

The Piper's Corner

by PVSFC Board Member Peter Walker

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.

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.

Bagpipe Gracing 2

Fig 5: Half & Hi-A doublings & shakes

Fig 6: Cadence & False Half-Shake (Reel)

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.

Bagpipe Gracing 3

Fig 7: Doubling as triplet (Strathspey)

Fig 8: Jig Shakes

Fig 9: Birls

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!