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Moebius

Art Music? Traditional Music? Traditional Art Music?

By Jon Swayne

While Jon Swayne, his instruments and music are certainly not strangers to North Hero, this is the first year for his ensemble, Moebius, to attend. As an introduction to the band and their music, Jon has been kind enough to discuss his approach to arranging music for multiple bagpipes.-Editor

In the early 90s, Don Ward, Judy Rockliff and myself met fairly regularly to try out stuff on three pipes. At that time we usually used two pipes in G and one in low D. Most of the harmonies were improvised, but I also began to write some simple arrangements. It all began to come together when I made a pipe in low C (a fairly uncommon pitch at that time) which gave us the interval of a fifth between the drones and was much more satisfying (see below). Then we got invited by the great Alphonso Garcia Oliva to perform at a bagpipe conference in Gijon in Asturias; we needed more repertoire in a hurry, so I started to develop some ideas I had had for some years about bagpipe harmonies. Soon after that we recorded a CD and began performing on a fairly regular basis. Judy dropped out because of illness around 5 years ago, and we were fortunate to be joined by David Faulkner, who learnt an extensive repertoire in an amazingly short time.

We often get asked what the name means. Well, August Moebius was a 19th century German mathematician who is best known for inventing a band or strip which is like a loop with a half-twist. The result of the twist is that the strip only has one side and one edge. Or to put it another way, you can slide your finger over the whole of the surface without going over the edge. Such conundra appeal to the minds of me and Don, and it was just one of those ideas which came up when we were thinking of names for the group, and it stuck. If you like, you can also see some symbolic correspondence between a Moebius band and the music we play.

A large part of the reason why people like pipes is for the sound they make. (Come to think of it, if you ask people why they don't like pipes, it's usually because of the sound ...) That might seem obvious, but especially with classical music, and to a lesser extent with other kinds, the sound, as sound, is usually supposed to be subservient to some higher cause, which is the music or the ideas which it is trying to express by means of melody, structure, etc. The fact that a bagpipe has a drone helps to give its music a timeless quality, so that what the music is trying to say is often less important than the state of mind it produces.

The result of three pipes playing in harmony together produces, I think, a kind of synthesis of both sides of the argument. On the one hand you have the feeling of timelessness induced by the drones; on the other, the harmonic possibilities offered by the three chanters against the drones

enables a very powerful emotional and dramatic impact. When (as they should be) the pipes are perfectly in tune with each other, there is something immensely satisfying about the sound of the chords which can be produced, whether voluptuous or bleak.

I have been fascinated by the idea of bagpipes playing together in harmony ever since I first started playing pipes. In fact, on the very first record of Blowzabella (a band which I helped to start in 1979) there were some simple examples of tunes harmonised on 3 pipes, done by doubletracking since there were only two pipers in the group. A year or two after that I had the chance to try something slightly more adventurous with three pipes together at different pitches when with two other pipers, we improvised a three-part harmony version of some simple tunes on Galician Gaita in high D, cabrette in A, and Flemish pipe in low D.

It became clear that for a really satisfying sound and for flexibility and variety, pipes at two different pitches would give much more scope than simply two of the same. This is because the relative ranges of the instruments overlap. It also means that you have two different drone pitches happening. Assuming that the drones of both instruments are used, unless you are going for really weird effects, the choice of intervals between the two sets of drones boils down to two, the fourth and the fifth. Both these intervals have their merits, but you only have to try it to come to the conclusion that the fifth is the more satisfying.

Except for the RWE (really weird effects) Proviso, both pipes must play in the same key. Each pipe on its own has a choice of two major keys, one based on the 6 finger note, the other on the 3 finger note. Therefore in the case of the fourth between drones, the upper pipe must play in its 6 finger key, the lower in its 3 finger key. The opposite applies when the interval between drones is the fifth. In this case the upper pipe plays in its 3 finger key, and the lower in its 6 finger key.

- Fourth: Upper in A, lower in E: play in key of A.
Upper in G, lower in D: play in key of G, etc.
- Fifth: Upper in A, lower in D: play in key of D.
Upper in G, lower in C: play in key of C, etc.

It's clear that some melodic freedom must be sacrificed if, as is usually the case, the upper pipe carries the tune. With the A/E or G/D combination, the tune must be a 6 finger tune for the upper pipe. In this case it is useful if the lower pipe is able to overblow, in order to extend the shared scale up by a fourth. With the A/D or G/C combination, the tune must be a 3 finger one for the upper pipe, and here it is useful if the upper pipe can overblow. A further implication is that in the A/E or G/D combination (drones at fourth), the lower pipe, which is playing in its 3 finger key, should be able to play a flattened seventh relative to its 6 finger tonic, since this is the fourth degree of the scale in the 3 finger key. Conversely, in the A/D or G/C combination (drones at fifth), this applies to the upper pipe. Depending on the demands of the music, in the A/E or G/D combination the upper pipe may need a sharp seventh. In the A/D or G/C combination, it's desirable for the lower instrument to be able to play a sharp seventh since it corresponds to the major third of the 6 finger scale of the upper (which becomes the sharpened leading note of the 3 finger scale).

All the above is quite difficult to visualise from words, and there are other more complicated implications, but once you try things out in practice it becomes clear and obvious.

In order to fill out simple harmonies, or to make more advanced ones possible, you can add a third instrument. It usually seems better to double the upper one than the lower, though this is not the only possibility. You could for example use an EAE, DAD, DGD, CGC, CFC, etc combination. However, depending on its design the high pipe could be rather piercing and tiring for extended listening, and would be better balanced by a larger ensemble underneath it. AAD, GGC is more mellow. Provided that the drone/chanter balance of each individual instrument is appropriate, there won't be an impression of excessive drones when all instruments are playing.

Writing harmonies for any combination is really a matter of experiment to see what works best. While writing for Moebius, I use a variety of means, from the simplest - pencil, paper and head – through keyboard, computer sequencer to multi-track recorder. If you have trouble hearing harmonies internally (which I do, unless they are relatively simple ones), a keyboard is probably the quickest way to check ideas. With the left hand play a fifth or fourth as appropriate at the pitch of the bass drones, and in the right hand play the three chanter notes. (If you are using a synthesiser you can use weights or wedges to keep the drone notes down.) Of course, you can also improvise harmonies on the three pipes in real time, but in my experience it is difficult and time consuming to arrive at harmonies other than tonic, dominant and sub-dominant triads. A keyboard allows you to visualise and experiment with possibilities much more easily. As far as I am concerned, anything goes, provided that within the harmonic direction of the piece, it goes with the drones.

Everyone knows that a badly tuned bagpipe sounds horrible. This is even more true of bagpipe harmony groups, so it goes without saying that the greatest possible attention must be paid to accurate adjustment of the pipes, not only before starting, but also as the piece progresses if necessary by adjusting pressure in response to the needs of the harmony. It's worth bearing in mind too that P A seems to exaggerate any mis-tuning.

I would encourage anyone who hasn't tried bagpipe harmony playing in whatever combination to do so. It can be enormously satisfying. It's probably best to start with pieces that are not too technically demanding, and to concentrate on accurate tuning and getting a beautiful sound.

It's not too easy to find music which is suitable for harmonising for three pipes, which is why I decided to write all the music for Moebius. "How can this be folk music?" I hear you ask. Well, I don't see why it should be, or why it can't be. Most of the pieces we play are based on traditional dance forms such as waltz, polka, hornpipe, bourrée, etc. On the other hand, I have taken the opportunity to do something a little more experimental from time to time, such as exploring the effect of changing harmonies without much melodic focus, or extending the structure beyond the 8 bar repeated form.

Recently I've been writing music for 6 pipes (at 3 different pitches) and percussion, but that's another story.