

PURPOSEFUL ACCIDENTALS

Poor choices in music spelling hinder the performer and often obscure the understanding of the passage. There are an alarming number of poor choices made by students, arrangers, educators, and editors of books and published music. Should we care whether a note is B \flat or A \sharp ? Is there a difference? Many would always prefer B \flat to an A \sharp . Duz speling mater, duz it really mater weather a not is speled B phlat or A sharp? Spelling matters. Notes do not occur by themselves—they occur in lines, in musical contexts, within key signatures and key areas, as part of arpeggios—and those contexts should be considered when making musical spelling choices.

We may be encountering more musical spelling errors recently because people are not actually making choices using their pens and pencils. Too many of us are dependant on what our software chooses for us. Computer notation programs have made music notation faster and accessible to more people, but it has created an epidemic of misspelled accidentals. The errors are not the fault of the software programs. Musical notation software offers opportunities to make those choices. Some offer enharmonic maps, and all offer the chance to enharmonically change a note. We just are not taking the time to choose. This is an appeal to students, educators, composers, publishers and editors to spell check the music.

The rules for notation boil down to readability. Notation decisions should be based on making the music easier to read. One needs to understand diatonic key signatures, proper use of accidentals as indicators of direction, and chord spelling. In all music theory books, near the beginning, the chromatic scale is introduced in both ascending and descending form. Altered notes want to continue in the direction in which they have been altered: sharps go up—flats go down. When accidentals are used correctly, the performer knows the pitch and the direction of the line. B \flat points down—A \sharp up. Better and accurate spelling makes for easier reading. Easier reading allows the musicians to get to the real music more quickly.

Principles of Accidental Usage

Spelling depends on context—there is no fixed name for an accidental.

I. Diatonic Considerations

Write in the key of the moment. Write diatonic passages using pitches common to the key signatures. Avoid mixing two pitches of the same letter (C - D \flat - E \flat rather than C - D \flat - D \sharp), or combining sharps and flats in the same scale passage (F \sharp - A \flat - B \flat).

When the music modulates, write in the new key of the moment.

Modulations typically move to closely related keys. Closely related keys can be defined as those one accidental away from the home key, or to the keys related to the diatonic chords of the home key. For example, the key of F major is 1 \flat . The keys one accidental away from F major are the keys of 2 \flat s (B \flat major & G minor), no sharps or flats (C major, A minor), the relative minor, D minor (shares the 1 \flat key signature). For each minor key, a leading tone must be added. Modulating to these close keys utilizes all twelve chromatic pitches. Here is a list of keys closely related to F major with the accidentals necessary for modulation shown in parentheses: G minor (E \flat , F \sharp), A minor (B \flat , G \sharp), B \flat (E \flat), C (B \flat), D minor (C \sharp). The twelve chromatic pitches for writing in the key of F major would be: F- F \sharp - G - G \sharp - A - B \flat - B \flat - C - C \sharp - D - E \flat - E \flat . (Read through any Bach invention or solo litera-

Ex. 3



Ex. 4



Ex. 5



III. Arpeggios

Write arpeggios so they are easy to read. Tertian arpeggios—chords built in thirds—should be spelled using thirds. Quartal arpeggios—chords built in fourths—should be spelled using fourths. Choose C-E \flat -G (an easy to read and sing C minor arpeggio) rather than C-D \sharp -G (difficult to read and nearly impossible to sing with an augmented 2nd and diminished 4th intervals.)

This can be illustrated with passages from published music shown in ex.6. The first measure (6a) is difficult to read as shown in the top line. The notes contain combinations of pitches not found in any major scale as written. The perfect fourth between D \flat and G \flat may be easy to see, but the whole step between G \flat and F \flat is unnecessarily difficult to read. Choosing C \sharp , F \sharp and E \natural makes these intervals, and the line, easier to read. F \flat to A \natural , an augmented third, is easier to read as a perfect fourth from E \natural to A \natural . D \natural to G \flat , a diminished fourth, is easier to read as a major third from D to F \sharp . The bottom staff makes the quartal arpeggio (E - A - D) clear, and all the notes are from the key of two sharps. The second example (6b) is also unnecessarily difficult to read as shown in the top line. The first three notes are easy to recognize as an F major triad. The second three notes appear to be a quartal chord (D - G - C \flat), but the last interval (G - C \flat) is a diminished fourth. Changing the C \flat to B \natural creates a much easier to read line of alternating F and G major arpeggios.

Ex 6a. Quartal arpeggio

Ex 6b. Tertian arpeggios

(Top line = poor choices, Bottom line = better choices = easier to read)

IV. Modulations & Transposing

Be careful when modulating to remote keys or transposing for other instruments. What may seem the best choice for one instrument will look different for another. Try to avoid the keys of seven flats (C^b/A^b minor) or seven sharps (C^\sharp/A^\sharp minor) when possible. The alternatives ($5^\sharp_s = B/G^\sharp$ minor & $5^b_s = D^b/B^b$ minor) are much easier to read in most cases. Pieces may modulate to remote keys such as the key of bVI . In the key of C, this would be a modulation from C to the key of A^b . Consider the ease of reading when transposing to other keys. In the key of D, the bVI key would be B^b , a logical choice. In the key of A^b , the bVI would be F^b major ($8^b_s?$). A more logical choice would be the using the enharmonic equivalent, E major.

The melodic material in ex.7 side-slips up a half-step and back down. Rather than move from B^b up to C^b major, an editor may chose to move up to the enharmonic B major, avoiding C^b and F^b in the line.

Ex.7

A thoughtful editor should consider how this looks when transposed for B^b and E^b instruments. For B^b instruments, the line would read better moving from C up to D^b , not C up to C^\sharp major. The line is easier for E^b instruments to read moving from G up to A^b , not G up to G^\sharp . (ex.8a and 8b.)

Ex.8a Exact transposition for $B\flat$

Better choice



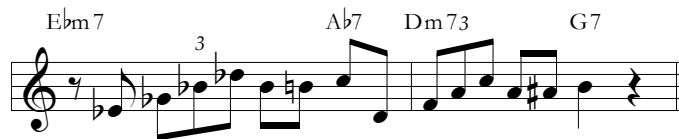
Ex.8b Exact transposition for $B\flat$

Better choice



Use the same reasoning in reverse when transposing back to concert pitch. Ex.9 was written by a trumpet player. He wisely chose $E\flat m - A\flat 7$ (ii7 - V7 in $D\flat$) rather than enharmonic $C\sharp$ major.

Ex.9



When he transposed it down for concert instruments he ended up with the phrase shown in Ex.10a. The $D\flat m - G\flat 7$ (ii7 - V7 in $C\flat$) is a correct transposition (down a whole step from the original), but difficult to read. Choosing to write in B major avoids the $B\flat$ and $C\flat$, as shown in ex.10b.

Ex.10a Keys of $C\flat$ & $B\flat$ = difficult to read

Ex.10b Keys of B & $B\flat$ = much easier to read



V. Chord Symbols

Avoid mixing enharmonic keys with melodic pitches and chord symbols. I once had to read a passage on a recording session with the melody written in G \sharp minor and the chord symbols written in A \flat minor. My right hand was thinking in 7 \flat s, my left in 7 \sharp s. (Here was a case where the composer should have considered putting the piece up in A minor or down in G minor.)

Keep the accidentals within a key throughout a passage. This applies to pitches and chord symbols. Avoid mixing chord symbols from different keys: use A \flat m7 - D \flat 7 (ii7 - V7 of G \flat) or G \sharp m7 - C \sharp 7 (ii7 - V7 of F \sharp), and avoid the confusing mixtures of A \flat m7 - C \sharp 7 or G \sharp m7 - D \flat 7.

If it modulates to closely related keys, use the closest key signatures. This becomes more problematic the further one is from the key of C. Consider this harmonic progression in C major:

Am7	F \sharp o7	B7	Em7	A7	Dm7	G7	C
vi7	ii \flat 7/iii	V7/iii	iii7	V7/ii	ii7	V7	I

These choices keep the passage in closely related keys. No one would choose G \flat o7 - C \flat 7 - F \flat m7 in place of F \sharp o7 - B7 - Em7. This same progression appeared in a published piece in the key of E major. Under the presumption that jazz players would rather see flats than sharps, the following chords were used. The first passage begins and ends in 4 \sharp s, but moves to far away key of 7 \flat , 8 \flat , and 9 \flat s before returning to 4 \sharp s. The second passage makes it easier to see the modulations to the closely related sharp keys.

Unnecessary remote modulations:

C \sharp m7	B \flat o7	E \flat 7	A \flat m7	D \flat 7	F \sharp m7	B7	E
vi7 of	ii \flat 7 of	V7 of	iii7 of	V7 of	ii7 of	V7 of	I of
E = 4 \sharp	A \flat m = 7 \flat	A \flat m = 7 \flat	F \flat = 8 \flat	G \flat m = 9 \flat	E = 4 \sharp	E = 4 \sharp	E = 4 \sharp

Closely related keys make reading easier for improvisation:

C \sharp m7	A \sharp o7	D \sharp 7	G \sharp m7	C \sharp 7	F \sharp m7	B7	E
vi7 of	ii \flat 7 of	V7 of	iii7 of	V7 of	ii7 of	V7 of	I of
E = 4 \sharp	G \sharp m = 5 \sharp	G \sharp m = 5 \sharp	E = 4 \sharp	F \sharp m = 3 \sharp	E = 4 \sharp	E = 4 \sharp	E = 4 \sharp

Diminished chords are often misspelled which can lead to confusion. In traditional music and in most jazz standards, diminished chords can be derived from the seventh degree of harmonic minor. Considering the closely related minor keys to F major one might expect to see a C \sharp o7 (pointing to D minor), F \sharp o7 (pointing to G minor), or a G \sharp o7 (pointing to A minor). Many examples can be found in printed music where these are spelled as D \flat o7, G \flat o7, A \flat o7. While these chords to the listener

might sound the same, it might be useful to the improviser to see spellings that reflect the close relation to the home key, and not the confusing conclusions that may be drawn from these enharmonic spellings.

Consider these chords in D major: D - B \flat ^o7. Taken out of a musical context, most horn players would prefer reading B \flat to A \sharp . Consider this in context though. The B \flat ^o7 chord might suggest the vii^o7 in the key of C minor, the relative of D \flat major, which is 10 flats! Using an A \sharp ^o7 instead makes so much more sense. In the key of D major one might expect a modulation to closely related keys. B minor is a closely related key and shares the same key signature with D major. The viii^o7 chord of B minor is A \sharp ^o7. Only one note changes between the two chords (A to A \sharp). It is a much easier modulation from the key of 2 \sharp s (D major) to the key of 2 \sharp s (B minor) than to any key with ten flats.

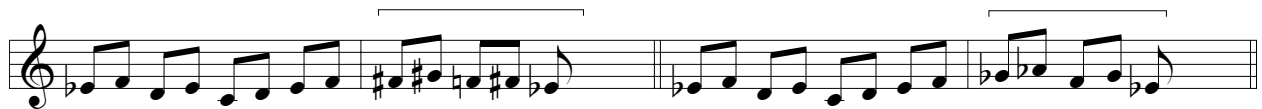
VI. Non-traditional scales & scale superimpositions

Jazz and contemporary music often makes use of non-traditional scales like modes of melodic minor, octatonic or diminished scales, and whole tone scales. When using melodic minor modes it is best to adhere to the traditional spelling of that mode. Diminished scales have eight tones but our musical alphabet only has seven letters, so choices have to be made. A whole tone scale can be spelled several different ways. Make choices based on the musical context. Choose pitches that utilize notes from the home key when possible.

The sequential line in ex.11 is from a diminished scale, but the choices made by the editor make the sequence hard to see by using F \sharp and F \flat in the same passage. Write clearly and the music will be easier to read (ex.11b), less time will be spent rehearsing, and the musicians will have a higher opinion of the music.

Ex.11a Difficult

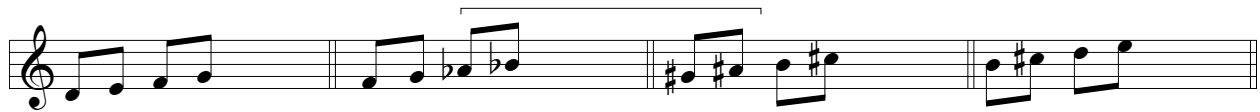
Ex.11 b Easier



Try grouping pitches into sets that relate to traditional scales. In a musical passage, look for similar spellings to those pitches in the home key. There is not one way to spell a diminished scale. All of the lines in ex.12 are from diminished scales, but different enharmonic notes are chosen considering the surrounding pitches in the passage.

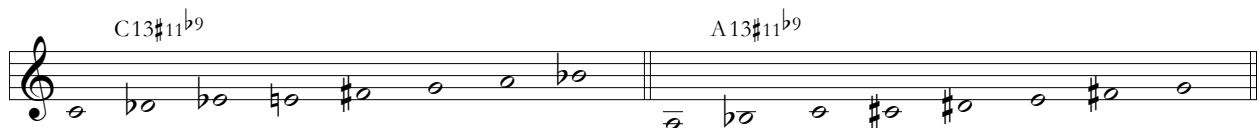
Ex.12 Diminished Scales





The same diminished scale might be spelled differently to reflect the accompanying chord symbol. Ex.13 shows an octatonic scale as it might be spelled for two different dominant 7th chords. D \flat and E \flat correspond to the $\flat 9$ and $\sharp 9$ of a C7 chord. C \sharp and D \sharp correspond to the major third and $\sharp 11$ of the A7 chord. How should the scale be written to correspond to F $\sharp 7$, G $\flat 7$, D $\sharp 7$ or E $\flat 7$ chords?

Ex.13 Enharmonic scales spelled to correspond to chords



Choose pitches for whole tone scales that relate to the home key or to the corresponding chord symbol. A whole tone scale in context of a C7 $\sharp 5$ might use these pitches: C - D - E - F \sharp - G \sharp - B \flat ; in a context of an A $\flat 7$ $\sharp 5$: A \flat - B \flat - C - D - E - G \flat .

Use the traditional spellings for melodic minor even when superimposing over other chords as shown in ex.14. This may occasionally contradict other principles, but will make the passage easier to read. For instance, a B \flat melodic minor may be used over an A7 chord. A passage using B \flat melodic minor should be written consistent to that scale: B \flat - C - D \flat - E \flat - F - G - A. While an A7 has a C \sharp as its 3rd, in the context of a B \flat melodic minor over an A7 (A.K.A. superlocrian, diminished whole-tone, or altered scale) a D \flat may be easier to read in melodic scale and arpeggio passages. The C \sharp is clear as the 3rd of A7 (ex.14b) but introduces some strange intervals (the augmented 2nd between B \flat and C \sharp , and the diminished 4th between C \sharp and F.) Ex.14c shows the arpeggio line spelled using thirds. It is easy to see a relationship between an A7 and its tritone substitute E $\flat 7$ when using the D \flat . The notes in ex.14c are the 7 - $\flat 9$ - 3 - $\flat 13$ of A7, and the 3 - 5 - 7 - 9 of the E $\flat 7$ chord.

Ex.14a D \flat instead of C \sharp Ex.14b C \sharp as 3rd Ex.14c D \flat enharmonic choice



VII. Conclusions

Jazz and contemporary music is highly chromatic. Our well-tempered system has its compromises and limitations. With transposing instruments, musicians may be thinking in several different keys on the same piece. Chromatic alterations and accidental choices are not always clear. There may be several choices in any situation. Making the right choice enables the musicians to get to the music quickly and accurately. Good choices communicate vital information to the improvisers as they indicate context and key relationships. This article cannot address all issues regarding note choices, nor does it presume to answer all the questions. I do hope that it encourages some critical thinking and editing from ourselves as educators, composers and arrangers as we try to communicate this music to our students and colleagues.

Bert Ligon
Director of Jazz Studies
University of South Carolina
803.777.6565
BLigon@mozart.sc.edu
www.music.sc.edu/ea/Jazz

