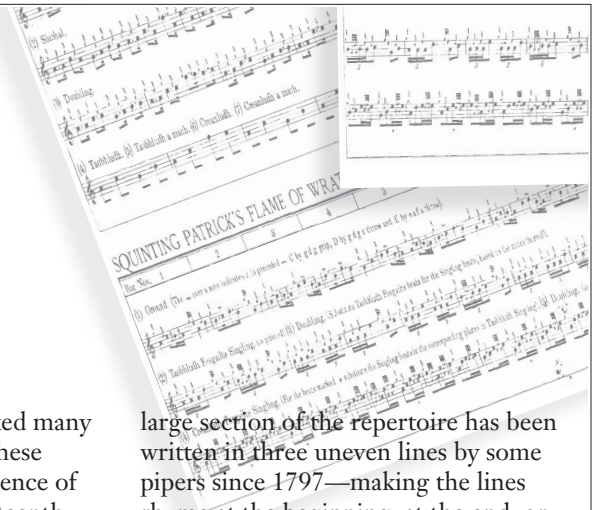
The Design of It: Patterns in Pibroch

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

by Barnaby Brown



ESTABLISHED THEORY does not do justice to the remarkable music that is pibroch. Like many nineteenth-century theories, it paints a picture that differs from reality. Since the Piobaireachd Society's publication of Book 1 in 1925, "traditional teaching" has become an excuse for ignoring the more challenging aspects of the evidence behind the established theory. We owe it to the pipers who put this music on paper around 1800 to give their evidence a fair hearing. What was cutting-edge scholarship in the 1940s is now out of date.

Over three parts, I will build on the work of researchers such as Frans Buisman, Roderick Cannon, Alexander Haddow and Robin Lorimer. I hope to provide an overview of pibroch construction that is more accurate, more comprehensive, and more accessible to the general student than what was published in *The Kilberry Book of Ceol Mor* in 1948, and has been taught ever since.

A MODIFIED VIEW

There are many aspects to pibroch construction. Only the most fundamental one is considered here: the design presented in the *Ùrlar* and repeated in each variation. There are four reasons for modifying established beliefs concerning the pibroch *Ùrlar*.

First, the classification system developed by General C.S. Thomason in the 1890s, made popular by *The Kilberry Book*, used only part of the evidence. Working in Bengal, Thomason developed his work with access to only two thirds of the repertoire, as he himself wrote in his *Ceol Mor* (page ix): "*I have analysed 173 piobaireachdan*…" He also lacked many of the earliest manuscripts. These manuscripts contain vital evidence of how pipers played in the eighteenth century. Because of the collapse of Gaelic patronage and subsequent anglicizing processes, variety of musical form was poorer in the sources available to him than in the sources now available in the National Library of Scotland since 1970.

Second, the firm convictions of a small number of players meant that musical features that did not survive in oral transmission, or that laid outside the rudiments of Western music, were rejected as "inadequate and confused," or even altered through sheer carelessness. The result is that some of the richest music was suppressed or defaced in publication between 1925 and 1990, making the repertoire seem more homogenous than it truly is.

Third, the spirit of Thomason's analysis goes against the grain of other seventeenth-century Gaelic cultural expressions such as harp music and poetry. Certain influential teachers in the twentieth century spread the notion that what they transmitted was identical to or, failing that, superior to the pibroch played in the seventeenth century. Combined with the ultra-conservative competitive climate of the last 50 years, this has discouraged pipers from taking a serious interest in the artistic milieu enjoyed by its composers 250 years ago.

Fourth, the division of pibroch into "even-lined" and "uneven-lined" designs makes it difficult to see the densely interwoven nature of the repertoire—one of its most beautiful features. Why hide this? Although a large section of the repertoire has been written in three uneven lines by some pipers since 1797—making the lines rhyme at the beginning, at the end, or both—when 290 works are brought into view in their earliest settings, this division becomes a clumsy one, causing unnecessary classification dilemmas.

WHAT USE IS A THEORY?

The design of anything deemed to be "good" normally follows a trend—a culturally acceptable way of doing things. Works of genius may do something slightly novel, akin to adding a pinch of exotic spice to a familiar dish. In the world of music, this excites the listener and, if imitated by other composers, sets a trend. Should the trend last a generation, a new tradition is formed. After this trend or tradition has ceased to be fashionable, its features are articulated as a theory, normally for use in education, or to restore works that have become garbled in transmission. Analyzing a large body of music is also an addictive activity—a bit like organizing a stamp collection. As a result, some theories are born from pure diversion and do not have a specific purpose.

The theory I update here *is* useful. It helps pipers compose, memorize, and keep their place while playing a pibroch; and it helps anyone appreciate the music while listening to a performance or studying a score. Writing at Bobdunsire.com in 2002, Jim McGillivray recalls:

"Back in 1971 when I had my first lesson with John MacFadyen, I showed up, pipes at the ready, at 9 a.m. He spent 15 minutes showing me how "The MacGregor's Salute" went, then told me to come back at 4 p.m. to play the tune for

him on the pipes, which I did. It was not unusual to be given a tune in the morning and to be expected to play the ground and first few variations by late afternoon, and the rest of the tune next day. This was by no means an impossible feat"

Iain Sherwood explains how:

"By learning the component phrases for each movement and assembling them in the right order, it is possible to learn an entire tune in an afternoon or less."

For listeners, recognizing the pattern in which the phrases are played means that the story unfolding in the music can be followed, and the performance more deeply enjoyed. Knowledge of the pattern generates expectation, providing the potential for surprise or fulfillment. It enables us to engage with the composer, whose music can then manipulate our emotions with greater power.

INADEQUATE AND CONFUSED?

Inspirational compositions often don't quite fit any given theories of musical form. A composer is not a computer, and the best music is never predictable. Pibroch music editors, however, appear to have shared some kind of obsessive-compulsive disorder, or harboured a sense of superiority that encouraged them to meddle, perhaps because they considered themselves better-educated than pipers of the early nineteenth century. "Educated" in this context, however, typically meant "anglicized." English-speaking culture has invaded most corners of the world and it is very difficult, if not impossible, for human beings to detach themselves from the culture in which they were reared.

Looking at the ammendations and errors in Books 1 to 15, Piobaireachd Society editors do not appear to have been masters of any kind of music. Simplistic, theory-based thinking meant that any material which did not square with rudimentary music theory was branded unfit for publication, or dismissed as "inadequate and confused" (Book 14, page 452). Such statements, frankly, are more likely to signal that something interesting has survived—un-anglicized. Thank goodness pipers are now examining the early evidence more closely, and the monotony of pibroch played the same, sanitized, twentieth-century way—ignoring the composers' world—shows signs of coming to an end.

THE PIBROCH RAINBOW

There is a marvelous guide by Alec Haddow, *The History and Structure of Ceol Mor*, published in 1982 and reprinted in 2003. My only quibble with Haddow's presentation of pibroch structure is that his detail obscures the larger picture. In Example 1, I display the spectrum of *Ùrlar* constructions, showing how the most archetypal designs interrelate. I have chosen to stand further away from individual works than Haddow, so that the underlying models are fewer in number and can be distinguished more easily by students. Haddow divides the Woven and Interlaced designs into eight separate categories, but to apply this level of detail across the repertoire would result in an unmanageable number of categories (albeit more homogenous ones). You might call these archetypes the nine "colors of the pibroch rainbow." The group could be reduced to seven, but a group of nine makes it clearer how the repretoire forms a single, close-knit family. Every *Ùrlar* design is related, to some degree, to every other design.

Musical rhymes do not have to be at the end of a line, they can occur in the middle. By presenting the archetypes in even lines (not always starting and ending with the same phrase), internal rhyme becomes an asset, and lines are woven together in the same manner as in classical Gaelic poetry. This arrangement not only brings out the qualities of symmetry and inversion that are also found in sixteenth-century harp music, but also displays a form supported by the earliest recorded statement on pibroch construction.

Joseph MacDonald's *Compleat Theory of the Highland Bagpipe* of 1760 (ed. Roderick Cannon, 1994) claims to describe how pibroch "was originally taught by its first Masters & Composers in the Islands of Sky & Mull." He writes:

"Their Adagios when regular, commonly consisted of 4 Quarters. In each Quarter there were Such a number of Fingers (which we Count as Bars) 2, 4, or 8 as the Quarter was Long or short."

MacDonald makes no mention of the uneven arrangements "6, 6, 4" and "4, 6, 4, 2 (or 1)" that have become part of the modern pibroch belief system.

All the evidence from before 1797 suggests that the composers saw their designs as 4, 4, 4, 4, and that they turned their genius to subverting that fourfold regularity. By superimposing an alternative structure of musical rhymes, the composition is rendered more sophisticated and pleasing. Henry Purcell (1659–1695) was doing much the same thing in his compositions where he built upon repeated grounds. Whether performed by Gaelic, French, or English masters, music with two or more superimposed structures was probably heard in Dunvegan Castle throughout the sixteenth and seventeenth centuries.

16TH-CENTURY HARP MUSIC

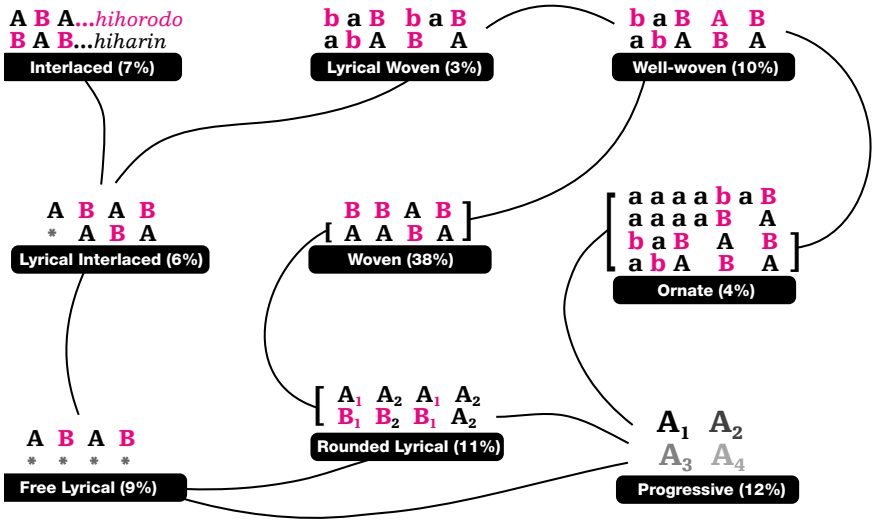
Nineteenth-century folklore claims that Gaelic pipers underwent a long and rigorous training. Unfortunately, there is no direct evidence of what this training consisted of before 1760, a century after the composition of many pibroch classics. To gain an insight into how the famous MacCrimmon composers were schooled, or understand the regimen they endured, we are forced to consider the contemporary evidence that exists for the training of the composers' artistic contemporaries: the harpers and poets. This may guide us to a more reliable understanding of the composers' world of ideas than the memory of pipers 100 to 200 years later.

Harp music is blessed with a remarkable manuscript, copied by Robert ap Huw in about 1613. Just

as Dòmhnall Mòr was finishing the education of his son, Pàdraig Mòr, this harper from Anglesey copied a list of 24 *mesur* from his teacher's book. Each *mesur* is a series of between 8 and 24 binary digits, and Welsh legend states that these compositional formulae were of Irish origin. This may in part be true, as at least four are closely related to pibroch, which has several Irish links.

A typical relationship is examined in Example 2. Other general similarities support the idea that Welsh harp and pibroch traditions share a common background. For example, we find an instruction in some of Robert ap Huw's variations to repeat the previous variation, raising the thumb of the top hand by two strings. This instruction corresponds to a thumb variation in pibroch, where (typically) all Fs are raised to high A. In the 24 *mesur*, the "0"s are known as *tyniadau*, providing tension, and the "1"s as *cyweirdanau*, giving resolution. Exactly the same principle operates in the *Ùrlar* designs of Example 1, where phrase A is defined by a consonant sonority, and phrase B by a dissonant one. It is also usual in both traditions to alter the melody at the end of the pattern. This alerts the listener to the fact that one variation is ending, and the next is about to begin.

As in pibroch, the compositional formulae of the Welsh harpers can generate 12 minutes of awe-inspiring music. The examples on Bill Taylor's CD, *Two Worlds of the Welsh Harp*, are the nearest thing to pibroch I have heard. (The CD is available from the artist at www.clarsach.net). More information on this tradition can be found in *Welsh Music History 3*, ed. John Harper, 1999.



EXAMPLE 1. The nine colors of the pibroch rainbow. *Every pibroch is related to one or more of the above archetypal designs. Connecting lines show how the designs are related. This perspective evolved between 1995 and 2002, from the contemplation of approximately 290 distinct works in oral transmission around 1800.*

17TH-CENTURY GAELIC POETRY

Gaelic poetry should bring us even closer to the world and the thoughts of pibroch's early composers. During the seventeenth century, amateur poetic forms rose in popularity—much to the chagrin of the old masters. In the following example, a poet of the old professional order, Cathal Mac Muireadhaigh, laments how the work of an untrained bard was now earning the esteem of Gaelic chieftains:

you have met with honour and success in taking up poetry without effort…

You are indeed in luck, having made no stab at erudition, to be held in such respect, unabashed, with a mouldy, half-finished poem...

For getting your words mixed up you have made quite a reputation, though clowning around on the booze is more your style than poetry...

Alas I never made an attempt on the lines of your metres, content devoid of truth or form and no reference to basic learning.

Let me forsake the snare of Strict Verse as we found it in the tradition, and let me enter your new order now: it will last longer than the path I have followed.

This would be a good time for me to make, if I could, a change in my profession since no-one respects my gift now that the world has altered.

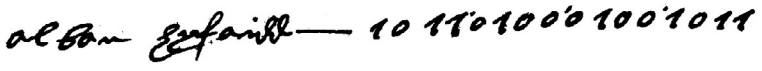
This is one of the last examples of the "Strict Verse" that dominated formal ceremony in Gaelic Ireland and Scotland between about 1200 and 1650. Less elaborate poetic metres had always existed, but only in the seventeenth century did they rise to eclipse the style of the professional elite, whose power and status were protected by arduous training and an archaic language.

Professional pipers like Dòmhnall Mòr used both elaborate constructions that could be classified as Well-woven or Ornate, and the simpler designs relating to the Free Lyrical and Progressive archetypes defined in Example 1. These contrasting styles of composition perhaps reflect the erudite, law-abiding poetry of the professional, and the lighter, more spontaneous verse of the amateur.

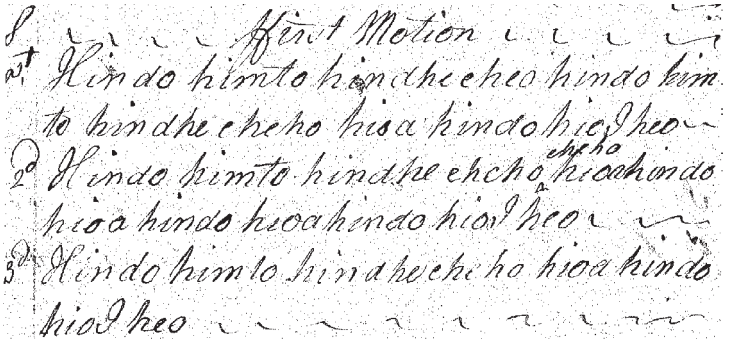
By 1650, the foundations for all subsequent creativity in pibroch had been laid. Pipers were certainly familiar with professional poetry before that date, and it is possible that the more rigorous musical designs formed part of their traditional education. When we see how many rules the professional poets studied, and consider that their station was similar to that of leading pipers, it is no wonder the pipers produced works of such intellectual stature.

Colm Ó Baoill describes the rules governing "Strict Verse" in his anthology of seventeenth-century Gaelic poetry, *The Harps' Cry* (1994, page

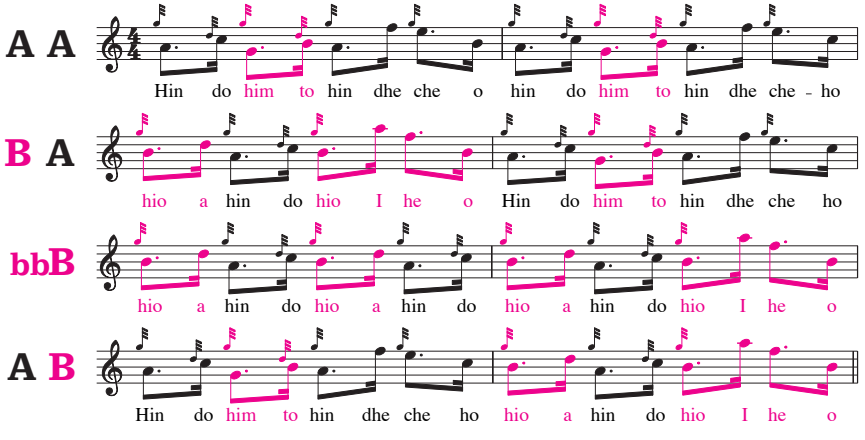
EXAMPLE 2. Common principles of design in Welsh harp music and pibroch.



Example 2a. *The Welsh* mesur, *"Alban Hyfaidd." Commas divide the 16 units into 4 "Quarters." This* mesur *could also be expressed as A B B A, where A is 1011, and B is 0100—the same pattern inverted (Lbl MS Add. 14905, p.105).*



Example 2b. Ceann Drochaid Innis Bhàiridh *("The End of Inchberry Bridge"):* a' chiad shiubhal *(first motion, or variation). From Colin Campbell's Instrumental Book, 1797, Vol. II, p.176. In Example 2c below, I ignore Campbell's insertion "cheho" in the 2nd line.*



Example 2c. *My edition of Campbell's score in Example 2b. This pibroch has much in common with the Welsh* mesur *"Alban Hyfaidd." Sonority "1" is formed by the consonant notes A-C-(E-F), and sonority "0" (marked in red) by the more dissonant notes, G-B. Although its Woven design is twice as long as "Alban Hyfaidd," three features are identical: the pattern of sonority within phrase A (1011), the inversion of that pattern in phrase B (0100), and the inversion of first and second halves—in "Alban Hyfaidd," A B becomes B A, and in the pibroch A A B A becomes B B A B.*

20)—a must-buy for any piper interested in the culture surrounding pibroch.

…the remarkable metrical complexity of the strict form of professional syllabic poetry, known to the poets themselves as dán díreach*…was declining fast in the seventeenth century. The final stanza of [*"Do Ruaidhri Mòr, Mac Leòid"*, c.1613] is a good illustration of the complexity of ornament which the metre rannaigheacht mhór (one of a sizeable range of metres), in its strict form, imposed on the poet:*

Fiche meisge linn gach laoi —
nochar leisge linn ná lé;
fiú i neart ar mbeathaidh do bhí,
ceathair, a trí, a seacht le sé.

The rules here require seven syllables per line, and there are rules for elision so that when two vowels occur together (in certain circumstances) one of them is elided and therefore only one syllable is counted: here we elide the word i *in line 3 and the word* a *following* trí *in line 4. The final words of lines 2 and 4 must rhyme together (as in all rhymes, the vowels must be identical); and the vowels of the finals of all four lines must agree in 'quantity' (i.e. long or short), as they do here:* laoi *has a single long vowel. Internal rhyme (which in Gaelic means rhyme within the couplet) occurs twice in each couplet, giving us the rhymes* meisge: leisge *and* linn: linn *in the first couplet; in the second couplet the rhymes* mbeathaidh: ceathair *and* neart: seacht *are also 'perfect', because of complex Gaelic rules of consonant grouping whereby, in rhyme, -dh- and –r- belong to the same group, and the consonant 'clusters' –rt and –cht (by even more complicated rules) rhyme together. (Anything as simple as the popular English rhyming system, where* bill *rhymes with* fill *but not with* fin*, would probably have been regarded by these poets as childish.)…*

Years of concentrated training were necessary to teach the skills of this verse: the target was technical brilliance, and neither originality of thought nor depth of lyrical feeling was required. Much of the verse was provided by the professional poet on demand, and praise of the leader (whether during his life or as an elegy on his death) was the theme of a good deal of it.

The abovementioned poem was probably heard by Dòmhnall Mòr and Pàdraig Mòr in Dunvegan Castle. Pibroch fulfilled the same ceremonial functions as did poetry, and many works of pibroch likewise lack originality and depth of lyrical feeling. Pibroch is not normally governed by such prescriptive rules, but some examples are so similar to *dán díreach* in spirit, the education of its composers could surely have been as erudite.

An elitist, Gaelic cultural education, however, would have ceased to exist soon after the disaster of Culloden, if not before. All things Gaelic were increasingly downtrodden or transformed by English language and culture as a result. Pibroch needed a new acceptable social function in order to survive: the competition.

Look for part II in the Spring issue of The Voice.