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## DIATONIC SEQUENCES

A sequence is a musical construction in which an interval pattern is repeated at an incrementally higher or lower pitch level. The repetition is generally exact or very close to exact, although there are exceptions. (For instance, changes may be desirable to stay within an instrument's normal range.) Interval sizes will be maintained, but interval *qualities* are likely to be changed in order to conform to the diatonic system. Compare the two examples below to hear what happens when exact intervals are preserved without regard for the key signature: the first sounds normal, but the second sounds peculiar, to say the least.

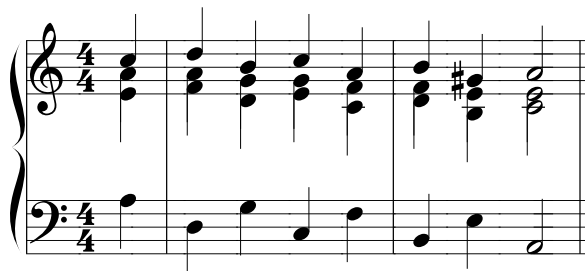


Although occasionally a sequence appears in only a single voice, you will find that the vast majority of the time most (if not all) voices will participate in a sequence. Because they work cooperatively, the voices collectively create a harmonic pattern that is predictable. When the word “sequence” is used without further description, it is normally assumed that the music contains both a melodic pattern and a harmonic pattern. If, however, this is not the case, then it is advisable to use the expressions *melodic sequence* and *harmonic sequence* for greater clarity.

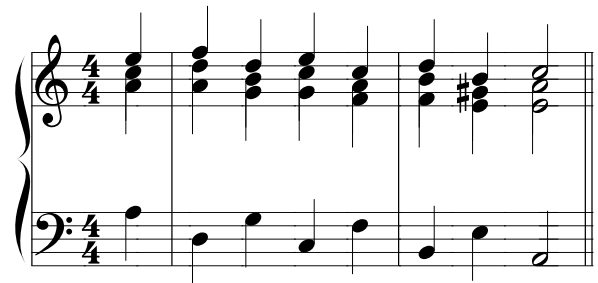
Melodic sequences are relatively easy to identify, but harmonic sequences often require a little more experience. It helps to be aware of the four most standard patterns.

### The descending circle-of-fifths sequence

The descending circle-of-fifths sequence gets its nickname from its pattern of successive root motion: each chord's root is a fifth lower than the previous chord's root. This sequence will sound very familiar to you, both because it is perhaps the most common sequence in tonal music and also because its second half conforms to a common functional progression. It sounds especially good in minor keys, but appears freely in major keys as well.



a) a: i iv VII III VI ii° V i



b) a: i iv VII III VI ii° V i

Observe that  $\hat{7}$  isn't raised until the end of the pattern. In minor keys, we only use a leading-tone when we want to return to the tonic. If we had wanted to continue the sequence even longer, we would continue to use the subtonic so that there would be no sense of arrival on the tonic (example c).

c) a: i iv VII III VI ii° v i iv VII III VI ii°  $V_{4-3}^{6-5}$  i

Also notice that the root-position ii° triad is acceptable in this context. We normally avoid root-position diminished triads, but in the context of this common sequence we don't particularly mind the sound because it fits into the overall predictable pattern. Similarly, the tritone leap in the bass does not stand out because we actually expect it. However, many composers avoid the problems associated with ii° by adding a seventh to alternate chords (example d) or to every chord other than the tonic (example e). Notice that it is necessary to alternate between complete and incomplete chords if you use sevenths throughout. Another common solution is inverting alternate chords (example f), possibly adding a seventh to the inverted chords (example g). As you will hear, no matter what we do to this sequence, it is so familiar to our ears that the effect is similar.

d) a: i iv<sup>7</sup> VII III<sup>7</sup> VI ii<sup>°7</sup> V i

e) a: i iv<sup>7</sup> VII<sup>7</sup> III<sup>7</sup> VI<sup>7</sup> ii<sup>°7</sup> V<sup>7</sup> i

f) a: i iv<sup>6</sup> VII III<sup>6</sup> VI ii<sup>°6</sup> V i<sup>6</sup>

g) a: i iv<sup>6</sup><sub>5</sub> VII III<sup>6</sup><sub>5</sub> VI ii<sup>°6</sup><sub>5</sub> V i<sup>6</sup>

The metrical placement shown in these examples is typical because it places the final tonic on a strong beat. However, this is by no means necessary — especially if the sequence's goal is a different chord. The only important metrical consideration is that alternate chords should fall on comparably strong beats.

h) Good — pattern corresponds with meter

i) Bad — pattern conflicts with meter

### The descending thirds sequence

The descending thirds sequence gets its nickname from the way that the established pattern is moved down a third for each repetition. In its most typical guise, you will notice that the descending thirds sequence involves a stepwise bass line, and this bass line is harmonized with alternating root-position and first-inversion chords. (Because of this pattern of inversions, the sequence is also commonly known as the *descending 5-6 sequence*.)

j) C: I V<sup>6</sup> vi iii<sup>6</sup> IV I<sup>6</sup>

k) C: I V<sup>6</sup> vi iii<sup>6</sup> IV I<sup>6</sup>

You will often find the same harmonic progression using only root-position chords. (This variant is commonly associated with Pachelbel.)

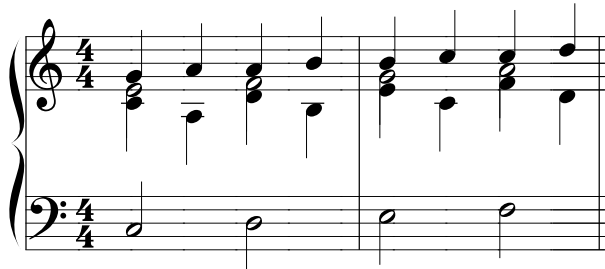
l) C: I V vi iii IV I

m) C: I V vi iii IV I<sup>6</sup>

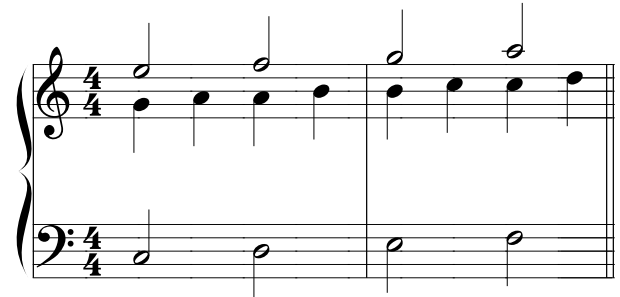
Notice that while this is a very smooth sequence, one of the four voices must leap quite a bit or there will be parallel octaves. The sequence, which almost always begins on the tonic and places the odd-numbered chords (I → vi → IV → ii) on strong beats, works well in both major and minor keys. Do not raise  $\hat{7}$  in minor because the sequence is leading away from the tonic.

## The ascending 5-6 sequence

Most sequences descend in pitch, but it is also possible to ascend. The ascending 5-6 sequence gets its nickname from the typical use of 5-6 motion in an upper voice over a gradually ascending bass. In its most common guise, you will notice that the ascending 5-6 sequence involves a slow stepwise bass line, and this bass line is harmonized with alternating root-position and first-inversion chords (notice that when the bass is stepwise, there are two chords per bass note). The established pattern is moved up a step for each repetition (and is therefore sometimes described as an *ascending step* or *ascending second sequence* — but beware, because the ascending circle-of-fifths sequence also moves up by step, so this is not a unique characteristic). This pattern is a bit difficult to write in four voices, but very easy to write in three (example o).

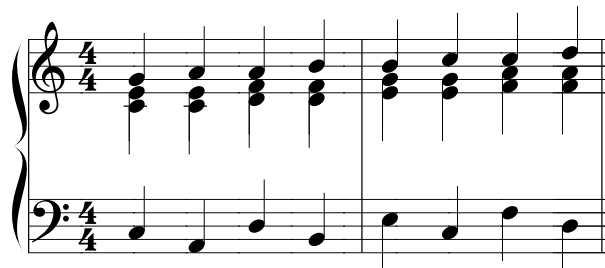


n) C: I vi<sup>6</sup> ii vii<sup>o6</sup> iii I<sup>6</sup> IV ii<sup>6</sup>

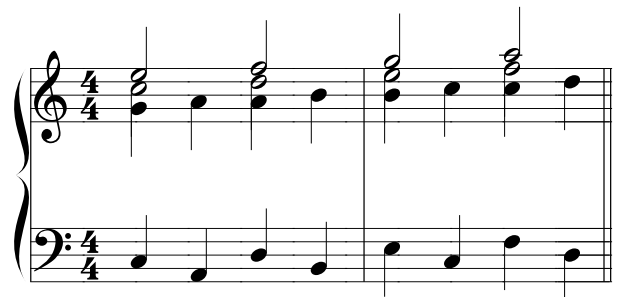


o) C: I vi<sup>6</sup> ii vii<sup>o6</sup> iii I<sup>6</sup> IV ii<sup>6</sup>

Like the descending thirds sequence, the ascending 5-6 sequence may be varied through the exclusive use of root-position chords rather than the usual alternating pattern. This variant is much easier for four-part writing.



p) C: I vi ii vii<sup>o</sup> iii I IV ii



q) C: I vi ii vii<sup>o</sup> iii I IV ii

It is possible to use root-position diminished triads as part of the sequence, but they should not be placed on metrically strong beats. Avoiding them altogether is more typical. This means that the sequence when used in minor should not start on the tonic because we will very quickly encounter ii<sup>o</sup> on a strong beat. The sequence can begin on almost any stable chord, however, so it is very useful. (As we shall see later, the ascending step sequence is particularly likely to be chromaticized.)

## The ascending circle-of-fifths sequence

The final (and least common) sequence type essentially reverses the first (and most common) sequence type. Each chord's root is a fifth *higher* than the previous chord's root, so it is known as an *ascending circle-of-fifths sequence*. The voice leading isn't difficult, but the harmonic effect can be somewhat disorienting.

It is particularly important not to use a diminished chord in this sequence. The ascending circle of fifths therefore tends not to last very long. It generally leads either from I to iii (in a major key — see example r) or from III to V (in a minor key — see example s). Inversions are possible, but not very common.

r) C: I V ii vi iii ii<sup>6</sup> V<sub>4-3</sub><sup>6-5</sup>

s) c: III VII iv i V<sup>8-7</sup> i

### Are other sequences possible?

The vast majority of the sequences you see and hear will fall into one of these four broad categories. If you find something you think is unique, it is probably either an elaboration or an obscure variation of some standard pattern. However, other sequence types are possible.

### What is the purpose of a sequence?

From a harmonic standpoint, a sequence is an elaborate way to fill in the progression from one chord to another. For instance, the tonic can go straight to ii<sup>6</sup>, but this progression can be expanded through sequence.

Decending circle of fifths: I ( IV<sup>6</sup> vii<sup>o</sup> iii<sup>6</sup> vi ) ii<sup>6</sup>  
 Ascending step: I ( vi<sup>6</sup> ii vii<sup>o6</sup> iii I<sup>6</sup> IV ) ii<sup>6</sup>

It is useful to know where common sequence types are most likely to begin and end.

Decending circle of fifths:	Usually tonic Possibly mediant	Anywhere that forms a good progression, especially I, V, or ii
Decending thirds:	Almost always tonic	IV, I, or ii
Ascending step:	Any stable chord	Any other stable chord that forms a good progression
Ascending circle of fifths:	In major keys, almost always tonic In minor keys, almost always mediant	I usually leads to iii III usually leads to V

As you will see in subsequent theory classes, sequences can also be very useful for modulating.