

# TRANSPOSITION: NOT A FOUR-LETTER WORD

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Why learn this advanced technique in this day and age of transposer dials on so many instruments? No less a composer than Irving Berlin had a movable piano keyboard that could mechanically shift from side to side in order to move the key up and down. It was an analog version of today's digital devices. This is not to say that these technological aids have no value for us or for the composer, but that they are not a replacement for our own skill.

Four of the five Guild Examinations include a transposition requirement at the keyboard: Service Playing, Colleague, Associate, and Fellow levels. Here is a table illustrating how the challenge increases with each level of examination:

Our need to transpose is not just for the purpose of satisfying a requirement on a Guild examination. Indeed, it is not just a stunt for purposes of display. Transposition, like other techniques, should be part of our total musicianship. It says something that the Guild exams require the acquisition of this skill to some degree depending on the level of difficulty of the test. It is important that the examinations reinforce the need for this important skill in order that we may add beauty to our service playing.

Here are a few ideas suggesting why the technique of transposition is important for us:

1. When altering the key of a hymn to make the hymn more comfortable for our congregation to sing. Usually this means moving it down a half step or a whole step.
2. When changing keys from one hymn verse to another (modulation). The hymn needs to be reproduced in the new key.
3. When working with choirs, moving the pitch of a piece to change the vocal color of the music. Moving up from G major to A-flat or A, for example, can make a lively piece have a special "ring" to it. Likewise, a move down to G-flat or F may render a quiet or reflective piece yet more somber. Even if the piece is to be sung a cappella, the rehearsal pianist or organist (you) will need to play the correct pitches at some stage in teaching the piece to the choir.
4. When times arise where the tenor or soprano section in the choir has suffered loss of personnel or the whole group is a bit on the tired side and needs a break. Dropping the pitch of the anthem may give the singers the help they need on that particular day.
5. Transposition during improvisation. In this case transposition may not only mean changing the melodies and harmonies to another key, but making a mode shift from major to minor or vice versa.

Playing the organ literature requires a particular discipline. Other advanced techniques require regular and disciplined practice in order for them to become part of your "tool kit" and help make your musicianship complete. Let's take a look at some ways to approach this musical challenge and try to demystify the technique of transposition.

Exam	Requirement	Preparation	Interval
S2	Your choice of any one hymn from the Examination Hymn Booklet. May not play in the original key for test. Pedal not required. Two of four possible intervals chosen by proctor.	In advance, up to nine months; possible to begin practice in July and take the exam the following April.	Up/Down M2nd, m2nd
C7	One original example given. May not play in the original key for test. Pedal not required. Two of four possible intervals specified.	During 20-minute preparation time at the piano.	Up/Down M2nd, m2nd
A3	One original example given. May play in original key first. Pedal optional. Two of four possible intervals specified.	One minute scan.	Up/Down M2nd, m2nd
F5	One original example given. May not play in original key first. Pedal optional. Two of eight possible intervals specified.	One minute scan.	Up/Down as far as M3rd, m3rd

## Methods of Transposition

**I. Reading note-for-note:** The simplest kind of transposition involves imagining a new key signature to move the passage up or down a half or whole step.

Let's consider the key of C. Going up a half step may mean thinking the passage in C-sharp or D-flat. Going down a half step may mean thinking the passage in C-flat or B-natural. The note-for-note method would call for C-sharp going up and C-flat going down. You need to choose which of the two enharmonic keys to use. This example is a tough one, as we don't use those keys very often. Developing some degree of fluency in these odd keys, though, may not be a bad thing!

Let's choose a key that's a little more "user-friendly," such as A major. Moving up a half step will mean a choice of either B-flat or A-sharp. Moving down will mean either A-flat or G-sharp. A-flat will be your easier, note-for-note choice when going down a half step.

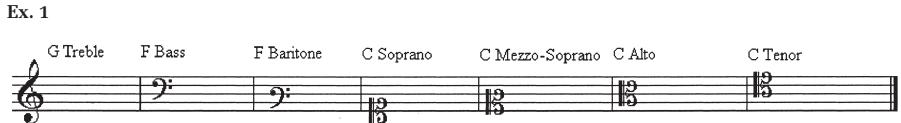
Try experimenting with all twelve major keys and discover the useful note-for-note possibilities. This technique can quickly become a useful part of your arsenal.

A helpful hint: Scan the example you're transposing for accidentals that need to be accounted for in the new key. Let's say, for example, that your original passage is in A

major. A cadence on the dominant (V, or an E-major chord) will mean seeing a D-sharp appear as an accidental (V/V, or a B-major chord). Now, let's say you're transposing down to A-flat major. Be prepared to translate the old D-sharp into a new D-natural. The new V/V, or B-flat chord, contains that D-natural, which moves the harmony to V, an E-flat chord. (See also Section VI. Harmonic Analysis, Hint #2.)

**II. Using G, F, and C clefs to move the pitches up or down:** This is probably the least useful method for most of us in most cases. Symphony conductors need to be fluent in all clefs in order to accurately read the notes for all of the instruments in the orchestra. Most of us only work in the G treble and F bass clefs. Some of us might have a useful knowledge of the alto and tenor C clefs if we are also violists, cellists, or trombonists. Few of us would have any need for a fluency in the soprano or mezzo-soprano C clefs or the baritone F clef. It is possible, though, to let substitutions of the different clefs transpose our music. For the sake of information and understanding, let's see how transposition with clefs works. Perhaps this knowledge can become a component in your acquisition of skill in transposition.

The seven clefs that concern us are:



The seven clefs will change the line or space on which a note appears. For our purposes here, we won't be concerned with the octave position of the notes, just the location

on the line or space on the staff and the note name. Using C as an example, let's see where it would fall in each of these seven cases.



Notice that C now has a position on each line or space of the staff, as dictated by the clef. The next musical example shows how

Ex. 3

The diagram illustrates clef substitutions for different voices across various staves. It shows the correspondence between the tenor, soprano, alto, bass, mezzo-soprano, baritone, and soprano voices using different clefs (Bass, Treble, Alto, Bass, Mezzo-Soprano, Baritone, Soprano) and positions (lines and spaces). The top row shows the Unison position. Below it, arrows indicate movement down (left arrow) and up (right arrow) through various clef positions: P4, Aug. 4 (Bass), M3, m3 (Treble), M2, m2 (Alto), Unison (Bass), M2, m2 (Mezzo-Soprano), M3, m3 (Baritone), and P4, Aug. 4 (Soprano).

These clef substitutions will work beginning on any tonic note and moving up or down the desired interval. Now, without fluency in all the clefs it may seem that this information may be interesting but not practical. But wait! Let's make a case for the soprano and baritone clefs when transposing up or down major or minor thirds. To be sure, this is a sort of halfway approach. In each case, one hand is easier since it is in a familiar clef. The other hand will be more difficult, since it's in a less familiar clef. So the level of clef reading difficulty "averages out" between the hands. Perhaps with a bit of practice, shifting clefs could become useful for you, if only in this case. The FAGO is the only examination requiring transposition up or down in thirds. This technique may be just what you need to get you through!

**III. Reading up and down the lines:** This method is related to the technique described in Part II, except without the clefs. It requires imagining the notes as appearing up or down a line or space, or imagining a line subtracted from the top and added to the bottom of a staff (or the reverse). Success in this method will depend on the neurological wiring of the player in visualizing the change.

**IV. Auditory input:** We are, after all, dealing with sound. In performing, we are taking the notes off the page and converting them to

we can pair these clefs to move both hands up or down, beginning on C as an example:

Moving up

sound. The reverse process is dictation: we take the sounds we hear and convert them to notes on the page. If our ears are aware of the pitches in the old key, it will help us convert them to the new key. Once again, success in this method will depend on the neurological wiring of the player in hearing the change. Caution: this method may be difficult for those with perfect pitch!

**V. Tactile input:** In practicing our instrument, we train our brains and muscles to move our fingers in patterns on the keys to produce particular melodies, harmonies, and rhythms. Feeling the old patterns can help us translate them to a new, yet familiar, pattern. The study of keyboard harmony and figured bass is the way to improve this method of transposition. Practicing a repertoire of chord progressions in all keys helps build this technique and supports the Harmonic analysis method suggested in Part VI. below.

**VI. Harmonic analysis:** With this method, we take the vertical chord patterns in the old key and reproduce them in the new key. For some hymns, those that are less contrapuntal, this is probably the most useful method for us to use. The following example, with harmonic analysis included, should illustrate:

Ex. 4

The musical examples show harmonic analysis from G Major to F Major. The top section, labeled 'G Major', shows a progression: I - vi - V6 - I - V - vi - iii - IV - I - IV - vii dim. vi - ii7 - V - V7 - I. The bottom section, labeled 'F Major', shows the same progression transposed: I - vi - V6 - I - V - vi - iii - IV - I - IV - vii dim. vi - ii7 - V - V7 - I.

**Hint #1:** when analyzing the music, be most aware of the beginnings of phrases and the cadences at the ends. Doing this gives a framework that you can use to keep you on track should you get confused for a moment.

**Hint #2:** a visual aid: notice where accidentals occur in the original key. These often signal a cadence in the dominant key. An ex-

ample: let's say you're in the key of G major and see a C-sharp at a cadence. This means you're moving to a D-major chord, the dominant (V). Notice how this becomes helpful when you transpose the music into A major, for example, and see that same cadence coming. The old C-sharp is now a D-sharp to move you to an E-major chord, the dominant in the new key.

**VII. Following the voice leading:** This technique is useful in our practice of contrapuntal literature in any case, whether or not we wish to transpose. Listen to the horizontal movement of each voice. Imagine that you are a soprano, alto, tenor, or bass, each in turn, and sing along with each line to put it into your aural memory. Refer back to Ex. 4 and notice how the alto line in the last two measures makes a descending scale pattern. Transposing each note in turn may not be necessary as following the voice leading makes the notes evident in the new key.

Hint: hear the soprano and bass lines together. You will then have another type of framework available on the upper and lower edges. Filling in the voices/harmonies in between them then becomes easier.

### VIII. Suggestions for practice:

- a. Set aside some time in each practice session for work on the technique of transposition. Do it early in the time you have available as your concentration will be sharpest then. Make it as important as learning literature, hymns, and choir accompaniments.
- b. Work slowly and accurately, as you would when learning a piece from the repertoire.
- c. Find the *combination* of the methods described above that works best for you. There may be danger in relying on any one of them alone and safety in using two or three together!
- d. Begin with rather chordal hymns such as "O for a thousand tongues to sing" ("Azmon") or "What a friend we have in Jesus" ("What a Friend"). Since these hymns have a limited harmonic vocabulary (essentially I, IV, and V chords), they will quickly lend themselves to the harmonic analysis method.
- e. You may find it helpful to work on one interval at a time. Spend a week or more doing just half steps up, for example.
- f. Later on, as your transposition technique improves, move to more contrapuntal music (Bach chorales, etc.).
- g. Transpose everything you can: hymns, preludes and fugues, chorale preludes, toccatas, etc. No, you won't need to do this for a service or in recital. You will find, though, that stretching your abilities with a difficult prelude or fugue will make moving the key of a simple passage easy by comparison.
- h. Write out passages in a new key. This is another avenue to help reinforce some of the visual techniques described above.

### Conclusion

Studying the skill of transposition can illustrate how all of the elements of music need to interplay to complete our musicianship. Transposition can involve harmonic analysis, contrapuntal analysis, aural memory, form, and visual and tactile memory. Whether or not you plan to pursue Guild certification, acquiring the skill of transposition will expand your ability as a musician and bring a great sense of accomplishment.

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