

BY LINCOLN HILTON

BACK TO BASICS

With lockdowns happening across the globe and competitions cancelled, many pipers have used this time to increase their skillset and accomplish their "I wish had time" goals. Inevitably, a lot of people have been asking how to compose; where do I start, you ask. In the past 20 articles, we have covered a plethora of techniques to help build your composing arsenal but we have never quite covered the basics.

I have always been a firm believer that you don't have to be among the piping cognoscenti or a technical virtuoso to produce good music. Sure it helps to have super fingers that naturally do what you imagine, but this only helps the musical efficiency to create music more quickly, not necessarily the overall quality achieved. If you know the nuts and bolts of music theory, you can write not only bagpipe tunes but all types of music, whether it be pop, rock or jazz.

"But where do I begin?" you ask again. To answer this, let's cover the basics in this volume. I promise to try and not bore you with musical jargon and semantics, but there are some things you must know, albeit a little confusing at first. Before you start writing, you must learn the fundamentals of Scales and Time Signatures; and no, these are not euphemisms for musical terms that will hurt your brain. Go fill up your coffee and let get through this small chapter of knowledge.

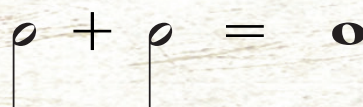
NOTE VALUES

Firstly, we must get note values over and done with. There are six different notes we have to remember. I'll put the US terminology in parenthesis; this will be helpful down the track - learn both, you'll thank me later.

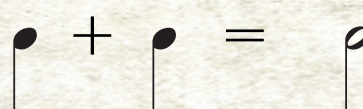
Semi-breve (whole note) - This is the biggest you go. If you see this hollow circle the page, and you'll be there for a while.



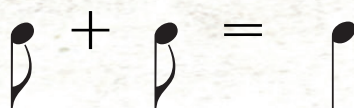
Minim (1/2 note) - Note the US terminology here; it is half the value (time duration) as a semi-breve. In other words, two of these will fit into a semi-breve (whole note).



Crotchet (1/4 note) - This is half the value (time duration) as a minim (1/2 note). In the US terminology, it quite literally means a quarter of the whole note, so four of these guys will fit into the semi-breve (whole note). There are two quarters in a half so we can conclude that two crotchets (1/4 notes) will also equal one minim (1/2 note).



Quaver (1/8 note) - This is half the value (time duration) as a crotchet (1/4 note). See the pattern here? Two quavers (1/8 notes) will fit into the time-space of one crotchet (1/4 note).



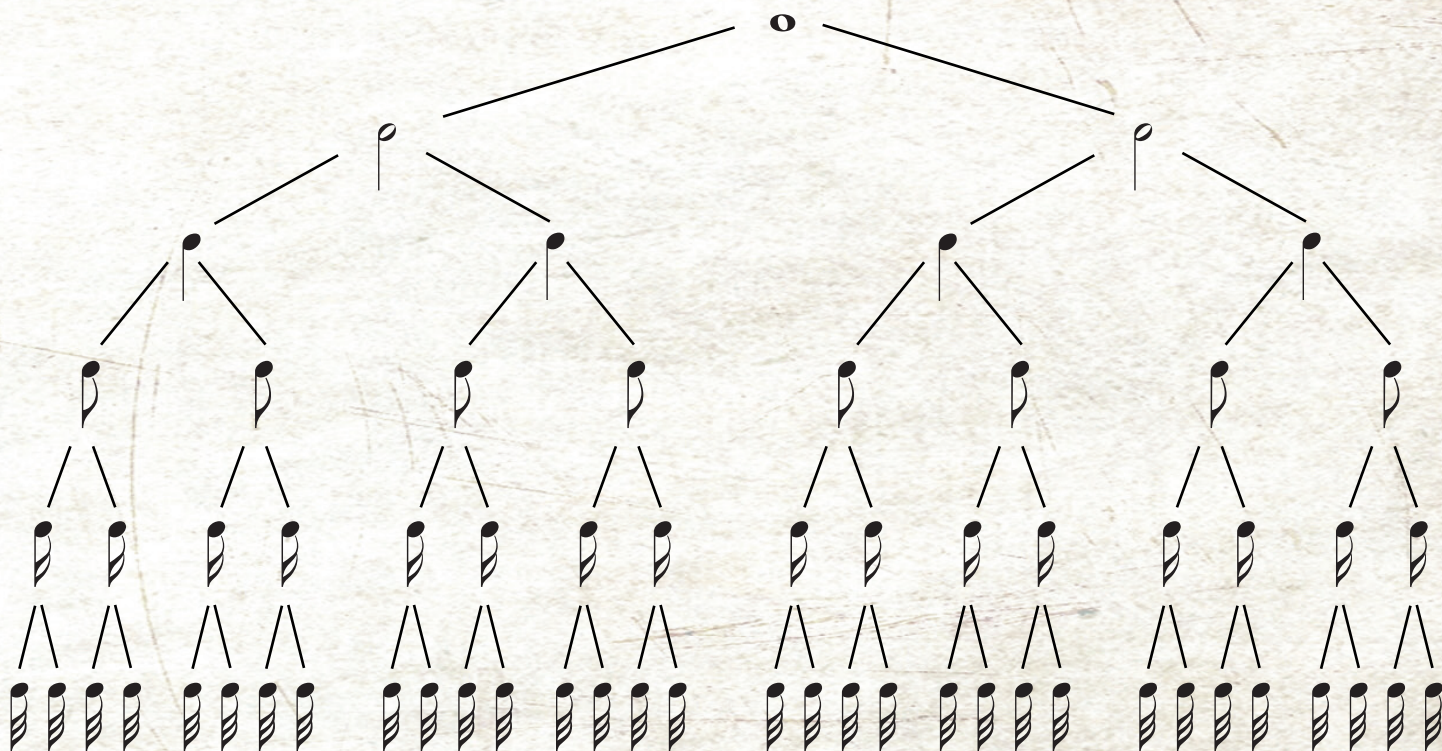
Semi-quaver (1/16 note) - You guessed it! This is half the value (time duration) as a quaver (1/8 note). Two semi-quavers (1/16 notes) will fit into the space of one quaver (1/8 note).



Demi-semi-quaver (1/32 note) - The fastest of them all and arguably with the most ridiculous title. This is half the value (time duration) as a semi-quaver (1/16 note). Two demi-semi-quavers (1/32 notes) will fit into the space of one semi-quaver (1/16 note).



Now here's they all divide up.



Dotted notes are longer in duration. The "dot" simply *increases* the duration of the note by half of its original value. Here's an example:



Notes that are tied indicate that they should be held for the length of both notes. Here's an example:



TIME SIGNATURES

Now, you must also know what the Time Signature means. There are the two little numbers stacked on top of each other at the start of a piece of music; it looks like a fraction, but it is most certainly not!



These tell us how many pulses/beats are contained in each bar, and which note value is equivalent to a beat. So remember when I said to know your US. Notation? Here's where it comes in handy.

The top number tells us the number of beats in a bar and the bottom number tells us the note value of each pulse. Here are a few examples:

Simple time signatures indicate that the top number tells you how many beats are in the bar, e.g. 2/4 - 2 beats per bar, 3/4 - 3 beats per bar, 4/4 - 4 beats per bar etc. These beats can be referred to as simple beats.

2 - 2 simple beats per bar

4 - each pulse is worth a crotchet (1/4 note)

3 - 3 simple beats per bar

4 - each pulse is worth a crotchet (1/4 note)

4 - 4 simple beats per bar

4 - each pulse is worth a crotchet (1/4 note)

Compound time signatures indicate that the beat is broken into three-part rhythms. If the top number is evenly divisible by 3 (except for when the top number is 3) it is a compound time signature, e.g. 6/8 - 6 quaver (1/8 note) pulses per bar are divided into 2 groups of 3 (2x3 = 6). The beat occurs at the start of each group of 3 pulses. These beats can be referred to as compound beats.

6 - 6 pulses | 2 compound beats per bar

8 - each pulse is worth a quaver (1/8 note)

9 - 9 pulses | 3 compound beats per bar

8 - each pulse is worth a quaver (1/8 note)

12 - 12 pulses | 4 compound beats per bar

8 - each pulse is worth a quaver (1/8 note)

Odd time signatures (aka. odd meters) are ones that don't fall into the above categories, e.g. 7/8 and 5/8. These time signatures contain simple and compound beats. In the case of a 7/8, you can divide the 7 quaver pulses in a myriad of ways. The positioning of the compound beat is up to the composer and the order of beats do not matter, e.g. you can make the pulses go 1, 2, 1, 2, 1, 2, 3 or 1, 2, 3, 1, 2, 1, 2 or 1, 2, 1, 2, 3, 1, 2.

7 - 7 pulses per bar

8 - each pulse is worth a quaver (1/8 note)



Abbreviated time signatures are common in piping; you might see these symbols below:

C - This is called "Common Time" which is exactly the same as the 4/4 time signature.

C - This is called "Cut Time" or "Alla Breve". This is also 4/4 but halved in duration and played twice as fast, hence the word "cut". This can also be transcribed as 2/2 with 2 minim (1/2 note) beats per bar. Cut time is commonly found in reels and has a similar feel to that of a 2/4 march.

On the rare occasion that you might find signatures that do not fit the usual duple (simple) or triple (compound) categories; these are categorized as complex, asymmetric, irregular, or unusual. We won't go into details here because we are only covering the basics and they are extremely rare, especially in piping.

Alright, that's Note Values and Time Signatures done; it's time to move on to Scales. If you've made it this far, well done! There's not much to go now; I'll try and keep this next section as straightforward as possible.

SCALES

There are 12 notes in an octave. In "bagpipe terms" they are A, B flat, B, C, C sharp, D, E flat, E, F, F sharp, G, G sharp, A. * With the symbols it looks like this:
A, B ♭, B, C, C♯, D, E ♭, E, F, F♯, G, G♯, A.



Each 8 note scale is made of a selection of the notes above going from A the A. The difference in intervals (distance between in each note) determines the tonality or feel of a scale. To keep it simple, we won't thoroughly go through the names of intervals in this article.

*All notes have enharmonic equivalents and can be called different names, for instance, B ♭ could be an A♯, G♯ can be called an A ♭, F♯ could be a G ♭. These are all relative to the key signature one might be playing in; luckily in piping, we don't have to worry about this since we play most of the keys available with our standard nine note scale.

Now with tape or simply avoiding specific notes, we can play any of the 100+ scales (Major, Minor, Blues, Diminished, Pentatonic, Whole Tone, Chromatic and many more Additional Modes) that are possible in music with the 12 notes available. Each scale conveys different emotions to the listener and essential building blocks to the start of a great composition. Let me show you some of the most commonly explored scales on the bagpipes today.

Notes used that are in our normal scale are highlighted in **GREEN**.

Notes used that are not our normal scale are highlighted in **RED**.

Notes not used at all are **GREY**.

A Mixolydian Scale



This is our standard scale which goes like this, with A being the root note (starting position). Don't worry about the crazy-sounding scale name here, we will get to that another day. This is very close to a Major scale in its construction, so pieces using this scale will generally sound happy-ish.

Tune examples: The Green Hills of Tyrol, Bonnie Dundee, The Battle of Waterloo.

A Major Scale



This scale uses the note G♯ which can be achieved with alternate fingering on the bagpipes and practice chanter. It has been cleverly used in pieces to give the authentic major feel, however, be cautious when using G♯ on the bagpipes; it can be quite jarring against the drones as it is only a semitone (one note) away from A. Pieces using this scale will generally sound happy and pleasant.

Tune examples: The 79th Farewell to Gibraltar, Hallelujah, Frère Jacques*

*Due to our regular Mixolydian scale, many pipe tunes end up inappropriately using the note G instead of G♯ which can also be considered A Major tunes, usually in the passing notes. Some change the song altogether to avoid G♯ entirely like Scotland the Brave.

B Minor Scale

You can achieve this scale by starting on B and playing up the scale right up to A then playing B again; this is because we can't achieve High B under normal circumstances. This is a fun one to begin with because you're going to get moodier, darker and sometimes sad sounding pieces here. Play these tunes with drones tuned to B and a chanter that plays Low F# instead of G for a full and rich minor experience.

Tune Examples: Paddy's Leather Breeches, Mist Covered Mountains, Farewell to Nigg.

D Major Scale

This scale will give happy-sounding pieces 100% of the time; if you're looking to compose something joyful - look no further.

Tune Examples: Amazing Grace, Flower of Scotland, The Road to the Isles, The Black Bear.

E Minor Scale

Similarly to the B minor scale, you will get darker and moodier results from using this scale. I like to think of this scale as the brighter version of B minor on this instrument as it is literally higher on the scale.

Note that C is highlighted in RED which means this is not in our normal scale, so you will have to find ways of achieving this note via taping the chanter, using alternate fingering* or avoid using the note entirely.

*Since our standard C is a C# we called this C natural to demonstrate it has been altered from its original state. The symbol for this is ♮, C natural can, therefore be indicated as C ♮.

Tune Examples: Lexy McAskill, The Little Cascade, Muir of Ord

F# Minor Scale

This scale is seldomly used, which is interesting because it contains all but one of our conventional notes on the bagpipes (G). It's a shame as it another flavour of the 'minor' palette applicable on bagpipes. To play this scale, we must find ways alternate ways to play or avoid the note G#. Tunes written in this minor scale will naturally feel sad. To give my best explanation of the difference, I'll delve a little into intervals here (more in-depth understandings of intervals will be explored in a future article). Since tunes will resolve to F# in this scale, in it's very DNA to display emotions of anguish and sadness. In my opinion, the combination of the Major 6th interval from Low A (our drones) to F# (the root note) and the minor 3rd interval from F# to High A is as sad as you get. The piobaireachd "Lament for the Children" extensively uses these intervals to evoke sadness and longing in the listener.

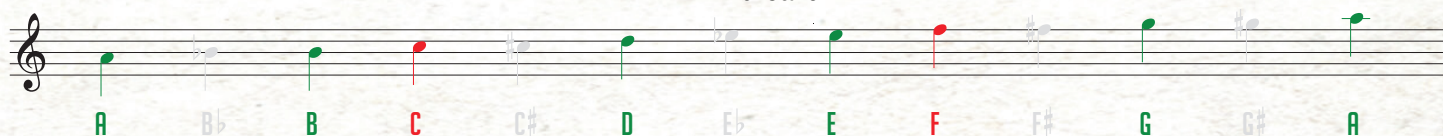
Tune Examples: Tir Nan Og, Lemon and Lime, (parts of) Richat, Odyssey

A Dorian Scale

Like the E minor scale, this uses conventional notes on the bagpipes except C#, which becomes a C \natural . The difference here is the root note (starting note) being A rather than E; this largely determines the overall feel of the piece and which note it resolves to. Tunes written in this scale feel cheeky, partly melancholy, a little hopeful and sometimes 'badass' (best to hear it for your self). You can either avoid or play the C \natural .

Tune Examples: John Morrison of Assynt House, Macgregor of Rora, Andy Renwick's Ferret, Altera Terra

A Minor Scale



The A Minor scale is another minor scale that has the same building blocks to the B and E minor scales however with a slight difference being that it's root note (starting note) is the main note of the bagpipes. The intervals in this scale give a genuine "minor" feeling against the drones, which are also in A resulting in a very powerful combo.

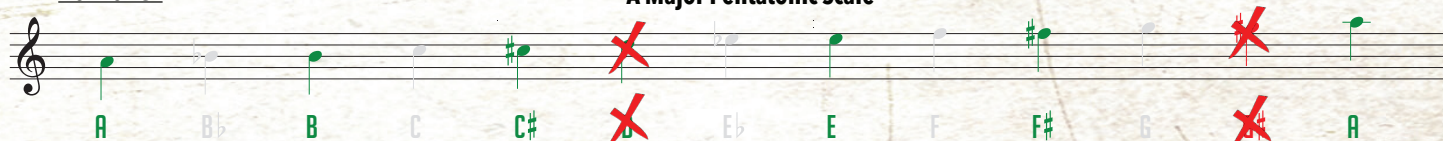
For this scale, we will be using (or avoiding) C \natural and F \natural

Tune examples: Danger Zone, Raigmore, Plinn Breton set I played in Lorient 2017.

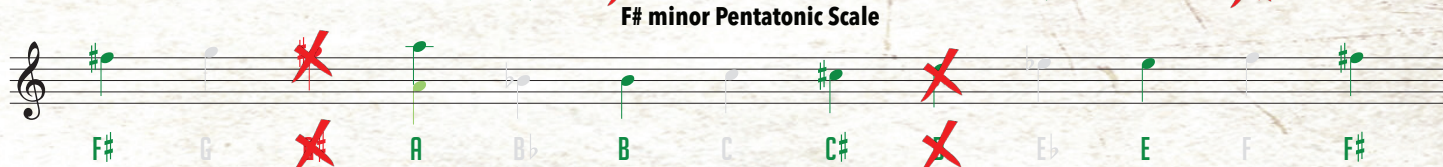
Pentatonic Scales

These scales consist of primarily using 5 notes of a typical 8 note scale. Here are some useful ones that we use on the bagpipes:

No D or G#



A Major Pentatonic Scale

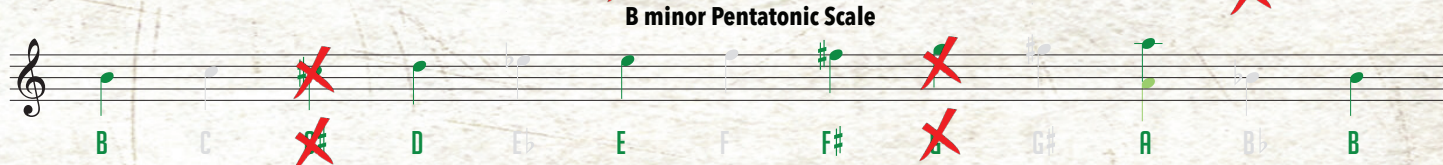


F# minor Pentatonic Scale

No C# or G



D Major Pentatonic Scale

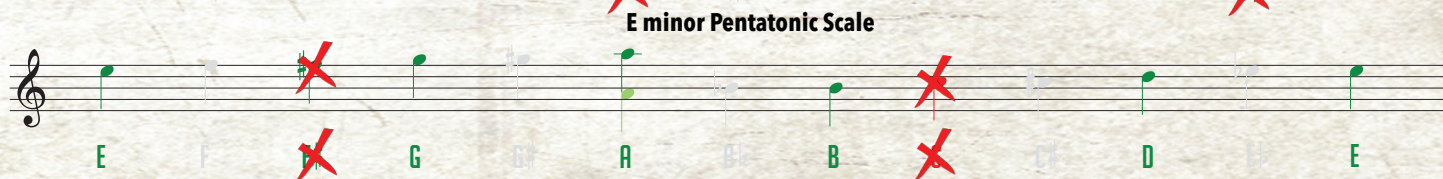


B minor Pentatonic Scale

No C or F#



G Major Pentatonic Scale



E minor Pentatonic Scale

Horrar! You made it to the end. I know that you may be just as confused as you began - THIS IS NORMAL. Take a few days break and come back to it. The second time reading is always easier to understand; sometimes your brain needs some time to work through what has just learned.

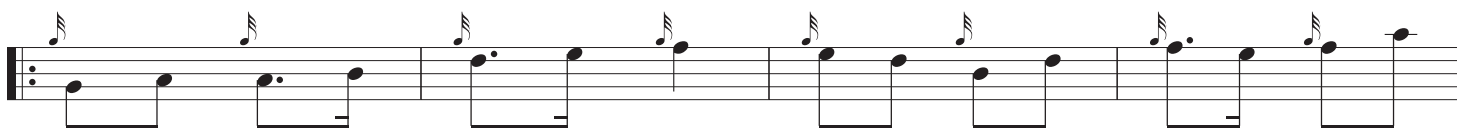
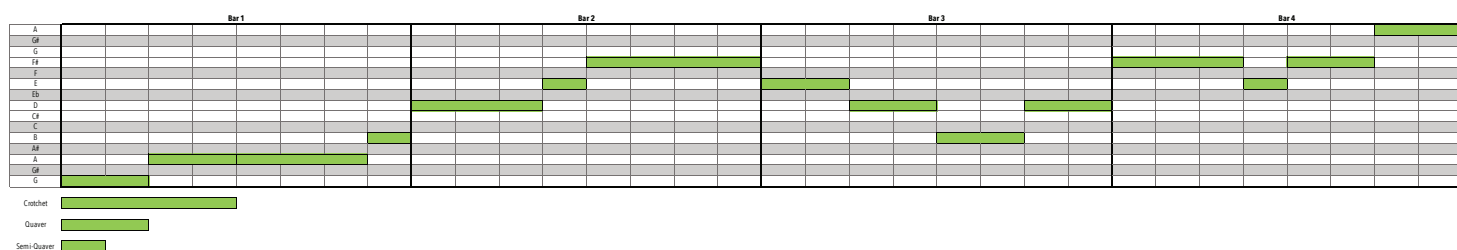
BY LINCOLN HILTON

FOLLOW THE GRID

In the previous article, we covered the basics of composition and got our feet wet with some musical theory. Now it's time to write! If you haven't already seen the article on page 22 and need a refresher on the basics of note values, time signatures and scales, please do so before reading on.

Now, there are a couple of ways to go from here and write your first tune. The most common way is to write out an idea on paper or in a bagpipe music writing program. I have done this many times in the past, and it works. The downside here is that you'll need some inspiration to hit and have an idea to begin with; whether it is an old recording on your iPhone or a tune you've been humming around the house. Who wants to wait for inspiration to hit? And any idea you formulate in your head is ultimately based on anything and everything you've ever learned up this point which often constricts you to a box of what you think is possible; consciously and subconsciously.


How do we think outside the box and write with no idea in mind? Use a grid! This idea is just as easy as colouring in a book. With this method, you can write a tune without putting your piping bias into the mix, and you will come across new ideas and melodies to explore. We reverse the process of composing where we end up writing a tune which you yourself have to learn, as opposed to having the idea already. Another advantage to this process is that you can inject a dose of randomness so you'll be able to mitigate the chances of plagiarism which happens more often than not with our nine note scale and distinct structures of melodies. Here's how it works.




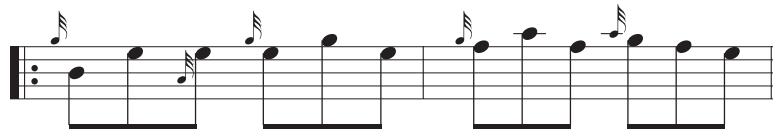
On the left side of the grid are the chromatic notes of our scale. The idea is that you'll pick a scale (look at the scales demonstrated Vol 21's article - Back to Basics) and "grey-out" note rows that aren't used in the scale. The vertical columns are based on note values with the thicker lines determining where the bar starts and ends. Here is what the first line of Mairi's Wedding looks like on the 4/4 grid. Note that there will be only one coloured space per column unless you are working with harmonies with multiple layers.

"How do we think outside the box and write with no idea in mind?"

	Bar 1				Bar 2			
A								
G#								
G								
F#								
F								
E								
Eb								
D								
C#								
C								
B								
A#								
A								
G#								
G								

Crotchets 

Quavers 





Let's have a look at the first two bars of the Fuddler, an E minor tune in the 6/8 time signature. In the E minor scale, we use C natural in place of C# so C# is grey on the grid but C (natural) is open to be coloured in. I recommend highlighting C in the column red, to remind you to either avoid the note or use it knowing you'll have to use alternate fingering or tape to achieve the note.

Now it's your turn! Let's pick the A Major Pentatonic scale. It just means that you need to adjust your grid and grey out more notes, simple! I've gone ahead and filled in the first two bars and the ending. Go ahead and fill in the gaps, and do this grid twice for two parts. Please send in your creations to info@mdpiping.com; we can't wait to see what you come up with.

	Bar 1				Bar 2				Bar 3				Bar 4			
A																
G#																
G																
F#																
F																
E																
Eb																
D																
C#																
C																
B																
A#																
A																
G#																
G																

	Bar 5				Bar 6				Bar 7				Bar 8			
A																
G#																
G																
F#																
F																
E																
Eb																
D																
C#																
C																
B																
A#																
A																
G#																
G																

Crotchets 

Quavers 

Note that I extensively used the tonic of the scale in the opening/resolve of the tune, which in this case is A (A Major). By resolving on the tonic, we guide the listener on a journey to the note they want to all want to hear at the conclusion of the piece. This tonic note can be in the last two bars, the entirety of the last bar or run into it at the last bar's end.

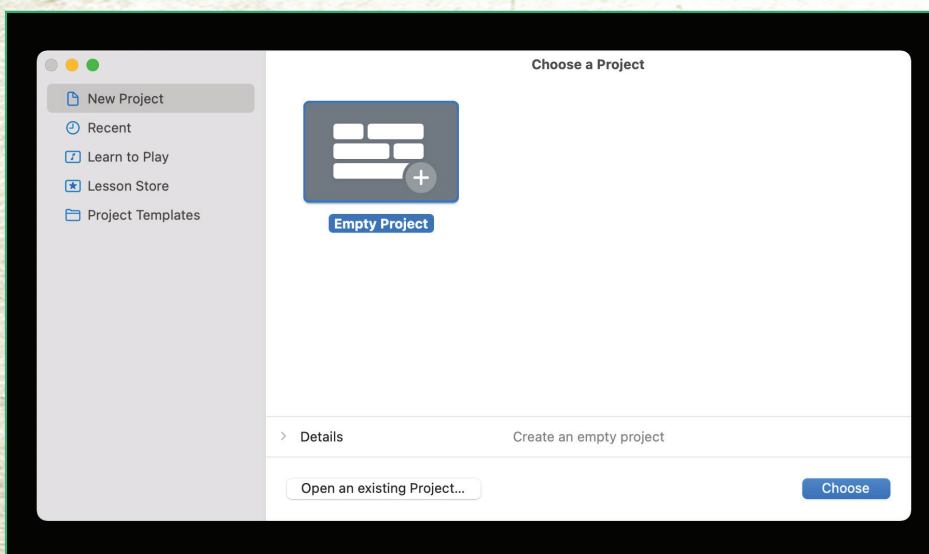
If you have got this far, congratulations, you have also learned how to write in MIDI (Musical Instrument Digital Interface). This is precisely the same process many DAW's (Digital Audio Workstations, e.g. Logic Pro X, GarageBand, Pro Tools, Audacity etc.) use in their Piano Roll. I don't expect you all to spend the rest of your days colouring in excel sheets to write in tunes, but instead, use this knowledge gain in this article to move onto MIDI programs where you can playback the melodies you have created. I hope that this method provides an alternative to the traditional "think of a tune and write it down approach" and it will get you writing more without waiting for inspiration to pass by.

MIDI MASTERY

The term "think outside of the box" is almost ubiquitous when it comes to composing new material and using MIDI helps us to do just that. As discussed in the previous volume of Modern Piping, this method reverses how tunes are typically composed whereby composers can write melodies before learning them. This disables our inner bagpiping tendencies and forces us to apply our gracenote jargon to melodies we are writing externally from our technical playing capabilities.

MIDI is a communication standard that allows digital music gear to speak the same language. MIDI is short for Musical Instrument Digital Interface. It's a protocol that allows computers, musical instruments and other hardware to communicate. First, we will need a digital audio workstation (DAW) to work with MIDI. There are many out there; Ableton Live, Audacity, Pro Tools, Cubase, FL Studio, REAPER, Logic Pro X, Garageband, to name a few. I personally use Logic Pro X for my productions and in this article, we will look at Garageband, a free MAC software that I like to call Logic Pro X's "little brother". If you're a PC user, don't fret, the processes will be primarily the same and you'll just have to figure out your program's nuances to get the same result. Note, this article will be based on the Garageband version 10.4.2 so if things change in the future, you'll have to do the process perhaps a little differently.

Let's jump in! Open the Garageband app on your computer. You'll see a window like this. To open a blank canvas, click, "New Project" - "Empty Project" and then click "Choose".



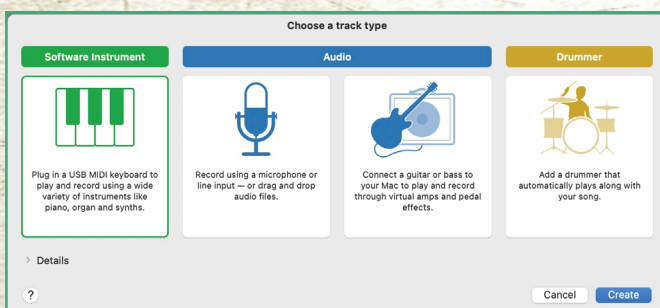
New Project - Options to open a new project.

Recent - Displays recently opened projects.

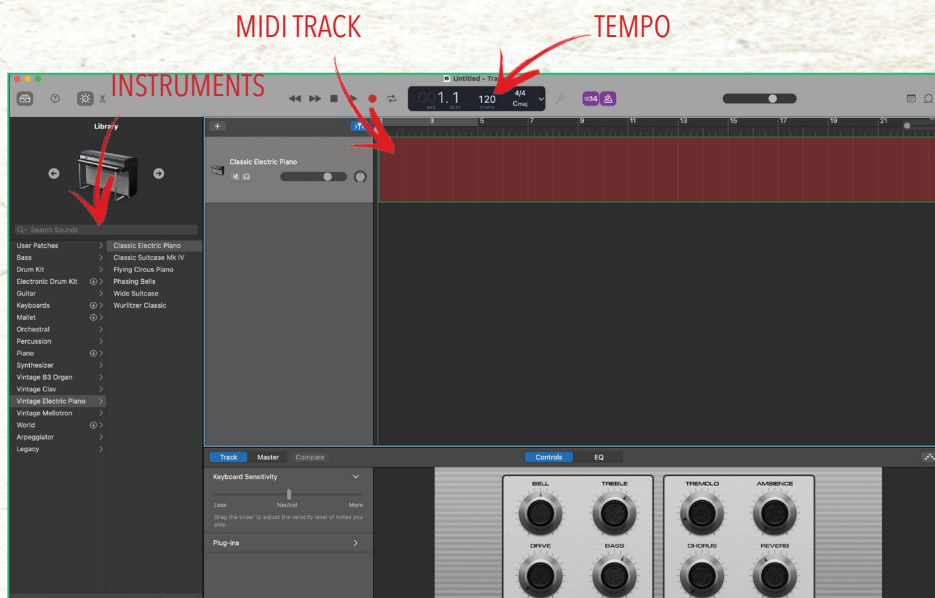
Learn to Play - Teaches you the basics of piano/guitar/chord theory.

Lesson Store - Various online lessons by different artists.

Project Templates - Options to open projects with prearranged instruments and tracks.



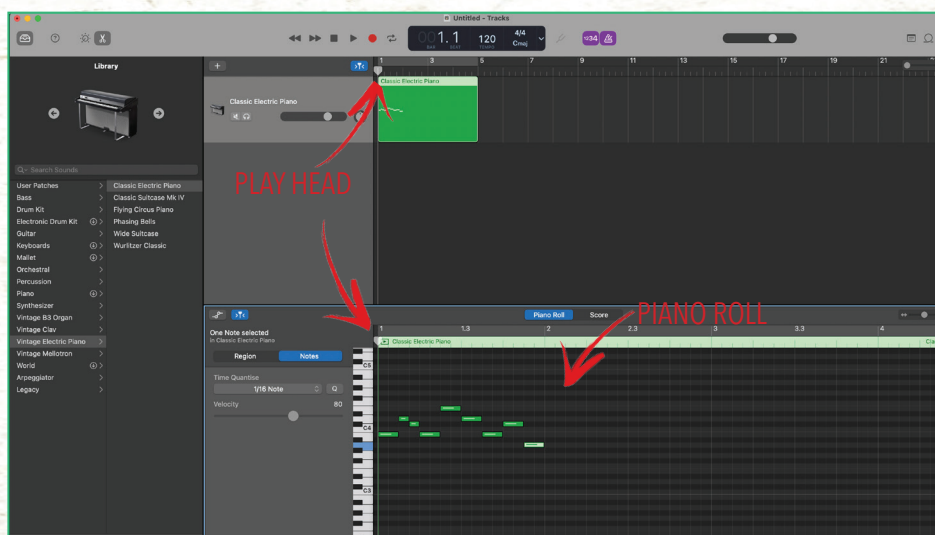
You'll then get to choose between the options of Software Instrument, Audio or Drummer. "Audio" is for recording into the program via a microphone or line-in for a guitar; "Drummer" adds a virtual drummer to your production and "Software Instrument" opens a MIDI track. We want to write in MIDI so click "Software Instrument" and then click CREATE.



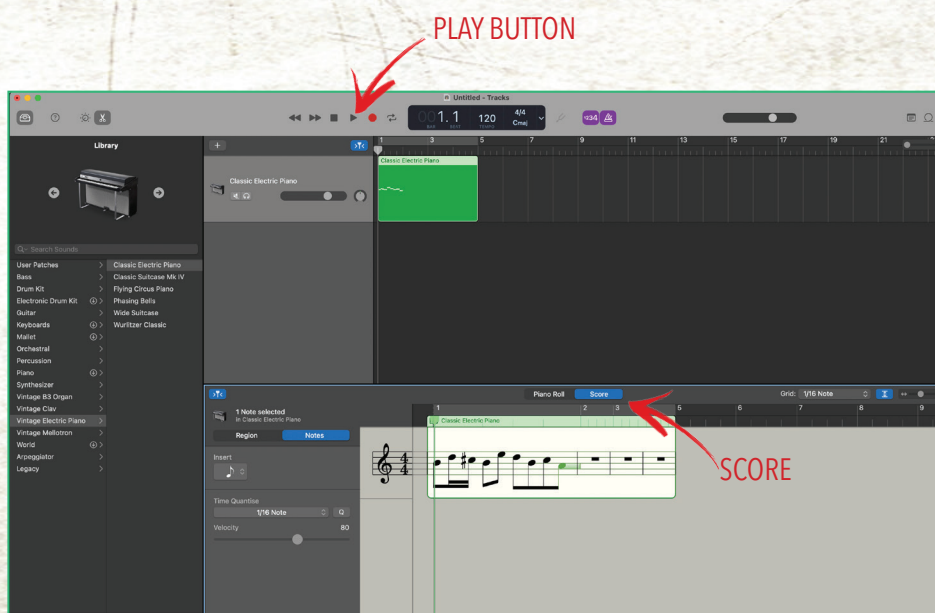
The project will now open up; just close the Musical Typing Keyboard window as we won't be using that here. Now, this is where everyone freaks out, closes their laptop and says this is too hard. Be patient, try and work through this! Eventually, this process will be second nature and you'll be writing up a storm in no time. Here's a brief rundown of the page and you'll want to "right-click" in the red highlighted area and click on "Create MIDI region".

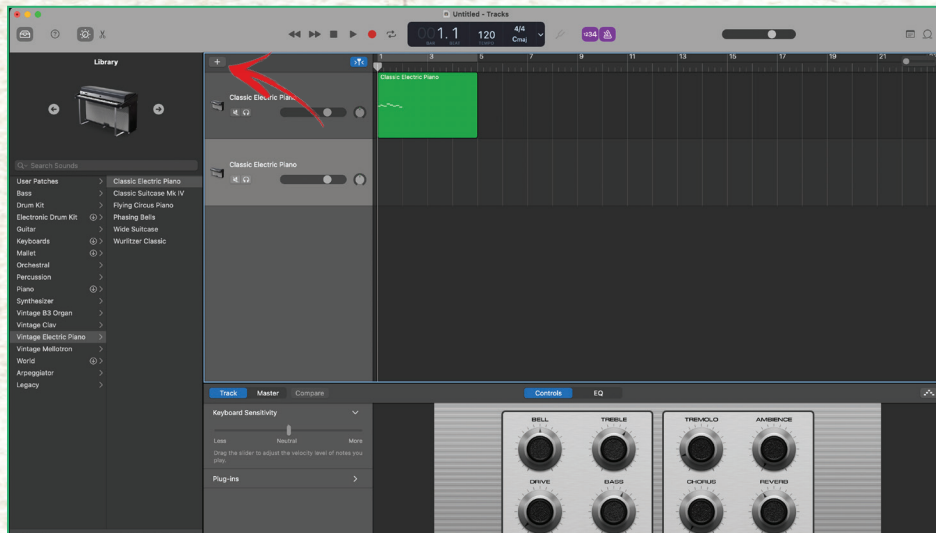


This will create a green box. Think of this as your painting canvas; you need something to write on, and digitally this will be your paper. Without it, you have no art. You can drag it from the top right, and it will LOOP the canvas. If you drag it from the bottom right, and it will EXPAND the canvas giving you more room to write. Double click it to access the piano roll.



Once you've double-clicked the green MIDI box, the piano roll should show up. For those who have read the article "FOLLOW THE GRID" in Vol. 22, this should look very familiar except this time you have a piano on the left-hand side of the grid. You can now draw in MIDI notes by holding down the command key on your keyboard and clicking in the piano roll. The longer the bar, the longer the note and it's vertical position dictates the note/pitch it will play. Drag the bars from the right side to lengthen or shorten notes. For a more comprehensive overview of working with the grid, read the article in Vol. 22 of Modern Piping. After writing in the melody you want, it should look like this (left). You can preview it by dragging the playhead to the beginning (left) of the page and pressing the play button or spacebar. Remember that you can adjust the tempo as you please (see screenshot above). Make sure to write around C4 so when we want to view the music, it will make sense in our notation. *Remember our standard C and F are C# and F#, not C and F natural.* If you click on the word "Score", it will take you to the music so you can read and learn what you just wrote. This is where you'll have to use your knowledge of ornamentation to put in embellishments as you play the melody since there are no gracenotes doublings. Click "Piano Roll" to get back to the Piano Roll.





To add harmonies and other lines, click the + sign here and repeat the steps above! To export the audio, click "share" on the top left of your computer and then "Export song to audio".

Again, I stress - be patient. I remember looking at this for the first time, and even after the hours of YouTube learning grind and countless sleepless nights, I was STILL super slow. Over time, I got used to how things work and what looked like rocket science appeared much nicer after practice and playing around with things. Stick at it, and I promise it will become an invaluable tool to your composing and harmony making skills. On top of that, you'll be practising your sight reading skills like never before. Good luck!

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We are excited to announce that all tunes featured in Modern Piping are now online at:



www.mdiping.com/listen

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018

LESSONS

BY LINCOLN HILTON

RHYTHM

GRACENOTE PLACEMENT

Rhythm and Ornamentation are arguably just as important as the melody itself and are quintessential building blocks of a great tune.

Tunes can be made or destroyed with this stuff and when used correctly, it can also get you out of the risk of writing something that has been written before in a particular key. It's also fun to re-arrange the rhythmic structure to an otherwise rhythmically bland piece. Think it's not important? ...think again.

Try and play any straight hornpipe and shift all the G gracenotes (where you can) over one note...



For this article, let's focus on round hornpipes. When presented with 2/4, you have 8 (one bar) or 16 semi-quavers (two bars) to play with: 1 2 3 4 5 6 7 8 right up to 16 if you want. You can break up the pulses by accenting ones with embellishments. Primarily these are G gracenotes so you will notice that they usually follow patterns by going on every alternating note i.e gracenote, no gracenote, grace note, no gracenote etc. For example, you can go:

2 + 2 + 2 + 2 rhythm which is the traditional 1 2, 1 2, 1 2, 1 2 melodies like most hornpipes e.g Gravel Walk.

3 + 3 + 2 rhythm which is that 1 2 3, 1 2 3, 1 2 rhythm found in the Clumsy Lover and many other tunes.

2 + 2 + 3 + 3 + 2 + 4 rhythm which can be found in my tune Shadow. This goes like 1 2, 1 2, 1 2 3, 1 2 3, 1 2, 1 2 3 4 over two bars.

Keep in mind that each number is a semi-quaver note and the 1's are embellished notes.

Let's play around with the 3rd part of Sound of Sleet!



Here we have the standard 2 + 2 + 2 + 2 rhythm



We can take this and incorporate the 3 + 3 + 2 rhythm



Obviously we can group two of these semi-quavers into a single quaver and ornament them like below:



Let change it up a bit for the second line and use the 2 + 2 + 3 + 3 + 2 + 4. Normally I don't put two different patterns in the same part but for this example I will.



Again, grouping two of these semi-quavers into a single quaver here and there can free the space up a bit and support the groove more.



Combine the lines and you have a pretty cool rhythmic pattern that you wouldn't have had before like below.



All lines in this article can be heard at www.mdpping.com/listen

This applies to every time signature. For the most part, jigs are straight forward being 1 2 3, 1 2 3 rhythms, but if you want to sprinkle some wow factor into it, change up a bar or two by my going 1 2, 1 2 3 4 or 1 2 3 4, 1 2 which also turns out to be waltz time. Hornpipe strikes and other crotchet friendly embellishments can count for 2 quavers so just chuck some of those in there towards the end of a beat and then you have a little bit of syncopation where there was none. Try putting two quavers in the anacrusis instead of one!

BY LINCOLN HILTON

BUILDING MELODIES WITH CHORDS

These chords, along with many others can be seen in Modern Piping's Vol. 1 article.

After many requests on applying knowledge from articles in Volume 1-5 when writing tunes, let's dive in and write a jig in D major! Most theory work has been covered in Volume 1-5, but to see more chords make sure to check in Modern Piping's Volume 1 article.

In the D major scale every note on our normal bagpipe scale can be used. We have 7 standard triads (chords with 3 notes) that we have to play with in this key and they are:

D MAJOR (D, F#, A)
A MAJOR (A, C#, E)

E MINOR (E, G, B)
B MINOR (B, D, F#)

F# MINOR (F#, A, C#)
C# DIMINISHED (C#, E, G)

G MAJOR (G, B, D)

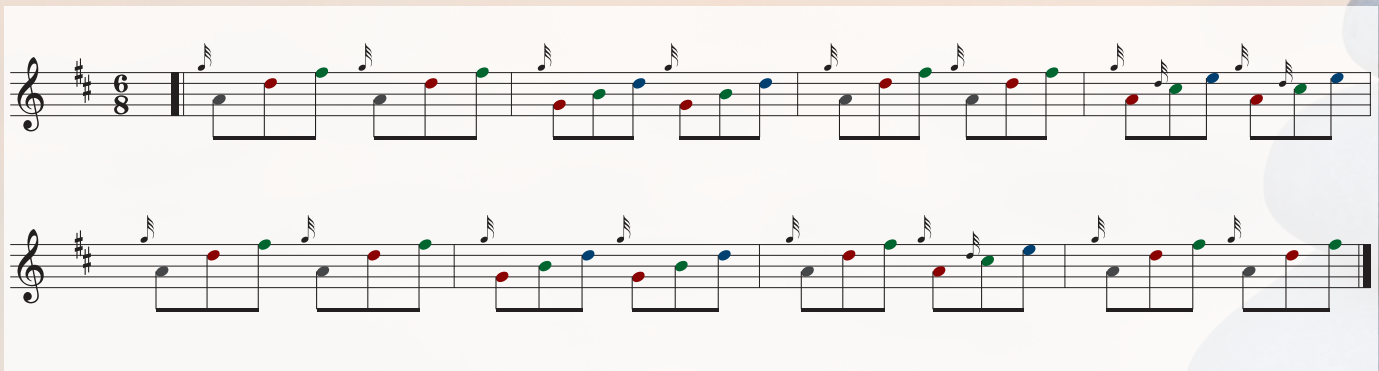
To keep things simple, for this example we will only use 3 chords and arrange them like below. Obviously you can get creative and change which chords you use and how they rhythmically back the melody. Whether you go for a complex arrangement or a simple approach, it's a good idea to start with the 1st chord (D major chord if you're playing in the D major scale) and finish so that it either ends with the 1st chord like the example or has a last bar that is leading into the resolving 1st chord e.g Glasgow City Police Pipers; the tune resolves to a Low A after the 8 bars of music finishes. Each chord is coloured so that the tonic (1st note of the chord) is red, the 3rd is green and the 5th is blue. The grey ones are also in the chord as they are just high/low inversions of A and G.

The musical notation shows an 8-bar jig in D major, 6/8 time. The chords and their notes are as follows:

Bar	Chord	Notes (Tonic, 3rd, 5th)
1	D MAJOR	D (red), F# (green), A (blue)
2	G MAJOR	G (red), B (green), D (blue)
3	D MAJOR	D (red), F# (green), A (blue)
4	A MAJOR	A (red), C# (green), E (blue)
5	D MAJOR	D (red), F# (green), A (blue)
6	G MAJOR	G (red), B (green), D (blue)
7	D MAJOR - A MAJOR	D (red), F# (green), A (blue) / A (red), C# (green), E (blue)
8	D MAJOR	D (red), F# (green), A (blue)

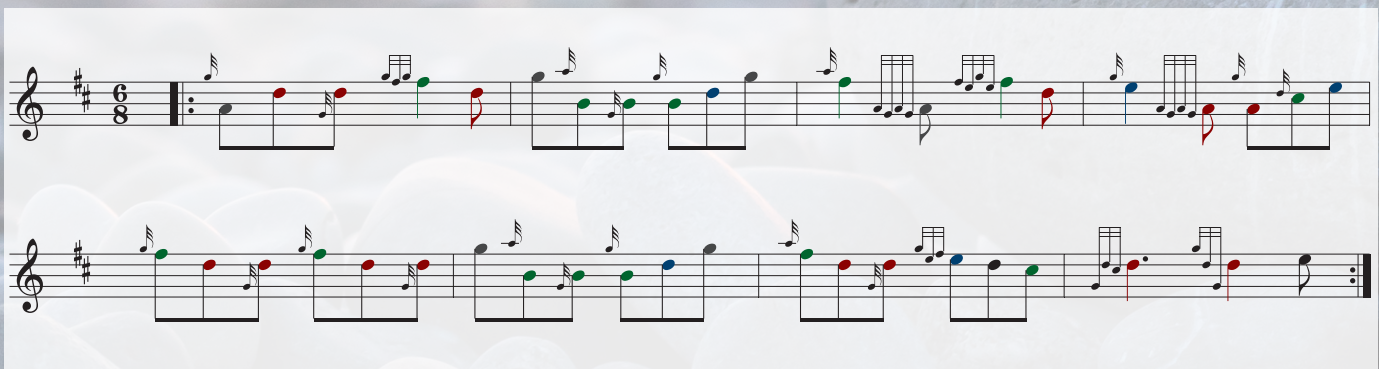
The notes are represented by colored dots on a musical staff: red for the tonic, green for the 3rd, and blue for the 5th. Grey dots represent high or low inversions of A and G.

As we all know, we can't play more than one note at a time unless we have accompanying pipers. The music below shows the chords arpeggiated meaning that, using the notes of the chord we're in, we cycle up and/or down the notes. This is a helpful tip if you're struggling coming up with ideas when creating the melody. Now, it sounds interesting but not what you want for the finished product as it is rather predictable and boring.

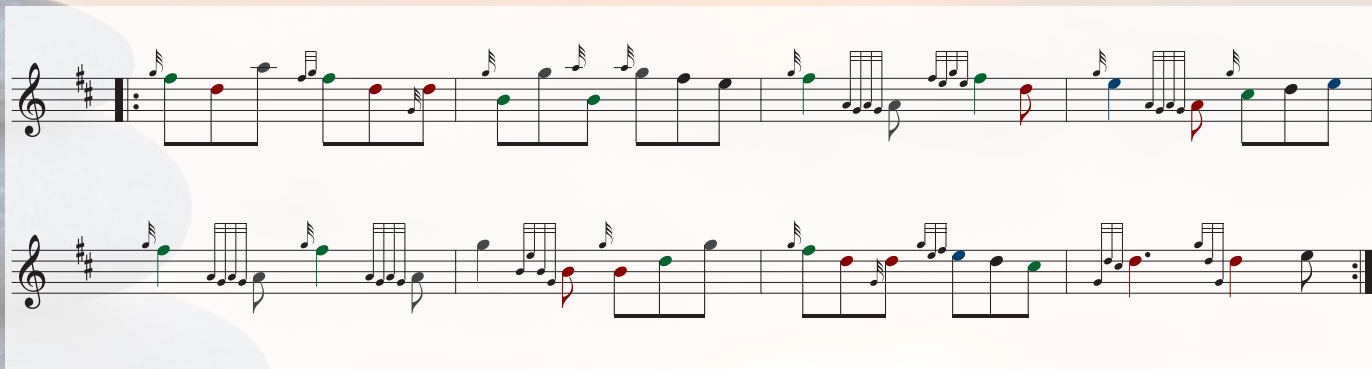


When writing the melody using this structure, you want to primarily stick to these notes, change the rhythm and add some syncopation in there if it feels right. You don't have to follow the chords exactly so experiment with using notes that aren't in the chord to create interest in a certain bar and dissonance where there was none. More often than not, you may even accidentally create 7th, 9th and even 11th chords because you're adding notes that go on top of the given chord; they're just inverted. That's where the magic happens. In music, I'm a strong believer in that if it sounds right, it is right....even if it goes against to norm. We will cover this in a future article.

For this example, I'd like to make it as simple as possible so we will use the main notes of the chords with the occasional passing note that isn't in the chord. I have colour coded them so you can see which notes I'm using from each chord. Notice nearly all of them are coloured in? I started with Low A because it is in the D major chord, was something different than just using D and was quite low and "grounded". It generally feels right to start tunes on the lower register of the scale and use longer notes (note the crotchet) because it makes it feel more of a first part and leaves room for more intensity for the later parts. Since we are finishing with the D major chord in the 8th bar, it makes sense to also resolve the melody there also. For most bagpipe tunes, they follow the 2 bar "question and answer" phrase patterns of A (bars 1 and 2), B (bars 3 and 4), A2 (bars 5 and 6), C (bars 7 and 8) where A is your introduction question, B is your answer, A2 is a variation of question A, and C wraps it all up. I like to have A AND B feel like questions as it keeps the listener more engaged and creates a bit more tension.



For the second part we will use the same chord progression, 2 bar "question and answer" phrase patterns and ending phrase. However, we will vary it up a bit by changing the melody in A, B and A2. Usually, second parts tend to be higher on the staff and start with either the 3rd or 5th of the main chord. In this case we used F# which is the 3rd of the chord. In general, D major (along with D) uses A's extensively so it gives us the option of ornamenting the Low A's with birds and using High A's as illusional rests. With this knowledge we can then come up with a second part.



I hope this provides a basic understanding into how using chords to construct a melody can produce cool results. Try writing one of your own songs or even practice by writing a 3rd and 4th part to this example. Mix it up by changing the chord progression or start using more of the notes that aren't in the chord you're in.

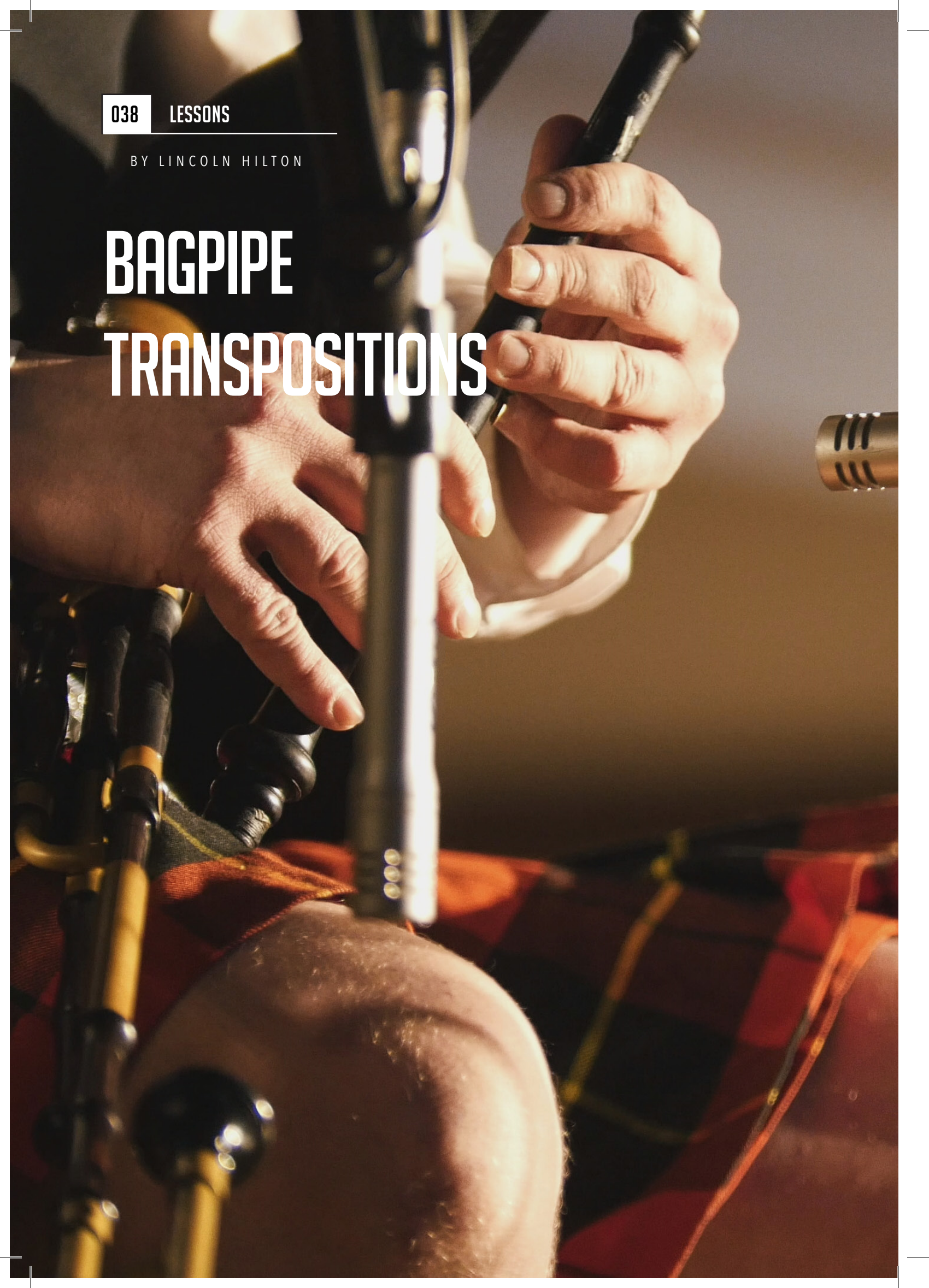
Remember, if it sounds right, go for it!

038

LESSONS

BY LINCOLN HILTON

BAGPIPE TRANSPPOSITIONS



"Essentially it works with any scale to any degree, we are just moving them up/down a note or two....or twelve."

Last edition we looked at how we can change time signatures to get different effects from a 4/4 march. This time we will look at changing keys signatures and what we can do with our limited use of notes.

Often when we change a song or a tune from one key signature into another it changes the feel. For the most part with bagpipes tunes, it can turn them into something unrecognisable that it almost becomes brand new with similar of traits of rhythm and melodic contour, or, it can shed new light on a melody you have heard before.

For instance, a tune like Erratic Disposition (page 17 and 18) had parts that worked quite well in A dorian (C's and F#'s) and B minor. The A dorian version had the octave of Low A and High A where as the B minor version could be played without changing the tuning of C# to C.

To transpose a melody, we must move all the notes up or down a certain amount of semitones. Using a midi program and transposing a melody electronically is the fastest and easiest way if you have a program handy.

The chart on the next page might look intimidating, but it includes every transposition possible! Now this looks a lot harder in theory than it actually is. All you have to remember is that you can move any melody up or down 12 semitones (until you hit an octave) and it will work perfectly. The challenge is that we can only play 9 notes so that's what makes it complicated. If you're okay with playing the unorthodox notes and you can pull them off, go for it! This article is going to be concentrated on the normal note transpositions.

I've specifically tailored this chart to our normal A mixolydian bagpipe scale (if you are using alternate notes/scales, just ignore the red coloured boxes and the bolded lines going down dividing the chart) The graph is divided up between 12 "steps" of transposition. There are 5 rows in each "step". In the first row there are the notes of the original scale. The second row shows whether the note will turn into a usable note or not with a tick....green ticks are good here. The third row shows what the note from row 1 will turn into after the transposition. A red box means it will turn into an unorthodox note. Rows 4 and 5 shows what the transposition is; whether it be A major to B major, A mixolydian to B mixolydian, A minor to B minor. Essentially it works with any scale to any degree, we are just moving them up/down a note or two....or twelve.

BAGPIPE TRANPOSITIONS

	A	Bb	B	C	C#	D
1 Step	A	Bb	B	C	C#	D
					✓ D	
	Bb	B	C	C#	D	D#
Minor 2nd	A major/mixo/minor	Bb major/mixo/minor	B major/mixo/minor	C major/mixo/minor	C# major/mixo/minor	D major/mixo/minor
	Bb major/mixo/minor	B major/mixo/minor	C major/mixo/minor	C# major/mixo/minor	D major/mixo/minor	D# major/mixo/minor
2 Steps	A	Bb	B	C	C#	D
	✓ B		✓ C#	D	D#	✓ E
		C				
Major 2nd	A major/mixo/minor	Bb major/mixo/minor	B major/mixo/minor	C major/mixo/minor	C# major/mixo/minor	D major/mixo/minor
	B major/mixo/minor	C major/mixo/minor	C# major/mixo/minor	D major/mixo/minor	D# major/mixo/minor	E major/mixo/minor
3 Steps	A	Bb	B	C	C#	D
			✓ D	D#	✓ E	F
	C	C#				
Minor 3rd	A major/mixo/minor	Bb major/mixo/minor	B major/mixo/minor	C major/mixo/minor	C# major/mixo/minor	D major/mixo/minor
	C major/mixo/minor	C# major/mixo/minor	D major/mixo/minor	D# major/mixo/minor	E major/mixo/minor	F major/mixo/minor
4 Steps	A	Bb	B	C	C#	D
	✓ C#		D#	E	F	✓ F#
		D				
Major 3rd	A major/mixo/minor	Bb major/mixo/minor	B major/mixo/minor	C major/mixo/minor	C# major/mixo/minor	D major/mixo/minor
	C# major/mixo/minor	D major/mixo/minor	D# major/mixo/minor	E major/mixo/minor	F major/mixo/minor	F# major/mixo/minor
5 Steps	A	Bb	B	C	C#	D
	✓ D		✓ E	F	✓ F#	✓ G
		D#				
Perfect 4th	A major/mixo/minor	Bb major/mixo/minor	B major/mixo/minor	C major/mixo/minor	C# major/mixo/minor	D major/mixo/minor
	D major/mixo/minor	D# major/mixo/minor	E major/mixo/minor	F major/mixo/minor	F# major/mixo/minor	G major/mixo/minor
6 Steps	A	Bb	B	C	C#	D
					✓ G	
	D#	E	F	F#	G	G#
Tritone	A major/mixo/minor	Bb major/mixo/minor	B major/mixo/minor	C major/mixo/minor	C# major/mixo/minor	D major/mixo/minor
	D# major/mixo/minor	E major/mixo/minor	F major/mixo/minor	F# major/mixo/minor	G major/mixo/minor	G# major/mixo/minor
7 Steps	A	Bb	B	C	C#	D
	✓ E		✓ F#	G	G#	✓ A
		F				
Perfect 5th	A major/mixo/minor	Bb major/mixo/minor	B major/mixo/minor	C major/mixo/minor	C# major/mixo/minor	D major/mixo/minor
	E major/mixo/minor	F major/mixo/minor	F# major/mixo/minor	G major/mixo/minor	G# major/mixo/minor	A major/mixo/minor
8 Steps	A	Bb	B	C	C#	D
			✓ G		✓ A	
	F	F#	G	G#	A	Bb
Minor 6th	A major/mixo/minor	Bb major/mixo/minor	B major/mixo/minor	C major/mixo/minor	C# major/mixo/minor	D major/mixo/minor
	F major/mixo/minor	F# major/mixo/minor	G major/mixo/minor	G# major/mixo/minor	A major/mixo/minor	Bb major/mixo/minor
9 Steps	A	Bb	B	C	C#	D
	✓ F#					✓ B
		G	G#	A	Bb	
Major 6th	A major/mixo/minor	Bb major/mixo/minor	B major/mixo/minor	C major/mixo/minor	C# major/mixo/minor	D major/mixo/minor
	F# major/mixo/minor	G major/mixo/minor	G# major/mixo/minor	A major/mixo/minor	Bb major/mixo/minor	B major/mixo/minor
10 Steps	A	Bb	B	C	C#	D
	✓ G		✓ A		✓ B	
		G#		Bb		C
Minor 7th	A major/mixo/minor	Bb major/mixo/minor	B major/mixo/minor	C major/mixo/minor	C# major/mixo/minor	D major/mixo/minor
	G major/mixo/minor	G# major/mixo/minor	A major/mixo/minor	Bb major/mixo/minor	B major/mixo/minor	C major/mixo/minor
11 Steps	A	Bb	B	C	C#	D
						✓ C#
	G#	A	Bb	B	C	
Major 7th	A major/mixo/minor	Bb major/mixo/minor	B major/mixo/minor	C major/mixo/minor	C# major/mixo/minor	D major/mixo/minor
	G# major/mixo/minor	A major/mixo/minor	Bb major/mixo/minor	B major/mixo/minor	C major/mixo/minor	C# major/mixo/minor
12 Steps	A	Bb	B	C	C#	D
	✓ A		✓ B		✓ C#	✓ D
		Bb		C		
Octave	A major/mixo/minor	Bb major/mixo/minor	B major/mixo/minor	C major/mixo/minor	C# major/mixo/minor	D major/mixo/minor
	A major/mixo/minor	Bb major/mixo/minor	B major/mixo/minor	C major/mixo/minor	C# major/mixo/minor	D major/mixo/minor

D#	E	F	F#	G	G#	✓
D#	E	F	F#	G	G#	2
			✓ G			
E	F	F#	G	G#	A	
D# major/mixo/minor	E major/mixo/minor	F major/mixo/minor	F# major/mixo/minor	G major/mixo/minor	G# major/mixo/minor	
E major/mixo/minor	F major/mixo/minor	F# major/mixo/minor	G major/mixo/minor	G# major/mixo/minor	A major/mixo/minor	
D#	E	F	F#	G	G#	5
	✓ F#			✓ A		
F		G	G#		Bb	
D# major/mixo/minor	E major/mixo/minor	F major/mixo/minor	F# major/mixo/minor	G major/mixo/minor	G# major/mixo/minor	
F major/mixo/minor	F# major/mixo/minor	G major/mixo/minor	G# major/mixo/minor	A major/mixo/minor	Bb major/mixo/minor	
D#	E	F	F#	G	G#	4
	✓ G		✓ A			
F#		G#		Bb	B	
D# major/mixo/minor	E major/mixo/minor	F major/mixo/minor	F# major/mixo/minor	G major/mixo/minor	G# major/mixo/minor	
F# major/mixo/minor	G major/mixo/minor	G# major/mixo/minor	A major/mixo/minor	Bb major/mixo/minor	B major/mixo/minor	
D#	E	F	F#	G	G#	3
				✓ B		
G	G#	A	Bb		C	
D# major/mixo/minor	E major/mixo/minor	F major/mixo/minor	F# major/mixo/minor	G major/mixo/minor	G# major/mixo/minor	
G major/mixo/minor	G# major/mixo/minor	A major/mixo/minor	Bb major/mixo/minor	B major/mixo/minor	C major/mixo/minor	
D#	E	F	F#	G	G#	6
	✓ A		✓ B			
G#		Bb		C	C#	
D# major/mixo/minor	E major/mixo/minor	F major/mixo/minor	F# major/mixo/minor	G major/mixo/minor	G# major/mixo/minor	
G# major/mixo/minor	A major/mixo/minor	Bb major/mixo/minor	B major/mixo/minor	C major/mixo/minor	C# major/mixo/minor	
D#	E	F	F#	G	G#	2
				✓ C#		
A	Bb	B	C		D	
D# major/mixo/minor	E major/mixo/minor	F major/mixo/minor	F# major/mixo/minor	G major/mixo/minor	G# major/mixo/minor	
A major/mixo/minor	Bb major/mixo/minor	B major/mixo/minor	C major/mixo/minor	C# major/mixo/minor	D major/mixo/minor	
D#	E	F	F#	G	G#	6
	✓ B		✓ C#	✓ D		
Bb		C			D#	
D# major/mixo/minor	E major/mixo/minor	F major/mixo/minor	F# major/mixo/minor	G major/mixo/minor	G# major/mixo/minor	
Bb major/mixo/minor	B major/mixo/minor	C major/mixo/minor	C# major/mixo/minor	D major/mixo/minor	D# major/mixo/minor	
D#	E	F	F#	G	G#	3
			✓ D			
B	C	C#		D#	E	
D# major/mixo/minor	E major/mixo/minor	F major/mixo/minor	F# major/mixo/minor	G major/mixo/minor	G# major/mixo/minor	
B major/mixo/minor	C major/mixo/minor	C# major/mixo/minor	D major/mixo/minor	D# major/mixo/minor	E major/mixo/minor	
D#	E	F	F#	G	G#	4
	✓ C#			✓ E		
C		D	D#		F	
D# major/mixo/minor	E major/mixo/minor	F major/mixo/minor	F# major/mixo/minor	G major/mixo/minor	G# major/mixo/minor	
C major/mixo/minor	C# major/mixo/minor	D major/mixo/minor	D# major/mixo/minor	E major/mixo/minor	F major/mixo/minor	
D#	E	F	F#	G	G#	5
	✓ D		✓ E			
C#		D#		F	F#	
D# major/mixo/minor	E major/mixo/minor	F major/mixo/minor	F# major/mixo/minor	G major/mixo/minor	G# major/mixo/minor	
C# major/mixo/minor	D major/mixo/minor	D# major/mixo/minor	E major/mixo/minor	F major/mixo/minor	F# major/mixo/minor	
D#	E	F	F#	G	G#	2
				✓ G		
D	D#	E	F		G	
D# major/mixo/minor	E major/mixo/minor	F major/mixo/minor	F# major/mixo/minor	G major/mixo/minor	G# major/mixo/minor	
D major/mixo/minor	D# major/mixo/minor	E major/mixo/minor	F major/mixo/minor	F# major/mixo/minor	G major/mixo/minor	
D#	E	F	F#	G	G#	7
	✓ E		✓ F#	✓ G		
D#		F			G#	
D# major/mixo/minor	E major/mixo/minor	F major/mixo/minor	F# major/mixo/minor	G major/mixo/minor	G# major/mixo/minor	
D# major/mixo/minor	E major/mixo/minor	F major/mixo/minor	F# major/mixo/minor	G major/mixo/minor	G# major/mixo/minor	

To use this, identify what key your tune is that you want to transpose and then use the charts via its columns until you see what key you want to change it into. For instance if you have a tune that is in D major, you would go down the “D” column and stop on a transposition you’d like to do. If it resolves on D now, after the transposition it will resolve to a completely new note. If you decide to go from D major to G major, it would resolve to G. To get this result, you would use the “5 steps - Perfect 4th” row and change the notes as indicated. As you can see, any G’s will turn into C’s so you will have a problem if you want to only play normal notes after the transposition and you have G’s in the original version. If you don’t like the result, try another. D Major to A major is a good one if you have G’s and don’t have any C#’s; this transposition will resolve to A.

Since this is based on the A mixolydian scale, tunes that we play often use scales that avoid (and in some cases, use) unorthadox notes to give the same feel. Tunes in E minor and G major will use a C instead of a C#. F# minor and A major tunes will use G#’s instead of G’s. A minor tunes will use C and F instead of C# and F#. In these cases you’ll have to make sure you’re using the right notes in the scale. This will change the amount of usable notes after the transposition so remember to ignore the red boxes and bold columns. As an example, going from A minor to B minor in the “2 steps - Major 2nd” transposition will be a perfect 7 note usability vs the 5 note usability which uses the normal C# and F#; they will turn into D# and G#. Here I use the term “usable” loosely as in these cases you’d probably be used to playing alternate notes, D# and G# are great notes to play if you can do them! You will be fine using this chart with B minor and D major tunes as they use the entire scale. If you have a A mixolydian tune (a tune that resolves to A and has G’s) then you’ll have to take that into account. If there are no G’s and it resolves to A, it is likely an A major tune (where the G’s are G#’s) which can easily be transposed into other major keys. If you’re unsure about what notes each scale includes, check the article in Vol.1 “BAGPIPE CHORDS AND SCALES” as most of the standard scales used in bagpipe tunes are shown there.

How does this work? Here are some examples.

Let's take the tune Amazing Grace and turn it into A major.

Slow Air

AMAZING GRACE

(D MAJOR)

Trad.



To do this we go down the D column and then see which row has the D to A transposition. This is the "7 steps - Perfect 5th" row. All notes in the first row will change into the third row after the transposition. This turns out nice since there are no C#'s in Amazing Grace as C#'s convert to G#'s.

Slow Air

AMAZING GRACE

(A MAJOR)

Trad.
Arr. Lincoln Hilton



To turn it into G major we have to see which row has the D to G transposition. That is the "5 steps - Perfect 4th" row. Again, it works out nicely since there are no G's in Amazing Grace; G's turn into C's when going from D major to G major.

Slow Air

AMAZING GRACE

(G MAJOR)

Trad.
Arr. Lincoln Hilton

Minor tunes are fun to transpose too. Take the popular 6/8 march - MacLeod of Mull for instance! Although MacLeod of Mull uses the F# minor pentatonic scale for the first two parts (which explains the F# minor feel with lots of F#'s, C#'s, A's and lack of D's and G's) there is a G in the third part and it resolves to B so it's more of a B minor tune than a F# minor tune. It's a B minor tune with extensive use of the F# minor pentatonic scale.

6/8 March

MACLEOD OF MULL

(B MINOR)

Donald MacLeod



To change it to A minor we go to the "10 step - Minor 7th" row and change the notes as indicated. Luckily in the first two parts there are no D's or G's so you end up with a tune that doesn't involve C's and F's so you can play the tune without altering notes.

6/8 March

MACLEOD OF MULL

(A MINOR)

Donald MacLeod
Arr. Lincoln Hilton



This also works for B minor to E minor since there are no G's (as they will turn into C's).

6/8 March

MACLEOD OF MULL

(E MINOR)

Donald MacLeod
Arr. Lincoln Hilton



This is just the tip of the iceberg when it comes to transposition; the creative possibilities are infinite. You can use this method to transpose songs of any genre and make them work on the pipes or even come up with multiple versions of a composition you have been working on. Although it may be difficult to get your head around the idea of transposition I'd highly recommend learning what it can do as it is a useful tool in your composing arsenal. For bagpipes, there seems to be a "Goldilocks" zone with both the 5 and 7 step rows having 6 favourable note transpositions, I'd suggest starting there if you're looking for a quick result that will work with our standard scale.

BY LINCOLN HILTON

TRANSPOSING MINOR KEYED TUNES

This is Part 11 of a series of lessons that will be discussed in each Modern Piping volume. To get a full understanding and a deeper comprehensive overview on composition principles be sure to check back in Volume 12.

"Transposition isn't as scary as it sounds, even when dealing with minor keyed tunes. There are many different colors of a tune, you just have to find them. "

When you write a tune in a minor key on the bagpipes there are 2-3 ways you can change it with minimal trouble of running into notes you can't play. Transposition isn't as scary as it sounds, even when dealing with minor keyed tunes. There are many different colors of a tune, you just have to find them.

One of the most popular minor keys to write in is B minor because the B minor scale includes the entire bagpipe scale with Low G, Low A, B, C#, D, E, F#, High G and High A.

The 4 minor keys that we can effectively use within our normal scale are:

B minor - All notes available

E minor - C#'s are C naturals

A minor - C# and F#'s are C and F naturals

F# minor - G's are G#'s

Let's use the tune Richat to demonstrate this...

Going from B minor to E minor works well if you don't have many G's because these will turn into C naturals. The note conversions from B min to E min (and vice versa) are below:

B - E / C# - F# / D - G / E - A / F# - B / G - C / A - D

The third part of Richat is in B minor and the fourth part is the same melody/harmonies but in E minor. To avoid the G to C natural problem I made all the converted G's (that were going to be C naturals) to another note in the chord of the bars containing the C's which is C Major (C natural, E, G). In this case I picked G for the 3rd and 4th bar and E for the 7th bar, both of which are also in the C Major chord. It could have been either E or G but these notes were my preference in those particular bars in place of the C naturals.

The musical score for 'The Rose Tree' is presented in two systems. The first system contains the first line of the melody, starting with a treble clef, a key signature of two sharps (F# and C#), and a common time signature (C). The melody begins with a quarter rest, followed by a series of eighth and quarter notes. The second system contains the second line of the melody, continuing the sequence of notes and ending with a double bar line. The notation is clear and legible, with notes and rests accurately placed on the staff lines.

B - F# / C# - G# / D - A / E - B / F# - C# / G - D / A - E

The image displays two staves of musical notation for the 'Fugue for Anna Magdalena' by J.S. Bach. The music is written in G major, indicated by two sharps (F# and C#) in the key signature. The notation includes various musical symbols such as treble clefs, notes, rests, and bar lines, representing the complex polyphonic structure of the piece. The first staff begins with a double bar line, and the second staff ends with a double bar line.

The musical score for 'The Rose Tree' is presented in two systems. Each system consists of a vocal line (treble clef) and a piano accompaniment line (bass clef). The key signature is one sharp (F#), and the time signature is 4/4. The melody is a simple, folk-like tune, and the piano part provides a steady accompaniment with chords and single notes.

B minor to A minor can be tricky since the popular B minor notes D and G turn into C and F naturals. The note conversions from B min to A min (and vice versa) are below:

B - A / C# - B / D - C / E - D / F# - E / G - F / A - G

If you take the first line of Richat and convert it to A min you'll get this: (note that there are no sharps or flats in the key signature)



Now to deal with the C's and F's, we can pick from their associated chords which in this case would be A minor (A, C, E) and F major (F, A, C). There are other chords they could be associated with like C major (C, E, G) and D minor (D, F, A) but since the notes in the original version were associated with B minor and G major, we will stick their A minor counterparts. So, for the C's we could pick E's or A's and F's, we can only use the note A, high or low, since the other option is C natural. Here's one way to go about it:



And another...



Sometimes you mightn't like either option and use it as a start for another tune like this...



As you can see there are some pretty cool effects and key changes within our usable minor keys on the bagpipes. Some sound better than others so try and explore all the options. When going from an A minor, E minor or F# minor song your best bet will be to try B minor first since there will be no notes that will go out of our scale. This article mainly concentrates on going to and from B minor. If you want more information about how to go to and from all the keys, see the article in Modern Piping Volume 8 - "Bagpipe Transpositions".

BY LINCOLN HILTON

COUNTERPOINT HARMONIES

Ever wondered how to make a relatively slow tune have more momentum or how to write a piece with slow and fast harmonies working at the same time. Counterpoint harmonies not only are a great way to create interest and movement within a piece but also can be used as a tool when coming up with reprises and entire new tunes altogether.

A counterpoint is when there are two or more melody lines that are both playing simultaneously that share the same harmonic structure but they differ in their rhythmic and melodic contour with varying complexity.

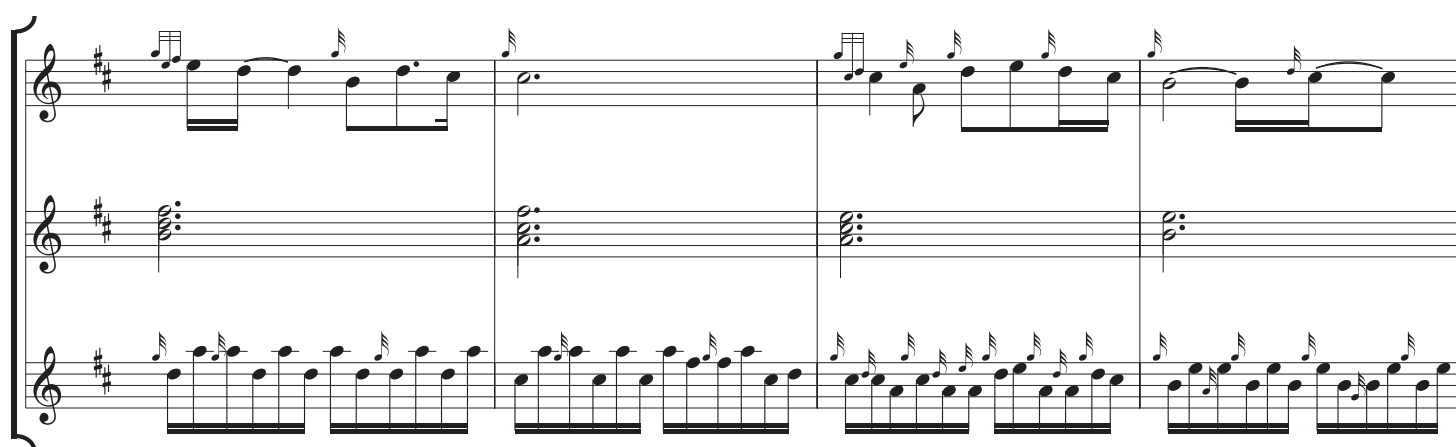
My general workflow here is to lock in the main melody, find the chord structure and work around that. I find it is a lot easier to write counterpoints where the main melody is a slow tune and you have to come up with a faster complex melody underneath, as opposed to writing a slow melody on top of a faster melody - you don't have much control here. As with all harmony writing, I highly recommend using a midi program so you have a visual of what is going on and you'll have a non-destructive editing process that you can use to have limitless tries to make your counterpoint exactly how you want it.

"I find it is a lot easier to write counterpoints where the main melody is a slow tune and you have to come up with a faster complex melody underneath, as opposed to writing a slow melody on top of a faster melody - you don't have much control here. "

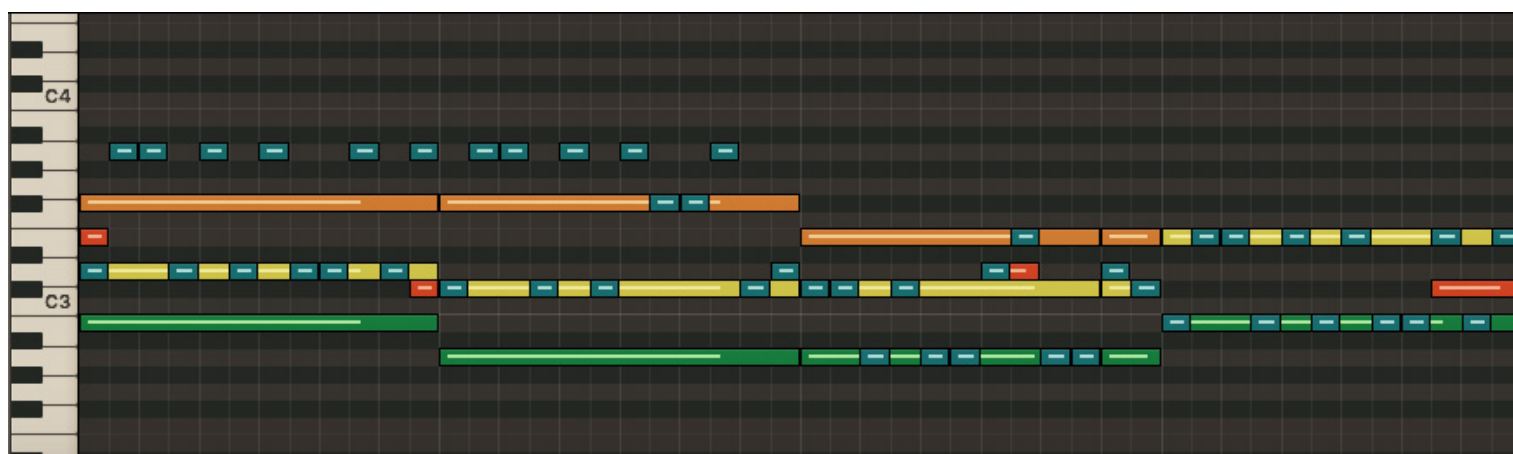
There are some general rules I like to follow:

- The supporting lines must be just that - "supporting". The main melody line always comes first.
- The counterpoint melody must have the same harmonic structure, bar lengths and time signature as the main melody.
- Attempt to have as much contrary motion as possible.
- Each bar of the fast melody should have it's rhythmic accents follow/include the main melody.
- Avoid playing in unison with the main melody.
- In general, start and end with a note of the underlying chord other than the unison.
- Notes used should mainly be derived from the underlying chord with dissonance coming from unaccented beats as passing tones.
- If you can, try and make the counterpoint melody as much of a standalone tune as possible. This makes it easier to remember and nicer to the ear.
- Avoid "heavier movements" that will clash with the main melody. No one wants to hear 3 D throws in the space of 3 quavers (quarter notes) for instance.
- Know where you want your tune to climax and stand out.
- Be creative, lower melodies hovering around the baseline of a chord will give you a more grounded feel however top hand melodies can provide a more subtle "airy" approach.
- Use of arpeggiation (going up and down a chord in a sequence) is good however try and steer clear from repetitive sequences.
- Repetition can also be a good thing, especially over the time frame of a bar or line as this will make the counterpoint a lot less random sounding and part of the tune as a whole.

Let's take a line out of A Road Less Travelled as an example. In this line, the main melody line (top) is supported by the chords (middle) and counterpoint melody (bottom). The notes in the counterpoint melody stay very true to the chords (B min, F# min, A Maj, E Maj) however it has vastly different rhythmic and melodic contours to the main melody being straight semi-quavers (16th notes). In the key signature of 6/8, we have 12 spots per bar to play around with here. In bar 1 (and 2), I used high A as a means of creating a staccato rhythm with melodic stabs putting emphasis on beat 1 of the bar and syncopating beat 2. Bar 3 I didn't want to crowd the main melody as it is quite busy here so I made the counter point melody line up with the main melody playing in unison for quite a bit of it. Especially the final two notes that lead into the 4th bar, I wanted them to stand out as they stepped down from D to C# to B. Bar 4, there isn't much you can do here without using G# so I copied the melodic and rhythmic contour of the Bar 1 so that there is some familiarity and structure to this section whilst going back and forth between B and E.

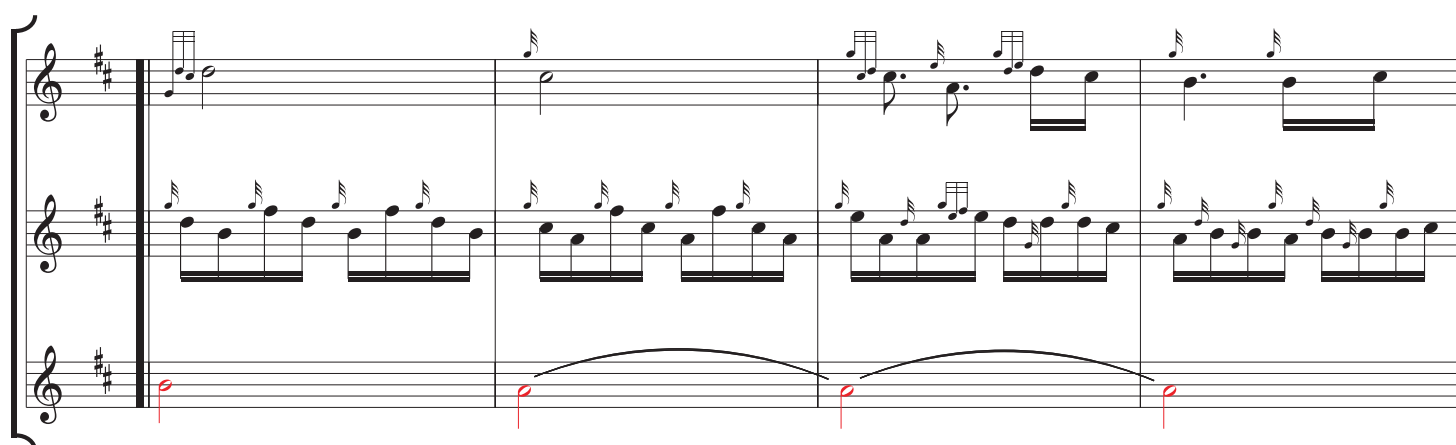


These bars look like this in midi form. The main melody (red) is hardly seen because the other harmony parts follow it so closely that they collectively end up playing nearly all notes of the main melody. Notice how even though there is a lot going on they all play within similar regions.



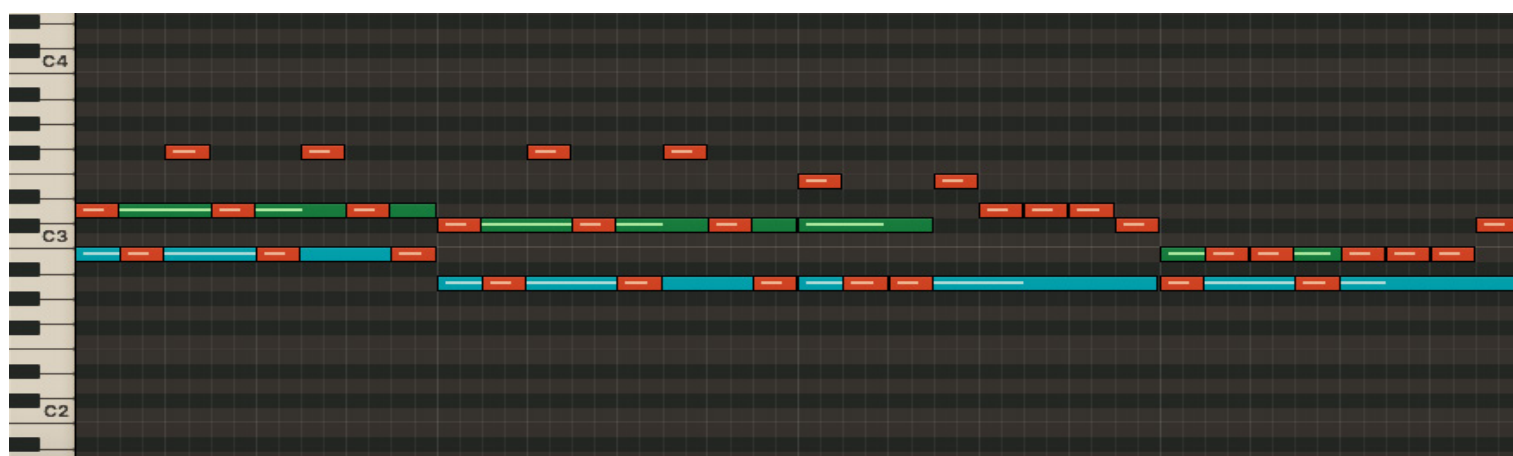
Next is a good example of how it can be a little bit of a puzzle when it comes to finding the right fit when writing counterpoints, especially when you only have 3 pipers like below. There are a few immediate concerns, the bottom part is playing all the lower notes of the chords and the main melody is hovering around the 3rds of each chord so all that you're left

with for the first two bars is F# really. Here's where arpeggiation comes in handy. In this case I alternated between the notes in a downward sequence and started on the D in the first beat so that the rhythm had an offbeat accent when hitting the F# and D (bar 1) - F# and C# (bar 2). In Bar 3 and 4 I copied the same rhythmic accent pattern of '1' 2 3 '1' 2 3 '1' 2 over the straight semi-quavers (16th notes) which can be found throughout the entire piece, this helps bring the overall feel back to the main parts. Again we have used a little unison (parts of the melody that are exactly the same in different parts) at the end of the 3rd bar to link the two melodies together, in these cases you can sometimes get a cool effect where the main melody can appear to shift from one line to another.



The midi version is below with the main melody in green, counterpoint melody in red and bottom harmony in blue.

Sometimes the counterpoint melodies can be parts on their own and join up with the main melody at a later point in the piece. "Dollar Sunrise" is a good example of where the main melody is followed by the counterpoint melody and is then joined together in the next part.



As you can see above, the midi visual is extremely helpful and I highly recommend utilising the technology we have at hand. Usually if it looks good, it will end up sounding pretty good and since it's a non-destructive editing process you can make limitless edits and replay them within seconds. If you learn this way of composing and use all your composing skills, making full use of rhythm and harmony, you'll be able to write great sounding complex counterpoints in no time!