

## The Power of Simple Sequences

by Dennis Winge

Sequences are used in every kind of music, and you hear them so often that, most times, you may not even be consciously aware of them in music you listen to. They are such an integral part of melody that any serious musician would do well to study them. The reasons to explore melodic sequences are many; here are some of them:

1. as a creative tool for composition and improvisation
2. they force you to really learn scale patterns across the fretboard
3. their use enhances your picking and fretting technique

A sequence is a group of notes whose relationship to each other can be applied to any other group of notes. One of the simplest examples of a sequence is the descending second. The second can be modified to minor seconds (1 fret apart) and major seconds (2 frets apart) to fit the key (called a “tonal sequence”), as in the example below in the key of A major:

Musical notation for a tonal sequence in A major. The notation consists of a treble clef staff with a key signature of two sharps (F# and C#) and a 4/4 time signature. The melody is written in eighth notes: A4, G#4, F#4, E4, D4, C#4, B3, A3. Below the staff are three guitar strings labeled T (Treble), A (Middle), and B (Bass). Fingering numbers are provided for each note: T (2-1), A (4-2), B (2-4) for the first measure; T (3-2), A (5-3), B (2) for the second measure; T (5), A (4-2), B (5-4) for the third measure; and T (4-2), A (2), B (5-3) for the fourth measure.

Musical notation for a tonal sequence in A major. The notation consists of a treble clef staff with a key signature of two sharps (F# and C#) and a 4/4 time signature. The melody is written in eighth notes: G#4, F#4, E4, D4, C#4, B3, A3. Below the staff are three guitar strings labeled T (Treble), A (Middle), and B (Bass). Fingering numbers are provided for each note: T (3-2), A (2), B (4-4) for the first measure; and T (2) for the second measure.

Alternatively, a sequence can be true to itself and not be bound to any particular key (called a “real sequence”) as in:

Musical notation for a real sequence. The notation consists of a treble clef staff with a key signature of two sharps (F# and C#) and a 4/4 time signature. The melody is written in eighth notes: A4, G#4, F#4, E4, D4, C#4, B3, A3. Below the staff are three guitar strings labeled T (Treble), A (Middle), and B (Bass). Fingering numbers are provided for each note: T (2-1), A (3-2), B (4-3) for the first measure; and T (1), A (4), B (2-1) for the second measure.

Even a very simple sequence, such as the descending second, can be an extremely powerful device for composition or improvisation because the possible ways to use them are infinite. In the example below, the sequence is played at the beginning of the bar and the rest of the bar is improvised:

In fact, the simpler the idea, the more easily it can be manipulated to fit the music you're improvising or composing.

Let's take a 3-note sequence next, and we'll use the same key and same position we've been in. The sequence *a - c# - b* could be thought of as 1 - 3 - 2 (because those notes are the 1<sup>st</sup>, 3<sup>rd</sup>, and 2<sup>nd</sup> of the scale respectively). That means the next sequence, which would be built off the second note in the scale, would be *b - d - c#*, or 2 - 4 - 3, and the next one would be 3 - 5 - 4, like this:

If that description is too confusing, here's another way to think about it. The sequence is really 3 scale tones in a row, but the order is changed to low - high - middle. If you think of the sequence that way, then you only have to think about the very first note of each group. In other words, you would think "one plus two notes, two plus two notes, three plus two notes" etc.

This approach can drastically improve your ability to digest sequences as well as make up your own. For example, suppose you only want to use a pentatonic scale for your sequence. The following is the same sequence above ("low-high-middle") applied to an F# minor or A major pentatonic scale:

In this case, in order to simplify the use of the sequence in your head, you would have to know the intervallic formula for the scale you are using. The intervals of any minor pentatonic scale is 1-b3-4-5-b7-8 and the major pentatonic formula is 1-2-3-5-6-8. These are critical to memorize, but that is a subject for another article. In the above example, if you are thinking A major pentatonic you would think "1 plus two, 2 plus two, 3 plus two, 5 plus two, 6 plus two, 8 plus two" where the "two" are in reverse order from how they fall within the scale in order to make the "low-high-middle" sequence each time.

This mental device of only thinking interval of the first note of each sequence is very useful in reversing direction. Notice in the example above that not only is the sequence ascending (meaning that “low-high-middle” leaves off on a note higher than the one you started on) but the scale is ascending as well (meaning “1 plus two, 2 plus two, etc.). At some point you’re going to want to change direction. You have two choices for how to do this.

1. To reverse direction in a sequence, you can invert the pattern, as in this example which inverts the above to “high-low-middle,” while descending the scale:

2. Another way to reverse direction is to keep the sequence intact, but the starting note for each grouping will descend if they had previously ascended, and vice versa. In our example, “low-high-middle” stays the same but the starting notes go down:

Remember I said you hear sequences all the time in music? The above reminds me of Harry Belafonte’s “Banana Boat Song” where he sings, “Day, is a day, is a day, is a day, is a day, is a day-o” in pretty much that exact sequence. You’re bound to recognize famous songs that use sequences you come up with.

For the A major pentatonic version, the “keep-the-sequence-intact-but-reverse-direction” melody would look like this:

This would be very tough if you didn’t know your scale formula forwards and backwards. In this case, you would think “5 plus, 3 plus two, 2 plus two, 1 plus two” meaning that we’re descending the major pentatonic from the 5<sup>th</sup> note down using our pattern “low-high-middle.”

Sometimes you can do sequences based on a pattern that pertains to a certain string set, and not have to think intervals at all. In the following example, the sequence is 10 notes long but because it's a simple pattern of 8 notes ascending across 3 strings then 2 notes back, the pattern can easily start again on the next set of strings.

The image shows a musical score for a guitar sequence. The top staff is in treble clef, D major (two sharps), and 4/4 time. It contains a melodic line of 10 notes: D4, E4, F#4, G4, A4, B4, A4, G4, F#4, E4. The bottom staff shows the fretboard with strings T, A, and B. Fingerings are indicated by numbers 1-5. The sequence is: 2-4-5 (B string), 2-4-5 (A string), 2-4 (T string), 5-4 (B string), 2-4-5 (A string), 2-4 (T string), 6-2-4 (B string), 6-4 (A string).

Thinking about sequences this way is much more powerful than reading them from a book, because they get you to think conceptually rather than analytically, which will serve you in composing and improvising in your everyday musical life. As you can see, you'll really have to know your scales, both fingering-wise and interval-wise. But you can also see that any simple melodic device can yield big results in your music.