Uses for the Tuplets Over Barlines plug-in in Sibelius
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Practical uses for Tuplet Over Barlines (all examples provided by Robin Walker)

Here are some practical applications for this plug-in.

Mensural Notation

In September 2017, Alexander Plötz published an article on the Scoring Notes blog, entitled:

Use Dorico's tuplets-over-barline feature for proper mensural notation

In that article, Alexander explained how the ability to engrave tuplets over a barline enabled the engraver to reproduce the original period notation whereby the sounding duration of a note extended over a (sometimes hypothetical) barline, instead of using ties over a barline in the modern fashion. The article is well worth reading for an explanation of the technique.

That technique is now available in Sibelius, using **Tuplet Over Barlines**.
In the example attached, the locations where the plug-in has been used are highlit in yellow.

Missa de Beata Virgine : Agnus Dei : extract
An example of mensural notation produced by the Sibelius plug-in "Tuplet Over Barline"

Josquin des Prez

In five cases, the plug-in has been used to engrave a dotted full note over a barline, so that the first full-note's worth occurs before the barline, and the remaining half-note occurs at the beginning of the next bar: but only one dotted full note has been engraved. This is achieved by positioning a note or rest selection at the desired starting point of the dotted whole note, and asking the plug-in to create a tuplet of ratio 1:1 with unit length of a

dotted whole note. Note how the spacing of the second bar is correctly managed, so that blank space is maintained for the residual half-note, before the next note appears. In another two cases, a dotted half note has been treated likewise.

In the first bar of the Altus staff, the plug-in has been used to extend the range of a "longa" to fill four whole bars. This was achieved by making a selection on the first beat of the first bar, and asking the plug-in to create a tuplet of ratio 1:2 with a unit length of a longa. This demonstrates that the plug-in does not just write a tuplet over one barline: it is capable of extending a tuplet over multiple barlines.

The score from which this screenshot was made not only looks correct, it also plays back correctly: that longa really does sound for four bars, and the dotted whole notes really do sound across the barline.

Credit and thanks to Alexander Plötz for the original concept and article, and for giving us permission to use his example in this article.

Polyrhythms and Irrational Time Signatures

Two examples are attached of how **Tuplet Over Barlines** can help Sibelius users to engrave scores with polyrhythms and/or "irrational" time signatures.

In the Sibelius Reference, a method is described where polyrhythms can be engraved by creating a single sufficiently large bar to accommodate an exact number of bars of each rhythm on each staff, using tuplets as necessary to fake some of the time signatures. The problem with this method is that the single large bar is constrained to occupy a single system of the Sibelius score, as the tuplets needed for the fakery cannot cross system boundaries.

Tuplet Over Barlines releases that constraint: a tuplet can be as long as you need, and it can be split over bar-lines, and therefore also split over system boundaries. There is no need for an artificially large single bar: the polyrhythms can be achieved using one of the rhythms as the real Sibelius time signature, and the native Sibelius barring for that time-signature. The other time-signatures can be faked with long tuplets spanning many bars and systems, until they reach a point where the different polyrhythms all converge back to a common bar-line.

Of the examples attached, the first is relatively easy, as no note requires to cross a bar-line, and the example could be done manually with tuplets in each bar, but using the plug-in speeds up the operation.

The second example, with deliberately chosen difficult polyrhythm ratios, can only be engraved with the help of the plug-in, because it requires a long tuplet which crosses multiple bar-lines and multiple systems, containing notes which cross the native Sibelius bar-lines.

Polyrhythms and Irrational Time Signatures
made a little bit easier with Sibelius plug-in "Tuplet Over Barlines"

1. At the beginning of bar 3, insert a real Time Signature of 4/4, and then hide it.

2. On top of that hidden time signature, insert "Time Signature (one staff only)" text objects of "4/4" (on the top staff), and "5/6" (on the lower staff).

3. Fill the top staff with sample music at 4/4.

4. On the first quarter note of bar 3 on the lower staff, use "Tuplet Over Barlines" to create a ratio 30:20 tuplet in units of a quarter. (Behind the scenes, this plug-in implements that request by creating tuplets of 6:4 in each of the next 5 bars: because the ratio is so easy, you could do that manually, but the plug-in is quicker).

5. Edit the 6th notes to become your required music at 5/6 time.

6. Insert fake bar-lines for the 5/6 bars (use plug-in "Add Fake Barline to Bars" to create one fake, then copy and paste as required).

7. Hide unwanted system bar-lines in the 5/6 passage by changing instrument to one with no bar-lines.

8. In the upper staff above the 5/6 passage, select each intermediate bar-line in turn and nudge it to the left using Shift-Alt-leftarrow, until both the 4/4 music and the 5/6 music look regularly spaced.

Polyrhythms and Irrational Time Signatures - less easy

only possible with Sibelius plug-in "Tuplet Over Barlines"

Tuplet ratio 60:48 of unit one-quarter note, spread over 16 bars and 3 systems.

Notes highlit in yellow are crossing bar-lines.

Multiple Time Signatures

Here is another example of the use of **Tuplet Over Barlines** helping to engrave a score where multiple time signatures are in use.

This piece by Stravinsky has a castanet playing a steady rhythm in bars of 3/8, while the orchestra switches between bars of 5/16 and bars of 7/16. The duration and tempo of notes are the same for both orchestra and castanet, so this is a rather easy example to engrave, and does not need tuplets to accommodate the different time-signatures. However, the bar-lines occur at different locations for the castanet than for the rest of the orchestra, and so in six locations (indicated by yellow highlights), a castanet 8th note crosses an orchestral barline.

In order to engrave the castanet correctly, for each of those six instances, **Tuplet Over Barlines** was used to create a 1:1 tuplet of unit duration of an 8th note, on the position of the final 16th of the bar, resulting in a single 8th note crossing the barline. This maintains the emulation of the 3/8 barring.

Agon : Bransle Gay

Demonstrating Multiple Time Signatures and the engraving of notes crossing barlines
by use of the Sibelius plug-in "Tuplet Over Barlines".

Igor Stravinsky 1957

The castanet plays a steady rhythm in bars of 3/8.

The orchestra switches between bars of 5/16 and bars of 7/16.

The duration and tempo of notes are the same for both orchestra and castanet.

The underlying barring of this score follows the orchestral bars, with bar numbering following the orchestra.

The effective positions of the castanet 3/8 barlines are indicated with dashed lines, as in the published score.

In six locations (indicated by yellow highlights), a castanet 8th note crosses an orchestral barline.

For each of those instances, the plug-in "Tuplet Over Barlines" was used to create a 1:1 tuplet of unit duration of an 8th note, on the position of the final 16th of the bar, resulting in a single 8th note crossing the barline.

For copyright reasons, the orchestral music itself is not shown in the sample above, but a reduction of the rhythms of the music is shown, to establish the rhythmic spacing.

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