

# The Design of It: Patterns in Pibroch

The secret to composing, memorizing, and appreciating *ceol mór*. (Part II)

by Barnaby Brown

## GEOMETRICAL AND LYRICAL PRINCIPLES

There are two opposite forces in pibroch design. “Geometrical” principles of pattern, order and symmetry have one effect on the brain, while “lyrical” principles of spontaneity and tunefulness have quite another effect. In the *Úrlar* of most pibrochs, geometrical and lyrical principles operate in partnership, but in some works, the *Úrlar* is relentlessly geometrical, devoid of melody. Only in a couple of instances is the *Úrlar* a pure, uncomplicated tune, without any intellectual cleverness. Generally, professional pipers of the seventeenth century showed off their skill in the craft of composition, producing results that are comparable in intricacy and sophistication to the designs found in the metalwork, sculpture, and poetry of the Gaelic culture of the time.

## INTERLACED

**A B A...hihorodo**  
**B A B...hiharin**

In the Interlaced family of musical designs, geometrical and lyrical principles operate hand in hand. Key works in this family are (with their Piobaireachd Society Book and page numbers) “The MacDonalds’ Salute” (11: 340), “A Flame of Wrath for Patrick Caogach” (5: 139), “Lament for MacSwan of Roaig” (1: 39), “The Old Men of the Shells” (7: 207), and “Lament for the Castle of Dunyveg” (1: 25). Fundamental to the Interlaced design is a strong cadence on B in the 4th eighth, normally ending on repeated “hihorodo” beats. These are answered in the last eighth by repeated “hiharin” beats on low A.

The contrast in sonority between A and B phrases can be either slight or bold. A popular work in the eighteenth century, “War or Peace,” uses bold contrast to produce a more battle-like effect. In Example 3a, the A phrase uses the consonant notes A-C-E, to contrast with the dissonant sonority of the B phrase (highlighted in red), which lies on the notes G-B-D, clashing with the drones. The four repetitions of “hodroha” in the 4th eighth are answered by the four “haninun” beats in the last eighth. “Haninun” in MacCrimmon canntaireachd corresponds to “hiharin” in Campbell notation.

This is one of several instances in pibroch where an editor—in this case, Angus MacKay—has wrongly reconstructed a lacuna, or memory lapse. Example 3a was transcribed by Niel MacLeod of Gesto from the chanting of Iain Dubh MacCrimmon (c.1731–c.1822), and corresponds with the staff notation of the other sources, with one small exception: it is unique in having 5 “hodroha”s in succession. Other sources have 4 “hodroha”s (“hiotraha” in Campbell notation), leaving the 5th eighth a beat short. This is probably what MacKay was taught. In Example 3c, Patrick MacDonald made up the missing beat in the measure by adding a rest. In Example 3d, we see that this rest has been replaced by a low A note. There can be little doubt that this is Angus MacKay silently improving what he had been taught. In this case, he has corrupted the phrase, transforming its identity from B to A.

“War or Peace” is an exciting musical work when liberated from the trappings of modern competition style, which do not suit it. It was widely

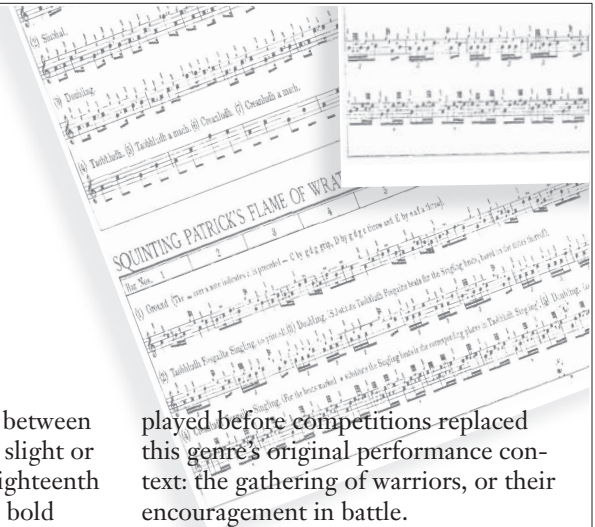
played before competitions replaced this genre’s original performance context: the gathering of warriors, or their encouragement in battle.

## LYRICAL INTERLACED

**A B A B**  
**C A B A'**

The lyrical principal comes to the fore in the Lyrical Interlaced *Úrlar* design family, which includes “Lament for the Children” (3: 99), “Hiotrotraho hiobabem” (15: 535), “Salute to Donald” (8: 229) and “The Pretty Dirk” (11: 318). It is closely related to the Interlaced design, with the distinction that here the 2nd quarter is a repeat of the 1st quarter, and the final eighth recalls the 1st eighth. “Hihorodo hao” (Example 4) is an example of outstanding melodic beauty, and it is unfortunate that such short works find no performance outlet today outside the rare recital. Modern institutions of training and patronage devalue works that do not fit the twentieth-century competition mould. As a result, about 25 per cent of the pibroch repertoire is still unpublished.

The Lyrical Interlaced design family has much in common with the *rounded binary* or *sonata* forms that have dominated Western classical music since the early eighteenth century. The 1st quarter of the *Úrlar* corresponds to the *exposition* of sonata form, which is normally repeated. In the case of “Hihorodo hao,” though, there is a touch of genius: one note is lifted up a scale step on the repeat (highlighted in Example 4, phrase A<sub>2</sub>). In sonatas and Lyrical Interlaced movements, the sec-



ond half begins with a *development* section, **C**-, which can extend into some or all of the 6th eighth—hence the dash between C and A in the schema. When the opening material re-emerges, -A **B** A', this is known as the *recapitulation*. Unlike most sonatas, the recapitulation of Lyrical Interlaced works is dovetailed into the development, creating a seamless melodic flow. The dovetail joint in Example 4 (phrase A<sub>3</sub>) is a fine example of melodic craftsmanship.

The last eighth of the schema, A', has an apostrophe mark because the recapitulation always incorporates a surprise, something to startle the listener. Western classical composers did exactly the same thing, generating musical shocks of varying kinds to keep the audience engaged, and to announce the end of a formal unit. The surprise event in “Hihorodo hao” occurs in the last bar where, instead of G-B-D, we have A-B-E. This marks the culmination of a process in which phrase A is completely transformed in four progressive steps (highlighted in Example 4). This transformation creates a sense of musical achievement and has an uplifting emotional effect.

Despite being a small group, the works in the Lyrical Interlaced design family are rich in imagination and promiscuous in their relationships with other designs. One of several works that lie on its borderline with other design families is “The Marquis of Argyll’s Salute,” in its *canntaireachd* settings (10: 280). When the “hiharin” and “hihorodo” beats are removed, its construction is similar to “The Pretty Dirk” and “Salute to Donald”. However, with the cadential beats in place (as the composer intended), it has equally strong Progressive features.

### PROGRESSIVE

A<sub>1</sub> A<sub>2</sub>  
A<sub>3</sub> A<sub>4</sub>

Due to the simplicity of the schema—four similar quarters—the Progressive

design group conveniently includes works that don’t fit into any other category. It is, in effect, a set of variations on the 1st quarter. This theme within a theme is reworked and transformed in the course of the *Ùrlar*, just as the *Ùrlar* is reworked and transformed in the course of the pibroch. Well-known examples of this design are “The Finger Lock” (1: 8), “The MacLeods’ Salute” (12: 372), “Lament for Donald of Laggan” (8: 219), and “Lament for Mary MacLeod” (5: 155).

“The Unjust Incarceration” (2: 42) has a 5th “quarter,” and perhaps this is the composer, Iain Dall, expressing indignation against authority, but it provides one of the clearest examples of the progressive, dramatic build-up typical of this group. Each of its five “quarters” grows out of the previous one, brilliantly evoking human anguish, welling up to new emotional heights on each pass.

Usually, the first two quarters in Progressive works are identical, or nearly so, and melodic transformation becomes serious only in the second half. The most common type of progression, from quarter to quarter, is the “lifting” of a few notes by one or more scale degrees (as seen in the transformation of phrase A in “Hihorodo hao,” Example 4). In Example 5, “Lament for the Young Laird of Dungallon,” the lifted sections are highlighted in red.

Many Progressive works have a design that is similar to those in the Rounded Lyrical design group. The crucial distinction comes in the final eighth, which in Rounded Lyrical works is a recapitulation, repeating the 2nd eighth. Progressive works continue progressing, right to the end.

### ROUNDED LYRICAL

A<sub>1</sub> A<sub>2</sub> A<sub>1</sub> A<sub>2</sub>  
B<sub>1</sub> B<sub>2</sub> B<sub>1</sub> A<sub>2</sub>

The Rounded Lyrical design family is the largest and most homogenous of the groups introduced so far. The

schema is of sufficient interest in itself that, often, little or no modification of the component phrases occurs—they are simply repeated according to the schema. This is the case in “Struan Robertson’s Salute” (Example 6), which is also typical in having a **B** phrase that climbs higher than the A phrase. Other examples include “Lament for the Old Sword” (3: 77), “The Pride of Barra” (5: 151), and “Lament for Patrick Og MacCrimmon” (3: 83).

### PHRASE ELONGATION

In many types of music, composers do not want phrase lengths to be regular throughout the composition. In most dance music, regularity of phrase is essential, but in pure music, like pibroch, there is no such requirement. On the contrary, techniques to vary phrase lengths and metre are found in every great composer’s toolbox. The craft of pibroch is no exception.

In their pre-MacKay settings, the **B** phrases of “The Piper’s Warning to His Master” are elongated from 4 to 6 beats (Example 7). This Rounded Lyrical design is regular in every other respect, and I am not convinced that the elongation of the **B** phrases is sufficiently unusual in seventeenth-century pibroch to constitute an effective “Warning.” A similar thing happens in “Sir Ewin Cameron of Locheil’s Salute” (Example 8). In each case, the elongation is carried through the variations. Examples of this type of metrical sport are found in all the major sources, but it is not a compositional technique with which Angus MacKay or the Piobaireachd Society editors were comfortable. Every example of it, apart from the variations of “The Parading of the MacDonalds” (7: 217), is suppressed from the pages of the Piobaireachd Society Books.

Compare Example 8 with the Society’s edited version in Book 10, page 284. Angus MacKay’s original is a regular Lyrical Interlaced design, with a development that fills the 3rd quarter. As in “Hihorodo hao,” the A phrase is totally transformed in the final

EXAMPLE 3. Interlaced design—“War or Peace.” The *Úrlar* uses “hodroha” instead of “hihorodo” to finish the 4th eighth, but is otherwise typical of the Interlaced design family.

*The True Gathering of the Clans.*

A	I hodroho, hodroho, haninin hiechin,
B	hodroha, hodroho, hodroho hachin,
A	hiodroho, hodroho, haninin hiechin,
bbbb	hodroha, hodroha, hodroha, hodroha,
B	hodroha, hodroho, hodroho hachin,
A	hiodroho, hodroho, haninin hiechin,
B'	hodroha, hodroho, hodroho, hodroha,
aaaa	haninun, haninun, haninun, haninun.

Example 3a. From Niel MacLeod of Gesto, *A Collection of Piobaireachd or Pipe Tunes*, as verbally taught by the McCrummen pipers in the Isle of Skye, to their apprentices, (1828) No.3.

*Gogadh na Sìth*  
*Peace or War*

A B...

..A bbb

B A

B' aaaa

Example 3b. This corresponds with the MacCrimmon *canntaireachd* above, except that the 4th quarter is a “hodroho” short—*bbb* instead of *bbbb* in the schematic analysis. (Peter Reid’s MS, 1825, folio 11r.)

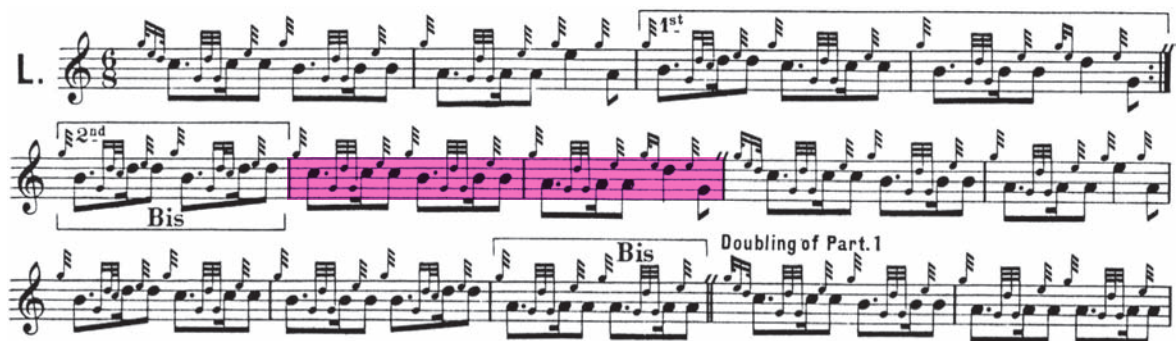
Coma lean, coma lean cogadh no lùth — Alike to me peace or war. 43  
The gathering of the clans. A bagpipe March.

Rather Slow.

Variations, Brifk.

Example 3c. The 4th eighth, marked in red, corresponds to Gesto’s and Reid’s B phrase, but with an erroneous rest inserted by the editor to make up the 4/4 bar. (Patrick MacDonald, *A Collection of Highland Vocal Airs*, 1784, p.43.)

MUSIC



**Example 3d.** Angus MacKay replaced Patrick MacDonald's rest in Example 3c with a low A, creating an "improved" setting which, far from being traditional, departs significantly from what he was taught. To agree with the MacCrimmon canntaireachd above, the bar marked in red should be replaced with phrase B: MacKay's first time bar. (Angus MacKay, *A Collection of Ancient Piobaireachd*, 1838 p.128).



**EXAMPLE 4. Lyrical Interlaced design—"Hihorodo hao."** The highlighted sections mark the gradual transformation of phrase A. From the MacGregor-MacArthur MS, (1820) No.18. John MacGregor, a .autist as well as a piper, wrote pipe music down in the key of D. This score is transposed up a 4th in Frans Buisman's critical edition (*The Music of Scotland 1*, 2001, p. 99) and, with Angus MacKay's editorial changes, in *Piobaireachd Society Book 4*, p.111. Note how John MacGregor divided the Urlar into three uneven sections using the sign //.

eighth. What is unusual here is that the A phrases of the first half have 3 beats (marked in red). Although I would move Angus MacKay's barlines to make the phrase construction clearer to the eye, I do not agree with the statement in Book 10, that "the setting of Angus MacKay is full of defects." On the contrary, phrase elongation is an important technique, used by Gaelic composers with great success in works like "The

Piper's Warning to His Master." It helps guard against musical monotony. Perhaps we need to remind ourselves that pibroch is pre-Industrial Revolution. The "factory-standard" mentality that age engendered in all matters of construction—visual and musical—is foreign to pibroch. Such editorial "improvements" are degrading, and show a lack of respect to the original composers.

When restoring a twelfth-century church, would you make two arches that were originally different the same? I'm lucky to live in Sardinia, where architectural jewels of that age are readily accessible. Invention and creativity explode in these buildings, no matter where you set your eyes. Wherever two things in modern buildings would be identical, in medieval buildings they are not. This increases their natural beauty and splendor. The pibroch sources demonstrate unequivocally that this music operates with medieval aesthetics, not with the aesthetics of the industrial age that has subliminally conditioned "developed" society since the nineteenth century.

**EVEN OR UNEVEN LINES?**

The late James Campbell, who probably knew the repertoire better than anyone else in his time, stated that there was very little we know for sure about pibroch. Seumas MacNeill was less humble in his convictions. In response to Joseph MacDonald's statement, circa 1761, that, "Their Adagios when regular, commonly consisted of 4 quarters," Seumas wrote:

*An attempt has been made to fit some three-line tunes to this "four quarters" pattern, but although the exercise is attractive to a numerologist it is musically unsound. Angus MacKay wrote piobaireachd in three*

lines, and for the piper there is no other way to play them. (*Piobaireachd*, 1968, p.66)

Angus MacKay was not alone in dividing Interlaced and Woven designs into uneven lines, starting and/or ending with the same phrase: so did Colin Campbell in 1797, and John MacGregor in 1820. It is an obvious thing to do. Whether it is more musical, or whether it corresponds with seveneenth-century MacCrimmon thinking, is wide open to question.

Try it yourself with “War or Peace” and “Hihorodo hao.” Do you prefer the uneven arrangement (marked in Examples 3d and 4 by the sign // above the bar line)? In Example 3, the uneven sections start with phrase A:

Ex. 3: A B, A bbbb B, A B aaaa

whereas in Example 4, they end with phrase A:

Ex. 4: A<sub>1</sub> B A<sub>2</sub>, B C A<sub>3</sub>, B A<sub>4</sub>

Or do you prefer the even arrangement?

Ex. 3: A B A bbbb, B A B aaaa

Ex. 4: A<sub>1</sub> B A<sub>2</sub> B, C A<sub>3</sub> B A<sub>4</sub>

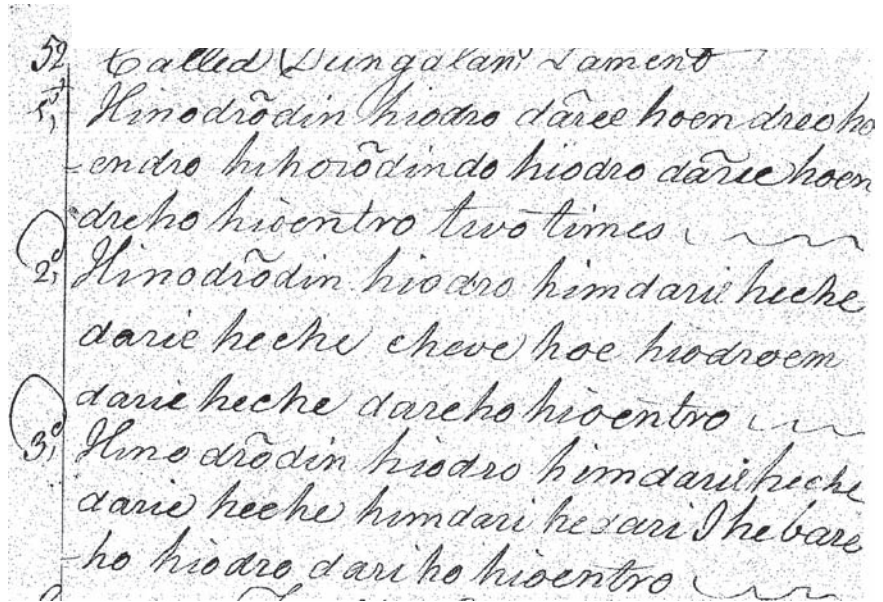
Do you agree with Seumas MacNeill that there only one way for the piper to arrange these phrases?

We must choose whether to follow the evidence of Joseph MacDonald on this point, or that of Colin Campbell, John MacGregor, and Angus MacKay. It affects how we compose, memorize, and appreciate this music. How it is written down is not a reliable guide to the mind of the composer. The writing down happened, on average, about 150 years after the composition. How we internalize and teach pibroch is what matters.

As Malcolm McRae said at the 1991 Piobaireachd Society Conference, following a talk by Dr. Roderick Cannon on “The Gesto Canntaireachd”:

*There’s a lot we’ll never know, obviously, but I think we’ve got to be sufficiently*

EXAMPLE 5. Progressive design—“The Young Laird of Dungallon’s Lament.”



Example 5a. From Colin Campbell’s *Instrumental Book*, (1797), Vol. II, No.52 (and No.86).



Example 5b. My edition of Campbell’s score in Example 5a. The “lifted” sections of melody are highlighted in red.

*open minded to realize that the tunes aren’t necessarily the way our teachers taught them to us. There’s far more even than our teachers ever dreamt of and I think that this sort of research and perhaps experimentation is to be encouraged. It broadens our minds and makes us approach our music as music, as distinct from some sort of*

*cult ritual that we’re somehow all initiated into. (Proceedings of the Piobaireachd Society Conference, College of Piping, www.piobaireachd.co.uk, 1991)*

*Part III of this series, completing the survey of the pibroch rainbow, will be published in the Summer issue of The Voice.*

XXXII.

**EXAMPLE 6. Rounded Lyrical design—“Struan Robertson’s Salute.”** From Angus MacKay *A Collection of Ancient Piobaireachd*, (1838) p. 79.

*Golla mi Ìobair*  
The piper warning to his Master

**EXAMPLE 7. Phrase elongation—“The Piper’s Warning to His Master.”** In this otherwise regular Rounded Lyrical design, the A phrases have 4 beats, and the B phrases are elongated to last 6 beats. (Peter Reid’s MS, 1825, folio 3r.).

### Sir Ewin Cameron of Lochiel’s Salute.

XX. Adagio.

**EXAMPLE 8. Phrase elongation—“Sir Ewin Cameron of Lochiel’s Salute.”** In this tune, the A phrases in the .rst half have 3 beats (marked in red), and all the other phrases are elongated to 4 beats. Flexibility of metre is common in Gaelic music, but, owing to a clash of cultures, most examples have been expurgated from the pibroch tradition. Although the construction of this Ùrlar is almost the same as Example 4, here Angus MacKay uses the sign // to arrange the eighths in even quarters. (*A Collection of Ancient Piobaireachd*, 1838, p.49).