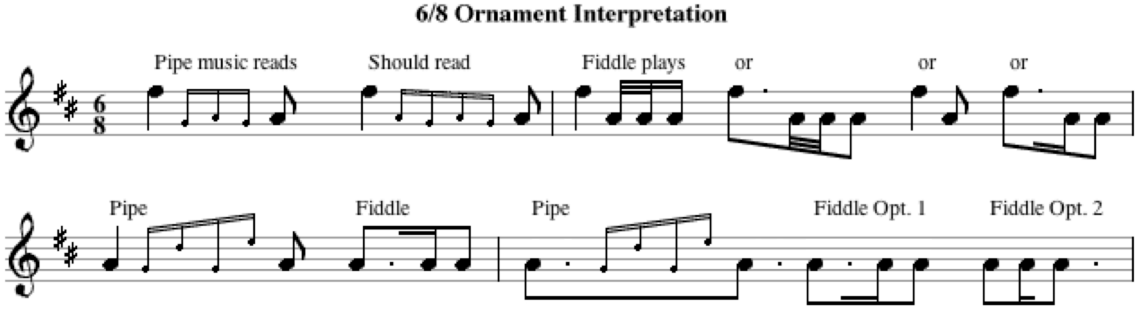
I last left you with the pipe setting of "Wi' A Hundred Pipers", a tune that celebrates the a legend that when Prince Charles' army captured Edinburgh and marched up to the castle, he was accompanied by a troop of pipers of that number (though the Jacobites never held the castle, and the reported number of pipers would have been an unlikely 3% of his total army at that point!). Often played as a jig, I gave it as a 6/8 march, and invited you to suggest the final fiddle setting of the tune. Here's my take!



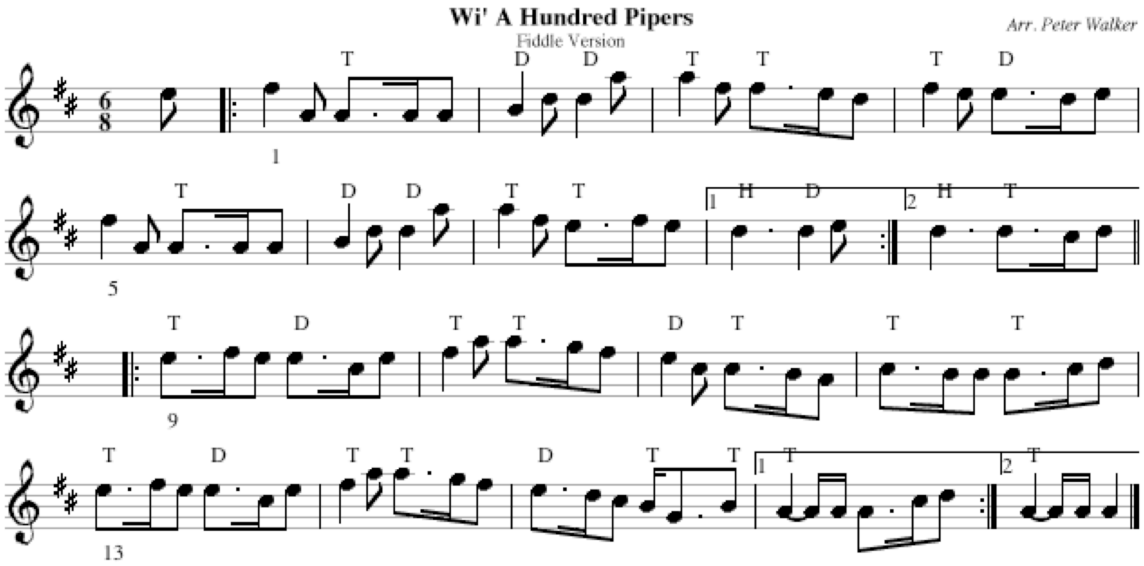
Before moving on to other rhythms, I'd like to do one more 6/8 march that's getting a lot of play at our Royal Mile jam session. It's a lovely tune called "The Heights of Cassino", remembering the four bloody Battles of Monte Cassino in January through May 1944. After a failed American attempt to take the strategic mountain in January, the Allies destroyed a 1500 year old abbey atop it, and the German forces moved into the highly defensible ruins, putting up fierce resistance, fending off a combined Rajput, Gurkha, and Maori assault; finally a combined force of 20 divisions of American, British, Indian, New Zealand, Canadian, Free French, Moroccan, and Free Polish troops captured the town and monastery after terrible losses on all sides. Like the 2/4 March The 24th Guards Brigade at Anzio, another tune about the Italian campaign in WWII, there is to my ear no glory in this melody, but rather an unburdening of a sweet

sadness. Here is another tune that should never be mistaken for a jig; but played as a stately pace, maybe at around 88-92 beats per minute.

The tune, given in the insert, is melodically simple; the second part differs from the first only by the first bar in each line; as does the fourth from the third. It's not especially heavily ornamented, but is carried on the characteristic heavily-swung 6/8 rhythm. The interpretation of the ornaments is as in Wi' A Hundred Pipers, with a couple of interesting exceptions.



The first is probably a typo. In the next to last bar of the 3rd and 4th parts, we see a quarter note F to an eighth note A, with a 2-pulse birl in between. This is almost certainly supposed to be a three pulse birl, as it's essentially impossible to play a 2-pulse birl from any note other than low A. There are a number of ways to interpret this. One could play a quarter note F and then a very tight birl on the eighth note A. Another possibility is that the 2-pulse birl was notated not for the execution, to indicate timing. As you'll recall, a 3-pulse birl is like the fiddle birl, starting on the beat. But a 2-pulse birl is anticipatory, taking its time from the previous note and ending on the beat. If this is what is indicated, then the interpretation would be a dotted eighth F, followed by a birl on a second dotted eighth A. This is the interpretation I have chosen. Additionally, one could simplify either of these rhythms by excluding the birl.



The second interesting ornamentation is a dotted eighth A, taorluath to dotted eighth A, seen in the second bar of each line of the last two parts. It's an interesting figure. One might decide to interpret it as a swing triplet, like the quarter note A taorluath to eighth note A in the first bar of the tune. But the composer deliberately chose this rhythm. If we remember that taorluaths take their time from the previous note, and take about a 16th note of time in a 6/8, the alternate interpretation, which I have favored, is three low A notes: an eighth, a sixteenth, and then a dotted eighth, reversing the usual 6/8 march rhythm. It's very counter instinctual to play this, so one might revert to the simpler alternative.

So here's my fiddle version. As usual, "T" denotes a tap on the beat, "D" a tap slightly after the beat, and "H" a hammer-on, in this case, from C# to D.

The Heights of Casino March P/M D. MacRae

Now, the fiddle adaptation:

The Piper's Corner

by PVSFC Board Member Peter Walker

4/4 Marches: Pointing the Way

We move now from the compound time, or 6/8 march, to the simple time, in this case in 4/4. The vast majority of pipe marches one might hear performed by a street band will be in 4/4 time, and though often compositionally far simpler than the 6/8 marches we've looked at previously, they do present their own unique feature: a bending of the strict interpretation of time known as "pointing".

We should step back for a moment and remember that, while a reeded wind instrument, the bagpipes do not allow for embouchure, not only because the pipes are removed from direct contact with the airstream by the bag (taking control of air velocity out of the equation), but because the bag provides air to multiple pipes simultaneously, and any changes in pressure will not only alter pitch as well as volume, but will do so differently for the chanter and each of the drones, putting the pipes out of tune with themselves (and any other instrument around them).

This puts the bagpipe in the awkward position of being incapable of stressing particular notes in keeping with the meter or scansion of the music. The bagpipe's volume is fixed by the physics of the chanter: in the case of a conical bore chanter like the Highland pipes, the lowest note is the loudest, the highest note is the quietest, and there's nothing the player can do to accent a given note (notably, cylindrical bore chanters like the smallpipes reverse this volume profile - the highest notes are the loudest, and the lowest the softest).

This means that all stress and accent on a bagpipe are implied, rather than directly expressed. This is accomplished by two methods. The first is by emphatic ornamentation, such as single grace notes, or double-pulse emphatic ornaments like doublings and shakes, which we have previously discussed, or even grips.

But the second method uses a form of agogic stress where a dotted note is given additional time at expense of the flagged note that follows it. This is what is meant by "pointing". The degree of pointing, that is, how much of the flagged note is stolen by the dotted note, can vary to imply different levels of stress, which we will see in 2/4 marches and strathspeys, but in the case of 4/4 time, the

general rule for pointing is "as much as possible!" We hold the dotted note for as long as it can be held, and play the flagged note as briefly as it can be played while still being perceived as a melody note. Because the beat in 4/4 time is on the quarter note, the largest note that can be pointed is the dotted eighth; a dotted quarter is not eligible for this treatment, as it ends on the upbeat, which is generally inviolable in pipe music. Pointing can occur in 6/8 time, but because in this case the dotted eighth ends on the upbeat, the largest note eligible for pointing is the dotted sixteenth. While pointing dot-flag pairs, one should remember that even eighth notes are not played with any stress, but perfectly evenly; it is the contrast between the highly pointed pairs and the perfectly even pairs that makes the 4/4 genre of music to stand out.

The tune I have given as an example is "Jack's Welcome Home" by Rob MacNeil, with the pipe setting used by City of Alexandria Pipes and Drums here:

The ornaments used are typical of those seen in previous tunes. I do call your attention to one figure, at the start of the second bar in lines seven and eight - a doubling on a snapped figure. A doubling on a snap, seen frequently in

strathspeys, is meant to convey a triplet figure similar in timing to an open birl. Pointing doesn't just affect dot-flag notes. As we have previously seen, semi-melodic ornaments like grips and taorluaths often substitute for flagged notes, and as such are often eligible for pointing. In this tune, the taorluaths in the first and second lines of the tune are prime examples of this effect.

My attempt at a fiddle adaptation is here, using my standard convention of "T" for a tap on the beat, "D" for a delayed tap, and "H" for hammer-on. I have notated the pointing by replacing the single-dotted eighth notes with triple-dotted ones, though the timing is inexact, this conveys the severity of the agogic stress used in a 4/4 march.

Next time, we'll take a look at 3/4 marches.

The Piper’s Corner

by PVSFC Member Peter Walker

Retreat!

Last spring, we looked at 4/4 marches, and the use of pointing to imply stress on an instrument not capable of adjusting its volume. What, again, is pointing? Pointing is the proccess by which, in a figure subdividing a beat into a doted note and a flagged note, where the dotted note is held beyond its alotted time, at the expense of the flagged note that follows, in such a way that they still add up to the original combined length of time; and in this way, imply stress on a note.

The stress on the note can be direct (a pointed dotted eighth can feel “bigger” than an unpointed one), or it can be indirect, by building tension in a pick-up note, the tension being resolved on a stressed beat. As with the 4/4 march, the 3/4 march doesn’t differentially point to imply varying levels of stress; generally, the candidates for pointing are held to the maximum level possible.

There’s another curious thing about 3/4 marches. When it comes to bagpipe marches, everything is about the down feet, not the down beat. These marches are marched to. In formation. With other pipers, and drummers even! And they have to move together. It's all real simple. For a a quick march, the pipe major cries, "Right. Quick. March." and you start walking to that cadence, left foot first. Left, right, left, right. The drums immediately begin with four beats of rolls on the first beat. On the fifth beat you strike in your drones. On the seventh beat you play what's called the "preparatory E" on the chanter, and the ninth beat starts the first bar of the tune. If there is a pick-up, it's taken out of the time of the preparatory E, so that the first beat of the first bar is the ninth beat since you started marching, always on your left foot. As importantly, you stop playing on right foot. Always. Even when marking time (marching in place). Even at rest.

This is all well and good for tunes with an even number of beats per measure. But what about a 3/4 march? Two very popular tunes of this type are *The Green Hills of Tirol* and *Lochanside*. Each bar contains a heavy beat, a light beat, and what's usually a pick-up to the next bar, meaning the last note of the tune would be the second beat of the last bar. If you were to play this as I describe, you would end on the left foot. That won't do! So we've got to start the tune a beat later somehow. Now, a sensible person would tell the pipers, "In the case of 3/4

(or 9/8) tunes, there's an exception. It's two beats of preparatory E **plus** the beat of pickup, instead of minus, and you start the first bar of the tune on your right foot". But that involves math. So pipe tunes are written so that the first beat of every bar is what should be the pickup in the previous bar. Look at one of the tunes I mentioned in the fiddle club collection. Look at it from a phrasing standpoint. The heavy beat, from the standpoint of the melody, is the **second**, not first, beat of each bar. This is completely contrary to the meter or 3/4, and it's entirely designed to get you to end the tune on the right foot, if it begins on the left.

Now try playing one of these tunes as written, but making the first beat of every bar the heavy beat. Sounds strange, forced, doesn't it? It should! Now make the second beat of each bar especially heavy. There, that's it. I suppose we should be writing those tunes for fiddlers and other musicians with the pick-ups in their proper place - but the horses left that barn long ago.

So how does this look? I've included two versions of the Pipe tune *Lochanside*. The first, is the version played by the City of Alexandria Pipes and Drums. The second, at is how a fiddler might play it, noting the pointing and ornamentation, using my standard convention of "T" for a tap on the beat, "D" for a delayed tap, and "H" for hammer-on. I have notated the pointing by replacing the single-dotted eighth notes with triple-dotted ones, though the timing is inexact, this conveys the severity of the agogic stress used in a 3/4 march.

Lochanside P/M John McLellan DCM (arr. J.G. Sprague)

Lochanside - "Literal" Fiddle Version

P/M John MacLellan, Dunoon

H - hammer-on
T - tap (on the note change)
D - delayed tap

The Piper's Corner

by PFSFC Board Member Peter Walker

In this column, I began by talking about a lot of the ornamentation that pipers use, and how a fiddler might begin to adapt those ornaments. I then went on to discuss the march repertoire, and issues regarding phrasing of the various types of march. Before I move on to how pipers interpret strathspeys, reels, and jigs, which you already know how to play, I'd like to spend some time discussing the most prestigious, and to many, the most mysterious music composed for, and played on pipes: *ceol mòr,* known today as *piobaireachd* (pee-pear-ack).

The term *ceol mòr* means "big music"; and this was the primary art music of the Scottish Highlands, and the peak period of composition appears to be the 17th and early 18th centuries. It appears, in many ways, to have grown out of an older tradition practiced on the *clàrsach*, the wire-strung harp that preceded the Highland pipes as the highest-status instrument in Gaelic culture. The modern term for the music, *piobaireachd* (often Anglicized as pibroch), simply means "piping" - and that the term is synonymous with *ceol mòr* tells you a lot about its importance.

But what is *ceol mòr*? In short, it's a theme-and-variations form where the themal melody is never explicitly stated. The piece begins with a melodic variation on the theme, called the *ùrlar* (ground). There might be a second melodic variation on the ground, and then the tune proceeds with a series of ornament-based variations, returning to the ground at the end. The melody will not be played in time, but is phrased according to its meter and scansion - but more on that later.

Because piobaireachd is not played in strict time, the only way it can be learned is by ear. This statement is as true for fiddlers dabbling at adapting the idiom to their instrument as it is to pipers themselves. This, then, is not so much a guide for how to learn to play *piobaireachd*, as it is a guide to help you know and understand what you're hearing when you're listening to a *piobaireachd*, and some ideas on how one might adapt it to a different instrument.

Traditionally, pipers would learn a tune first by singing it with their instructors, using a musical language known as *canntaireachd*. This language, roughly, translates the pitch of themal notes as vowels, the gracenote that

introduces them as a consonant, and uses a series of fixed vocables to describe ornaments that often imitates their rhythmic structure. Once the tune, and its particular phrasing, was learned by singing, the student would move to the practice chanter. Nowadays, people learn the notes from sheet music instead, but singing the tune to vocables to get its phrasing is still a common practice, though the formal structure of the *canntaireachd* is usually abandoned.

How then does one begin? My own instructor once told me of a phrase common to *piobaireachd* teachers: "To get to the mother, first get to know the daughters". By this, he meant that the basics of the interpretation of a tune, insight on the ground variation can be found in the variations. Because of this, we'll actually begin by looking at variation sets first, before coming back to the ground.

The Lament for the Old Sword

We'll begin by looking at *Cumha an t-Seana Chlaidheimh* (Lament for the Old Sword). I will be using the Piobaireachd Society setting for this tune. It's a pretty straightforward theme, with a fairly conventional set of variations. The meter is 4/4, with a scansion in the ground of "heavy-light-medium-heavy". Here is the skeleton of the theme, though it's never played in this form.

Try playing through the skeleton to get a taste of the melody - though it's not very satisfying in this form! I've added a rough guess at the chords, so that the underlying harmonic structure of the tune is revealed. The harmonic structures common to *piobaireachd* are a discussion for the future, but I'll point this one thing out now - whenever the tune is in an "A" chord, the melody is consonant with the drones (which play "A" continuously through the tune). When the tune is in a "G" chord, the melody is dissonant with the drones. It is the tension built by dissonant phrases, and their resolution into consonance (or not!), that drives much of the music.

How do piobaireachd variation sets work? The most common form is to adorn the themal skeleton in the following way, so that each themal note in the skeleton above is expressed as:

(introductory grace) - themal note - ornament - connective note(s)

Each variation will have a characteristic ornament and connective note, and the value and type introductory grace will more strongly depend on the pitch of the themal note. The first “variation” is the ground, so we’ll start with the second.

Variation 2: Dithis singling

The first variation played in this tune, after the *ùrlar*, is called the *dithis* (gee-ish), which is the Gaelic counter for "two persons". One might read even it as "duet". It sets the rhythmic pattern for all variations to follow. Ornamentally, each themal note is introduced with a single grace note (generally, high G, where possible), followed by a connective note (usually low A - always in this tune). The connective note is preceded by a second grace note; E when the themal note is low G, A, B, C, or D; high G or high A otherwise. The first line of the variation is shown below, and one can easily extrapolate the rest of the variation from the themal skeleton:

Important to consider is the timing. The phrasing of the theme is to express the length of the notes according to their weight in the phrase, a principle called "scansion". In the variations in this tune, the scansion is expressed as a simple "heavy-medium-medium-heavy", with the first and last themal note of a bar as the heaviest. Additionally, *piobaireachd* is "back-heavy", meaning the ends of phrases are more important than the beginnings. Thus, the end of a bar will be heavy; the end of a 2-bar phrase will be very heavy, and the end of a 4-bar line will be very, very heavy. Ends of parts and ends of variations will receive additional time. I have marked "M" for "medium", "H" for heavy, "VH" for "very heavy", and VVH for "Very, very heavy". The additional time between each degree of stress - expressed as duration - is incremental and subtle; and it is this

timing that requires the most practice.

This principle holds true for all the ornamental variations in this tune - but only to the themal notes. The connective notes are unaffected by the scansion. Within *piobaireachd* variations, connective notes, and ornaments for that matter, are all of identical length to one another - and the connective notes are often of similar size from variation to variation. This is a difficult task, especially while simultaneously applying the scansion to the themal notes.

Moreover, the approximate timing - scansion aside - of the *dithis* variation is a bit different from written. To get a closer approximation of what's played, one can reimagine the variation in 12/8; with the themal notes occuping 5/16 of time (longer, with fermatas of a value per the phrasing discussed above), and the connective note occupying 1/16 of time. This is illustrated in the rewrite of the first two bars of the line below:

This variation would be played in the neighborhood of 75-80 themal notes per minute, not accounting for the fermatas.

How might a fiddler interpret this variation? Well, one might perform a third-finger tap in place of all the grace notes; but the most important thing about interpreting this variation is the relationship between connective note, always low A in this tune, and themal notes; and the phrasing of the themal notes. I show the first few bars in the next section.

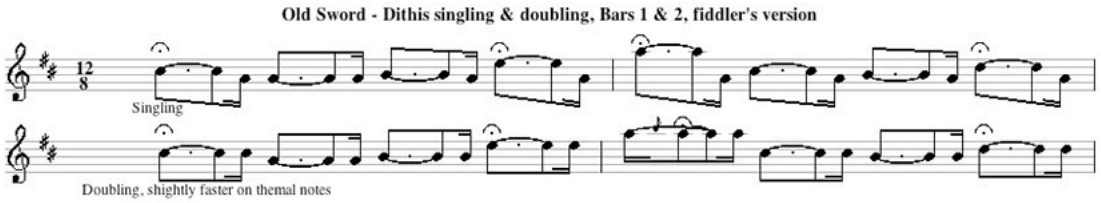
Variation 3: Dithis doubling

Having looked at the *dithis* variation last time, we now move on to the remaining variations, beginning with the "doubling" of the *dithis*. The phrase "doubling" can mean several things in piping, in case of a *piobaireachd* variation, it usually means a repeat of a variation, slightly faster, sometimes with a simplified structure. In the case of the *dithis* doubling variation, it takes the basic form of *dithis*, but rather than going to low A as a connective note, going to the same pitch as the themal note, with (usually) the same grace note as in the *dithis* in between. The only exception is the high A, where an ornament called,

confusingly, a half-doubling, is played on the themal note, and thumb swipe to separate it from the connective note is performed. The first four bars of the *dithis* doubling are shown below:

The tempo will be picked up ever so slightly over the *dithis* singling.

How might a fiddler interpret this variation? As with the *dithis* singling, a grace note on note changes would be the most literal approach. But this grace note is mostly unnecessary, as a change in bowing direction will achieve the necessary articulation. A delayed tap on all the high As might convey the effect of the half-doubling ornament on this note in the *dithis* doubling variation. I've conveyed the first two bars of the *dithis* singling and *dithis* doubling below, in 12/8 time, to show how it might actually be played. Each themal pulse will receive 3/8 of time, before scansion is applied.



Variation 4: Taorluath

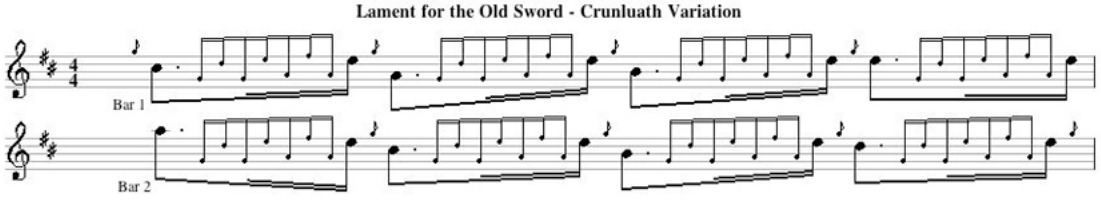
A term of obscure origin, *luath* meaning "a movement" in Gaelic, the *taorluath* (tor-loo-ah) variation is built around an ornament we've discussed earlier, but I'll recap here: taking its time from the preceding melody note, the ornament is a short low G, bisected by a D grace note, and with an E grace note at the change to the next melody note. In the case of the *taorluath* variation, the most common connective note after the ornament is low A - and is exclusively such in this tune. The important parts for a fiddler are the low Gs and the low A; the D and E grace notes are essentially just articulations.

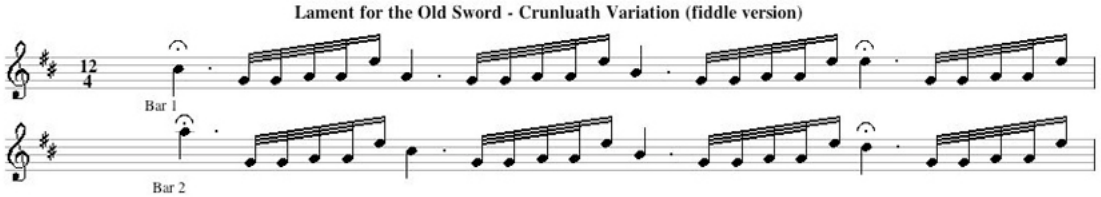
Here's the bar of this variation to show the pattern, followed by how a fiddler might interpret the first four bars. Timing is difficult to convey, but I've given my best guess. I've marked the fiddle versions 12/4, rather than 12/8, from now on to make them easier to read, so now a themal pulse takes 3/4 of time. The important thing to realize is that the two sixteenths followed by the eighth are

fairly open, not like a tight birl you might see in a reel.

Variation 5: Crunluath

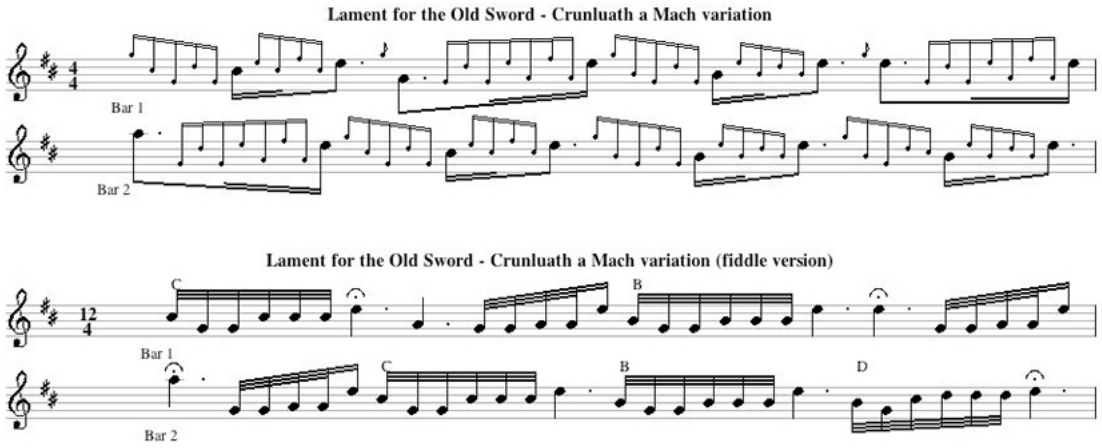
Again, the meaning of *crunluath* is obscure, though I've seen it rendered as "the crowning movement" and "the round movement". Curiously enough, a figure of this name appears in Bunting's book on Irish harping as a harp ornament. A *crunluath* ornament is a *taorluath* to a low A, which is itself bisected by an F grace note, generally followed by an E connective note. It's the largest ornament routinely played in *piobaireachd*, and it's a big one. Here's again the first bar written out in pipe notation, followed by the first four bars of a fiddler's interpretation.





Variation 6: Crunluath a Mach

But we have one more variation in this tune. The phrase *a mach* is Gaelic for "outward", though in this case it might mean "inside out"! In this, the formula of the previous variation of "themal note, *crunluath* to connective note E" is changed for only three notes: B, C, and D. On these notes, the themal note is absorbed into an introductory ornament, and it's the connective note E that's held out the length remaining length of the “beat”. For these notes, it's the connective note E, and not the themal note, to which scansion is applied. The remaining notes are unchanged from the *crunluath*. I've shown the original first two bars, and then the fiddler's representation, to show how these three notes are realized.



To help make sense of this variation, I've notated the putative themal note above the figure whenever it is B, C, or D. This is a difficult variation, and is often left off in competition. Indeed, piping associations maintain a list of the only *Piobaireachd* tunes where this must be played in competition; if a tune is not on that list, even if it has a *crunluath a mach* variation in the official settings, one may skip it. If this variation is played, the tune ends after this variation, and a voluntary "dismount" to the tonic (A, here). If not, one returns to the ground, or more commonly, the first line of the ground (without repeat) before ending.

Combining what I've shown above with the themal skeleton in the previous part, you are now equipped to play all the ornamental variations in this tune. The important thing to remember in the variations, tempo-wise, is that the connective notes will feel fairly consistent from variation to variation, and, in this tune, there will be the perception of a slight tempo increase with each variation. In some cases (like between *taorluath* to *crunluath*), the perception of tempo increase mainly comes from the fact that the ornament is longer, eating up more of the themal note's time. But it's important not to forget the scansion - the first and last themal note of every 1-bar phrase should be played heavier than the notes in the middle, and the ends of each 2-bar phrase, 4-bar line, 8-bar part, and 16-bar

variation should each gain increasing, if subtly incremental, weight.

The ornamentation in the *taorluath*, *crunluath*, and *crunluath a mach* variations may seem daunting, but the best approach is how pipers learn it - practice the ornaments as a module, slowly, evenly, and then pick up the pace until you can play through them quickly and consistently. The *taorluath* and its connective note should feel like a 3-note ripple between themal notes; the *crunluath* and its connective note like a 5-note ripple between them. The *crunluath a mach* on B, C, and D should feel like a 6-note ripple before the elongated connective note E. In some cases, this will combine with the *crunluath* of the preceding pulse to create a 11-note ripple between the previous themal note and the elongated connective E!

Now it's time to hit the ground (*ùrlar*) running.

Variation 1: Ùrlar

Not all variation sets are as formulaically constructed around the themal skeleton as Lament for the Old Sword, and we will cover tunes where this is the case later, but the themal skeleton is always more controlling over these than it is over the ground, or *ùrlar* (Gaelic for "floor") variation. The *ùrlar* can be thought of as the "main melodic variation" of *piobaireachd*, though sometimes the *ùrlar* has its own variations, again to be discussed later. But most notably, the *ùrlar* may put weight on what would otherwise be connective notes, rather than themal ones, or change the themal note in a few places. Similarly, unlike the variation sets, the ornamentation can not be formulaically applied to get from the themal skeleton to the full ground variation. Each ground has to be learned separately. Similarly, while meter and scansion may be simplified or subdued in the rhythmic variations, it is fully expressed in the ground. For example, this tune's scansion is "heavy-light-medium-heavy"; but in the variations, that's often simplified to "heavy-medium-medium-heavy"; but in the ground, the more complex weighting is used.

So let's look at the ground of this tune.

We'll take the ornamentation & phrasing bar by bar. But don't fear: there are only six unique bars (and two are extremely similar!).

Line 1, bar 1: The first pulse is not snapped, and the C is played fairly open. The ornament between the As is a leumluath, and is two low Gs separated by a small D grace note. The ornament between the A and the B is called a "cadence" or "introductory E". Here, it essentially is a very short G grace note, followed by longish E and a medium D grace note before the themal pulse C. Cadences also add weight to the preceeding note, so the scansion of this bar is more correctly "heavy-medium-medium-heavy". The ornament between the C and E is an "edre"; basically short semi-melodic notes (EAA), with a tiny F grace note between the As.

Line 1, bar 2: The first ornament, between the high A and the C, is a "hodro". Similar to the "edre", it consists of three short semi-melodic notes (CGG), with a tiny D grace note between the Gs. The next ornament is another cadence, same as in bar 1. The third ornament is another edre, again as per bar 1. The final ornament is a "d-throw". Piobaireachd usually uses the light version of this ornament, so I'll interpret here as a semi-melodic G and C, separated by a tiny D, before going to the themal pulse D. The final pulse ends a phrase, so it should be a little extra heavy.

Line 1, bar 3: Same as line 1, bar 1.

Line 1, bar 4: Similar to bar 2, the ornament between the high G and B is a "hiodro", and is identical to the hodro in Bar 2, except that it begins and ends on low B. The final ornament is a d-grace note birl, but here would be played fairly open, with three semi-melodic grace notes (DAA) with short low Gs between the two As, and the last A in the ornament and the themal pulse A. The final A ends the line, so it should be heavier than the last note in line 1 bar 2 on the first repeat; and a bit heavier still on the second, as it ends the part.

Line 2, bar 1: First ornament is an edre, as above; second is a d-throw.

Line 2, bar 2: First ornament is a hodro, then a cadence, than a d-throw. Again, the cadence extends the value of the previous note, and the final pulse should be a bit heavier, to indicate the end of the phrase.

Line 2, bar 3: Same as line 2, bar 1.

Line 2, bar 4: Almost the same as line 2, bar 2, but holding the B, and with a hard percussive ornament to A at the end. The weight of the final pulse should be similar to the first repeat of line 1, bar 4.

Line 3, bars 1-2: Same as line 2, bars 1-2.

Line 3, bars 3-4: Same as line 1, bars 3-4. The only thing to note is that the scansion requires that the final A be held longest here, as it is the end of the variation.

Here's how one might most literally interpret this, removing all the very short graces and leaving in the semi-melodic ones.

You'll be able to find video of the pipe, and suggested fiddle, versions of this tune in the "Piper's Corner" playlist at Fiddle Club's new YouTube Channel, named PotomacValleyScottishFiddle:

https://www.youtube.com/channel/UCkJHDa9hqkYu0TZ08vn6sPg