

INTRODUCTION

I've been a Sibelius user since it first became available for Mac (Version 1) and have used it exclusively ever since. Up to that point I had used pretty much all the notation programs that were ever available for Mac, starting with Music Publisher in the early '80s (anyone remember that one) on an old Mac SE. Sibelius represents the first time I got the feeling that one of these programs took into account the composer/orchestrator/arranger's requirements. Their innovative use of virtual paper and desks definitely brought me closer to the natural feeling of writing with pencil or pen and ink. I was also drawn by their playback capabilities having found that sequencers took me too far away from the feeling that I was 'writing'. Playback for me has always been primarily for proofing scores that would be played by humans. The newly added ability to save as an audio file will satisfy some of my clients who want a 'practice' disc.

In Sibelius 1 I missed some features I had come to depend on. For example, I needed to be able to make slash notation quickly and I had come to depend on being able to 'explode' voicings into individual instrument parts. I pleaded with the Sibelius people and was assured it was coming in a forthcoming release. I remember the gentleman I spoke to saying that explode and implode were really just a form of automated copy and paste. Nothing could have prepared me for what I saw when I launched Sibelius 2 for the first time with the newly added arrange function. I saw right away that some programming genius (I don't use the phrase lightly) had created a way of automating favorite ways of orchestrating by allowing the user to set up his or her own templates in arrange. Initial reaction to this great addition to the program appeared to be quite hostile, based it seemed, on a misapprehension that Sibelius were dehumanizing the art of arranging. In fact they were reducing multi click steps to as little as one for the user. In retrospect, had Sibelius named this feature "Orchestrate" maybe users would have understood that here was a major timesaver lying under the hood.

Instrument ranges are pre-programmed with warnings for difficult or out of range notes indicated by colored notes (the visual side of this can be turned off). These instrument ranges can be individually adjusted in the properties window for staves. These preset range parameters can cause 'explode' or any arrange style to end up in the wrong octave causing the user to think that Arrange is not working properly. If writing for a professional Big Band your first step should be to either set up your own manuscript or tweak an existing one, rename it and save it as a manuscript template before using any of the jazz arrange styles. The first 2 trumpets come to mind as does the need to replace the 4th trombone with a bass trombone if that's what you will use in your ensemble.

In the following pages I have included several examples that show how I use Arrange to automate repetitive tasks. These require an understanding of jazz voicing techniques in order to get the most out of Arrange. If anyone has any further questions I would be glad to be of help. You can email me at david@davidourke.com.

Enjoy,
David.

HOW I USE JAZZ ARRANGE STYLES IN SIBELIUS

A GUIDE TO USING THESE EXAMPLES

Throughout this booklet I will present voicings in concert/sounding pitch and the exploded result from using Arrange in transposed/written pitch to avoid all the ledger lines.

USING BLOCK VOICING TECHNIQUES (These use only one style in Arrange)

Basie Style Block (Brass Only)

This voicing style is most closely associated with arranger Neal Hefti and his work with the Count Basie Orchestra. It uses 4 part block voicing in the trumpets with the trombones doubling the trumpets an octave lower. I begin by writing my voicings on the first trumpet staff. Next step is to copy to clipboard (cmd/ctrl C), then select the destination staves (or select all, arrange will ignore staves not specified in the arrange style) followed by shft-cmd/ctrl V) and voila! You now have a Neal Hefti/Atomic Basie style shout chorus in the brass.

Example 1a shows the voicings on the first trumpet staff.

Example 1a shows the voicings on the first trumpet staff. The notation includes chords: F Δ 6, F $\#$ o7, Gmi7, C7, Ami7, D7b9, B \flat mi11, Ami11, A \flat mi11, Gmi11, C7+b9, and F Δ 9. The notes are grouped into blocks, with some groups circled and numbered 2, 3, 4, and 5.

Example 1b shows the ‘exploded’ voicings distributed to their individual instruments.

Example 1b shows the ‘exploded’ voicings distributed to their individual instruments. The notation shows the distribution of the chords from Example 1a across four trumpets and four trombones. The trumpets play the upper notes of the blocks, and the trombones play the lower notes, creating a full brass sound.

Ex. 1b Basie Style Block (Brass Only)

Adding the Saxophone section

There are so many approaches to how to incorporate the saxophone section into a brass tutti, this list is by no means a complete one.

Constant ‘coupling’

Trombones doubled by saxes.

Some arrangers automatically double the trombones in the sax section in ‘Block’ passages with alto 1 = tbn 1, alto 2 = tbn 2, tenor 1 = tbn 3, tenor 2 = tbn4 and the bari sax. doubling the lead alto one octave lower. One of the downsides of this way of voicing is that the alto saxes are often written low.

Example 1a shows the 4 note block voicings on the 1st trumpet staff.

Example 2a shows the same voicings after the “Basie Style Shout Chorus” arrange style has been used.

The image displays a musical score for a brass and saxophone ensemble. The score is arranged in a system of 13 staves. The top five staves are for saxophones: Alto Saxophone 1, Alto Saxophone 2, Tenor Saxophone 1, Tenor Saxophone 2, and Baritone Saxophone. The bottom eight staves are for trumpets and trombones: Trumpet 1, Trumpet 2, Trumpet 3, Trumpet 4, Trombone 1, Trombone 2, Trombone 3, and Bass Trombone. The music is in 4/4 time and G major. The saxophone parts feature a melodic line with slurs and accents, while the trumpet and trombone parts play a rhythmic, block-like accompaniment. The score is labeled 'Ex 2a Basie Style Shout Chorus' at the bottom.

Ex 2a Basie Style Shout Chorus

Lower trumpets doubled by the saxes

Here the arranger decides to double the trumpets and trombones using combinations from the various tables below:

1. tpt 2 = alto 1, tpt 3 = alto 2, tpt 4 = tenor 1, tbn 1 = tenor 2 & tbn 2 = bari.
Sometimes the bari doubles the lead trumpet 2 octaves lower (ex. 3b) or plays independent roots .
2. tpt 3 = alto 1, tpt 4 = alto 2, tbn 1 = tenor 1, tbn 2 = tenor 2 & tbn 3 = bari. Bari doubles the lead trumpet 2 octaves lower (ex. 4b) or plays independent roots.
3. tpt 4 = alto 1, tbn 1 = alto 2, tbn 2 = tenor 1, tbn 3 = tenor 2 & tbn 4 = bari.
Previous variation using bari can be applied here also.
4. This one depends on the trumpets being in the mid to low register: tpt 1 = alto1, tpt 2 = alto 2, tpt 3 = tenor 1, tpt 4 = tenor 2. Bari can either be in unison with tbn 1 or double tpt 1 two octaves lower.

Variable ‘coupling’

Variable coupling is possible but requires using a different arrange style each time you change which trumpet is being doubled by alto 1. One drawback of variable coupling is the potential for a lack of cohesion between the sections.

USING NESTICO OPEN & SEMI OPEN VOICING TECHNIQUES (These combine more than one Arrange Style)

Nestico Open Voicings

These voicings are usually voiced as follows:

- a) Trumpets play a triad with tpt 4 doubling tpt 1 an octave lower. Also known as upper structure triads. This voicing style is most often used when the lead trumpet melody is in the mid to high register. (example 3a)
- b) Trombones are usually voiced in a *spread* or *open voicing*. More often than not the bass trombone is playing a low root note. (example 3b)

Example 7a Dmi Trumpets lead note doubled

Example 7b Trombones

The ‘Nestico’ arrange styles can also be applied to Thad Jones voicings like the ones shown in Example 4. Thad often has wider intervals between the upper notes, also in the lower register while the mid register tend to be voiced more closely. Occasionally the lead trombone is voiced above the 4th trumpet. In the example shown here: a dominant 7th chord with multiple chromatic alterations, the lead trombone is playing the #9 while the 4th trumpet plays the b9. If you do use the ‘Nestico’ styles for a Thad Jones voicing, make sure to omit the saxophone section in you selected destination

staves. Thad voiced the saxes as a self contained independent unit, often using one of the trumpet notes as a ‘lead’ line.

Ex. 4

Ex. 4 shows a chord voicing for C13(#11#9). The treble clef staff shows the chord structure with notes: Root (C), 13 (E), #11 (F#), and b9 (Bb). The bass clef staff shows two alternative voicings: the first has notes b#8 (Bb), #9 (A), b7 (Bb), and R (C); the second has notes b#8 (Bb), #9 (A), b7 (Bb), and R (C) with a '3 (10?)' label below the bass line.

USING BILLY STRAYHORN SAXOPHONE STYLES
(Explode with the Baritone Sax in ANY voice other than the lowest note).

These Arrange styles were created for use with the saxophone section only. They can be used with 4 part closed doubled lead or 5 part closed. See *Writing For The Saxophone Section In Sibelius Using Arrange* for instructions on how to easily turn *closed voicings* into ‘drop’ voicings.

Example 5a shows the saxophone section playing the 4 part closed voicing with doubled lead using the most commonly used distribution of the notes of the voicing: (alto 1, alto 2, ten 1, ten 2 & BARI) on the doubled lead (an octave below Alto 1).

Example 5b shows the same voicing with a different distribution: bari & tenor 2 have now swapped places: (alto 1, alto 2, tenor 1, BARI & tenor 2) Example 10b shows the transposed scores.

Example 5c shows the voicing with yet another distribution (alto1,alto 2, BARI, tenor 1 & tenor 2) Example 11b shows the extracted notes.

Example 5d has the baritone sax in the 2nd voice below the lead: (alto 1, BARI, alto 2, tenor 1 & tenor 2). Example 12b shows the extracted notes.

Ex. 5a: F#6 voicing with notes Alto 1, Alto 2, Tenor 1, Tenor 2, and Bari. Ex. 5b: F#6 voicing with notes Alto, Alto, Tenor 1, Bari, and Tenor 2. Ex. 5c: F#6 voicing with notes Alto, Alto, Bari, Tenor 1, and Tenor 2. Ex. 5d: F#6 voicing with notes Alto 1, Bari, Alto 2, Tenor 1, and Tenor 2.

USING THAD JONES ARRANGE STYLES
(Double Diminished Voicings).

These harmonically dense voicings should be used sparingly as indeed Thad himself did. They work best on a ‘bluesey’ line where the melody line (top note) is enough to suggest the tonal center. In a whole arrangement I’ve never seen these voicings being used for more than one phrase. Overuse them and they’ll lose their effect quickly. These arrange styles speed up the scoring process, as all the arranger needs to do is enter

one diminished chord, Sibelius adds the rest by utilizing the ability to double any pitch with any interval. A variation on this style could be vertically stacked 4th intervals found in modal jazz. A Quartal (Fourths) Arrange style will be available for download at the (Sibelius website?) along with some other arrange styles that may be of interest to the jazz arranger.

Example 6a shows the single line melody derived from the blues scale, followed by the diminished chord line in concert mode while Ex. 6b shows the transposed score after the arrange style has been used.

Important: It is advisable to avoid extreme ranges in the brass. These voicings work best in the middle register.

Example 6a

Example 6a shows a single line melody for Trumpets and a diminished chord line for both Trumpets and Trombones. The melody is in 4/4 time and consists of the following notes: R, b3, 4, #4, 5, 4, b3, 4, b3, R. The chord line for Trumpets is labeled "diminished chords" and includes B13(#11#9) and C13(#11#9). The chord line for Trombones includes B13(#11#9) and C13(#11#9) with voicings: b9, 13, #11, b9, #9, b7, 3(10), and R.

Example 6b . (Note Range adjustments are needed in 1st 2 trumpets, trombone section & baritone sax to avoid 'wrong' octaves)

Example 6b shows a full brass section score for 12 instruments: Alto Saxophone 1, Alto Saxophone 2, Tenor Saxophone 1, Tenor Saxophone 2, Baritone Saxophone, Trumpet 1, Trumpet 2, Trumpet 3, Trumpet 4, Trombone 1, Trombone 2, Trombone 3, and Bass Trombone. The score is in 4/4 time and shows the transposed score after the arrange style has been used, with note range adjustments indicated for the 1st 2 trumpets, trombone section, and baritone sax.

USING SIBELIUS FOR 'LINE WRITING'

'Line Writing' is the name given to the style of soli writing where target points are linked by independent lines as opposed to the 'Block' style parallel approach.

This technique differs from many of the more established arranging techniques in the way passing/approach notes and harmony is dealt with. Points of resolution or 'target notes' are approached by independent lines, often using contrary motion, derived from related chord scales. Arrangers who use this style of writing do so to create more interesting and melodic inner lines for the whole section. The dissonance in the passing notes is cancelled out by the consonance of the target notes, giving a sense of 'tension and release'. Line Writing works best at medium to fast tempi. Interesting contrapuntal lines can be created by scoring target notes with different types of voicings: cluster to open, block to open, cluster to block and so on...

Using Sibelius, the arranger can voice his target points and for the moment, ignore his passing tones. I usually mark the target notes (example MARK) with either the letter 'T' using technique text or using a violin downbow articulation (that will stand out on a saxophone line!). Marking the target notes make them easier to recognize after you've 'exploded' the voicing (example SHOW EXPLODED TARGET NOTES).

Line Writing Steps:

1. Compose your melody line. (example 7)

Ex. 7

Example 7 shows a melody line in 4/4 time, starting with a key signature of one flat (Bb). The melody consists of two staves. The first staff contains the first six measures, and the second staff contains the remaining six measures. Chords are indicated above the notes: FΔ, D7b9, Gmi7, C7b9, Bmi7b5, E7+(b9) in the first staff; and Ami7b5, D13, Gmi7, C7+(b9), Gb7b5, FΔ9 in the second staff. The melody features several target notes, which are marked with a 'T' above them. A triplet of eighth notes is marked with a '3' below it in the second staff.

2. Harmonize the target notes in your choice of voicings, making sure to not have extreme jumps in range. Take note that not all chord tones are necessarily treated as target notes.
3. Mark your target notes for easy recognition. (example 8)

Ex 8

F Δ T Drop 2 DL
 T D7 $b9$ Drop 2+4 DL
 Gmi7 T
 C7 $b9$ T Open voicing

Bmi7 $b5$ T
 E7+($b9$) T add #9 instead of doubled lead
 Ami7 $b5$ Drop 2 DL
 D13 T 5 part Drop 2

Gmi7 T drop 2 DL
 C7+($b9$) T drop 2+4 DL
 G $b7b5$ T open voicings
 F $\Delta 9$ T Sub: F6/9#11

4. Copy your line with harmonized target notes to the clipboard.
5. Select 'Explode' in Arrange.
6. Link the target notes with passing notes (marked 'x') taken from the appropriate chord scale, making sure at all times to aim for strong melodic content (avoiding leaps) on each individual instrument. In example 9 I've adjusted octaves on the passing notes for easier reading)
7. Example 10 shows the 'lines' created using the appropriate chord scale.

Ex 9

Soprano Saxophone

Alto Saxophone

Tenor Saxophone

Tenor Saxophone

Baritone Saxophone

X X X

X X X

X X X

X X X

X X X

Example 10

♩ = 160

F^{Δ} $D7^{b9}$ $Gm7$ $C7^{b9}$ $Bm7^{b5}$ $E7+(b9)$
 T X X T T T X X X T T X X X T X T
 T X X T T T X X X T T X X X T X T
 T X X T T T X X X T T X X X T X T
 T X X T T T X X X T T X X X T X T
 T X X T T T X X X T T X X X T X T

A_{m7}^{b5} D^{13} $Gm7$ $C7+(b9)$ G^{b7b5} $F^{\Delta9}$
 X X X T T T X X X T T T
 X X X T T T X X X T T T
 X X X T T T X X X T T T
 X X X T T T X X X T T T
 X X X T T T X X X T T T

3
X
3
X
T

3
chromatic passing note used

Although not a prerequisite, some interesting effects can be achieved by working on the 2 outer lines (eg: lead alto and baritone saxes in a sax soli) especially if the arranger is using contrary motion. For more on Line Writing I recommend the book “Arranging For The Large Ensemble” (*see bibliography*) and for a thorough explanation of ‘Chord Scales’ I recommend “Modern Jazz Voicings” (*also listed in the bibliography*).

Writing For The Saxophone Section In Sibelius Using Arrange

A knowledge of writing for the saxophone section is required. *Modern Jazz Voicings* by Berklee press describes all these voicing styles in detail. The following methods work for *vertical* structures only. *Open* and *spread* voicings by their very nature require two hands as they often range from 2 to 3 octaves.

Some of these voicings require a lot of steps and it is my hope that by spelling these out, a talented plugin writer may take this on as a project. As far as I know, these can all be addressed in the *Manuscript* language. I would envisage a pull-down menu with the different voicing styles. A seasoned arranger knows when to *open up* the voicings and what effect this will have on the sound of the saxophone section. The advantage to having a plugin for this or indeed having it eventually built in to the arrange function is that the arranger can play these voicings with one hand instead of two.

4 way close doubled lead

Simply write your 4 note voicings (example 13a) on the Alto 1 staff (or a staff of your choice), copy to clipboard, select the saxes as your destination staff, choose the Jazz: Saxes 4Part (DL) Arrange Style.

The following voicing techniques all use explode:

Drop 2, Doubled Lead

Play in your 4 part voicings, perform the following steps:

- step 1: using Edit>Filter>Top Note to select the top note.
- step 2: press shift-8 to double the top note down an octave.
- step 3: using Edit>Filter>2nd Note to select the 2nd note.
- step 4: press cmd or ctrl arrow down to transpose the 2nd note down an octave.

Drop 3, Doubled Lead

Play in your 4 part voicings & perform the following steps:

- step 1: using Edit>Filter>Top Note to select the top note
- step 2: press shift-8 to double the top note down an octave
- step 3: using Edit>Filter>3rd Note to select the 3rd note
- step 4: press cmd or ctrl arrow down to transpose the 3rd note down an octave.

Drop 2 + 4, Doubled Lead (when lead alto is in upper register)

Play in your 4 part voicings & perform the following steps:

- step 1: using Edit>Filter>Top Note to select the top note
- step 2: press shift-8 to double the top note down an octave
- step 3: using Edit>Filter>2nd Note to select the 2nd note
- step 4: press cmd or ctrl arrow down to transpose the 2nd note down an octave
- step 5: using Edit>Filter>3rd Note (note that because you have transposed/dropped the 2nd note down an octave, what was the 4th note is now 3rd from the top) to select the 3rd note
- step 6: press cmd or ctrl arrow down to transpose the 3rd note down an octave.

5 Way close simply explode

5 Way Drop 2 using procedures outlined above, transpose the 2nd note down an octave using filters.

5 Way Drop 3 transpose the 3rd note down an octave using filters

5 Way Drop 2 + 4 transpose the 2 & 4th notes down an octave using steps 3 through 6 in Drop 2 + 4 doubled lead.

THE GOOD NEWS!

Thanks to plugin writer Bob Zawalich who has written a plugin to automate all of the above voicing styles. In order to use this “ArrangeVoicings” plugin, the arranger plays in 4 or 5 note voicings in close position and lets the plugin ‘drop’ any notes. These voicings are now ready to be *exploded*. I’ve included some useful reference charts for using voicings like these.

Bob has written some other useful plugins that will be of benefit for arrangers. One of his plugins creates slashes or moves existing slashes without changing the noteheads to the middle line of any transposed instruments (useful when giving solo changes to transposing instruments). Bob has also written plugins that will show the user the number of all your plugins and lines and/or create a text file showing these numbers. This makes it very easy to assign keyboard shortcuts for your most frequently used plugins. I use ‘v’ for the voicings plugin and option-/ for the mid line slashes plugin.

OTHER JAZZ ARRANGE STYLES NOT INCLUDED WITH SIBELIUS 3 (available from www.davidourke.com)

From time to time I will add new arrange styles on my website such as a Claude Thornhill Style featuring the sax section in close harmony, with clarinet lead in unison with one French Horn, Glenn Miller’s clarinet lead with 2 Altos & 2 Tenors, a variation on the Miller Styles with clarinet lead, 1 alto, 2 tenors and baritone. Many arranging and orchestration books have featured a clever orchestration technique used by Maurice Ravel in his Bolero. Ravel’s technique uses the overtone series and carefully marked dynamics to imitate Pipe Organ registration.

GLOSSARY & REFERENCE

Ambi Voicings Chord voicings whose tonality is ambiguous until assigned a separate root note.

Altered Chords Chords in which one or more chord tones are chromatically altered: eg $\flat 5$, augmented 5th, $\flat 7$ etc.

Approach Notes Usually a non-chord tone moving stepwise to another chord tone or extension. *Passing* tones occur between 2 chord tones. *Auxiliary* or *neighbor* tones are found (either above or below) between 2 occurrences of the same chord tone.

Basic Chord Tones A generic way of referring to the 1st, 3rd, 5th & 7th. Jazz musicians sometimes limit the name to just the guide tones (3rd and 6th/7th).

Bi-Tonal Voicings Two chords that collectively form another chord eg D Major triad stacked on top of C Dominant 7th (5th usually omitted) result in a C13#11

Block Voicing (*aka close position, close voicing, the thickened line, 4 way close position, 5 way close position or mechanical voicing*): A vertical structure built primarily in stacked 3rds though often containing a 2nd and occasionally a 4th (sus 4 chords). All chord notes are within a one octave range.

Cluster Vertical structures whose prevailing interval is a 2nd (major or minor).

Chord Extensions 9ths, 11ths & 13ths when added to the basic chord structure.

Constant Coupling In shout choruses or concerted passages when the saxophones are paired with the same brass instruments throughout the entire selection.

Chromatic Passing Tones an approach note which moves by a half step to a target note (chordal or extension).

Diatonic Passing Tones Passing notes derived from the related chord scale.

Double Chromatic Approach target notes approached by 2 consecutive half steps (above or below).

Doubled Lead Usually refers to the practice in jazz voicing of doubling the lead note either an octave higher or lower.

Drop Voicings Vertical close position structures in which one or more notes are 'dropped' an octave.

Open or Spread Voicing Voicings whose range exceed one octave and typically contain the root (or 5th) on the bottom. Inner voices will typically contain 3rd & 7th/6th, and in the case of 5 part spreads: one extension note.

Quartal Voicing Voicings whose adjacent intervals are either perfect 4ths. Augmented 4ths (diminished 5ths) or a combination of both. A notable exception is the "So What" voicings which includes a Maj 3rd interval between the top 2 voices.

Parallel Vertical Structures is the name sometimes given to the voicing employed when every line moves in harmonic and rhythmic unison with the melody line, the voicing can typically be a cluster, intervallic (4ths, diminished) but can be any chord.

Poly-chords see *Bi-Tonal Voicings* In modern classical music this can refer to several stacked chords from different tonalities.

Target Notes Notes in a melody line that the arranger has decided are important harmonic or rhythmically accented points. Other notes in the line are considered to be passing tones leading to these target points or points of resolution.

Tension Notes Berklee speak for chord extensions (altered and un-altered).

Variable Coupling is when the saxophones are combined with different voices in the brass section, usually to keep the saxes in a specific register. Arrangers who use technique do so as it is a way of creating contrary motion between the brass and the saxes.

RECOMMENDED READING

Voicing & Arranging

Arranging For The Large Ensemble, (Dick Lowell & Ken Pullig) Berklee Press

Modern Jazz Voicings, (Ted Pease & Ken Pullig) Berklee Press

Changes Over Time: The Evolution Of Jazz Arranging (Fred Sturm) Advance Music

Inside The Score, (Rayburn Wright) Kendor Music

Gil Evans & Miles Davis (1957-1962) Historic Collaborations, (Steve Lajoie)

Advance Music

Score Study

The Birth Of The Cool Scores, published by Hal Leonard.

Thad Jones Scores, (some of these are available on an individual basis from Kendor Music.

Gil Evans Scores ((Author) Hal Leonard

Frank Foster Scores, can be purchased along with the arrangements directly from the artist's website.

Gil Evans & Miles Davis Scores, (4 full scores are contained in the book listed above along with a thorough analysis of each score, great for seeing how Gil orchestrated his cluster voicings)