LilyPond Regression Tests

Introduction

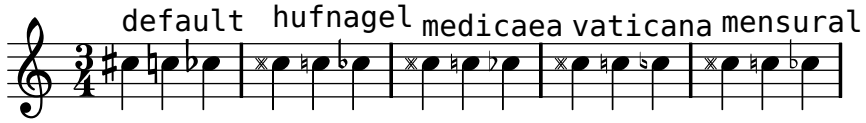
This document presents proofs for LilyPond 2.12.2). When the text corresponds with the shown notation, we consider LilyPond Officially BugFree (tm). This document is intended for finding bugs and for documenting bugfixes.

In the web version of this document, you can click on the file name or figure for each example to see the corresponding input file.

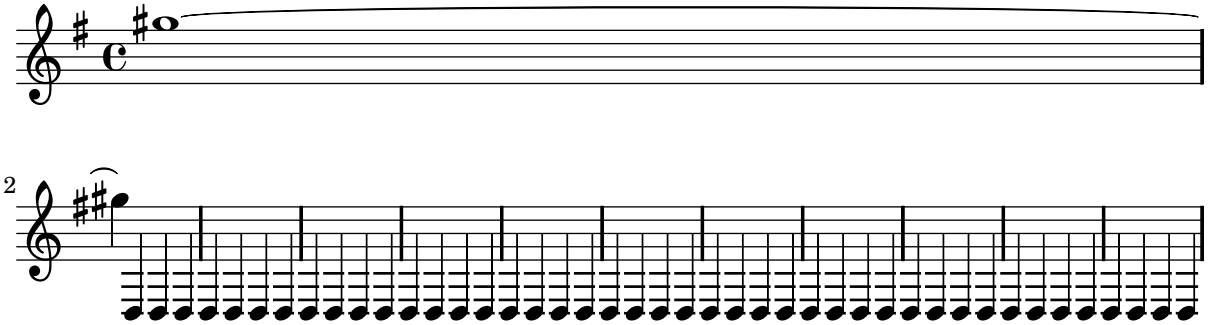
TODO: order of tests (file names!), test only one feature per test. Smaller and neater tests.

Regression test cases

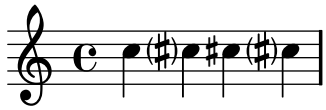
‘accidental-ancient.ly’ Accidentals are available in different ancient styles, which all are collected here.



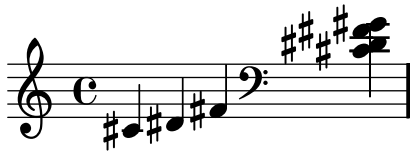
‘accidental-broken-tie-spacing.ly’ When a tie is broken, the spacing engine must consider the accidental after the line break, to prevent a collision from occurring.



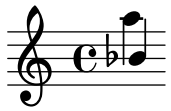
‘accidental-cautionary.ly’ Cautionary accidentals may be indicated using either parentheses (default) or smaller accidentals.



‘accidental-clef-change.ly’ Accidentals are reset for clef changes.



‘accidental-collision.ly’ accidentals avoid stems of other notes too.

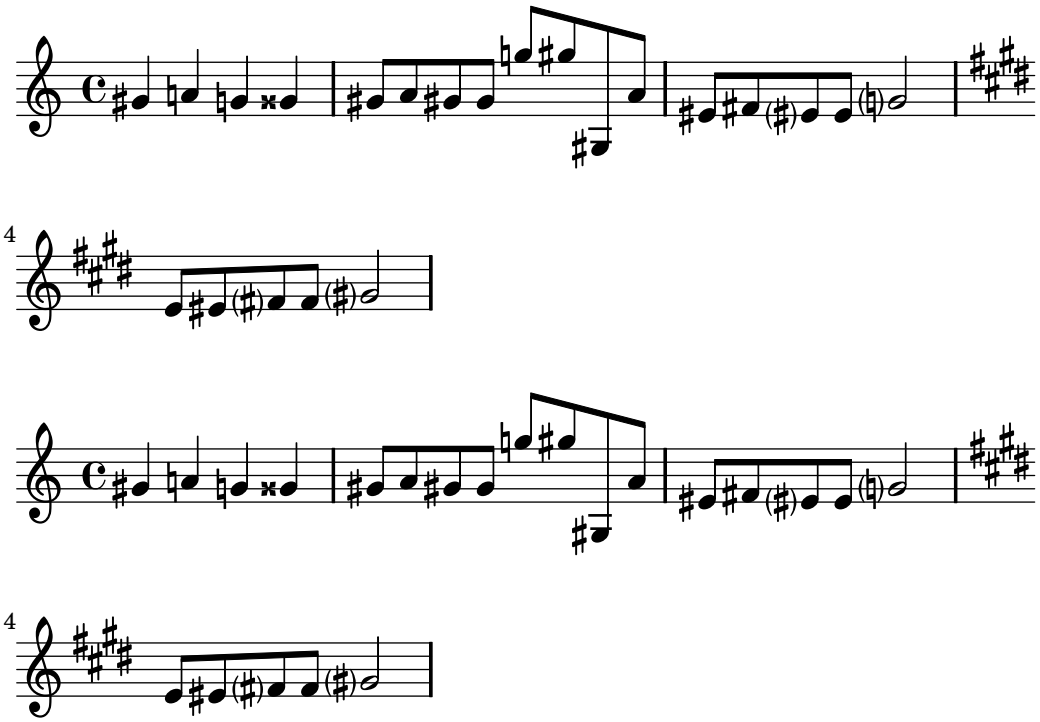


‘accidental-contemporary.ly’ Several automatic accidental rules aim to reproduce contemporary music notation practices:

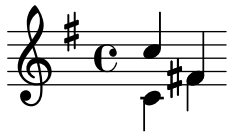
- `'dodecaphonic` style prints accidentals on every note (including naturals)
- `'neo-modern style` prints accidentals on every note (not including naturals), except when a note is immediately repeated
- `'neo-modern-cautionary` style acts like neo-modern, adding cautionary parentheses around accidentals.

- `'teaching` prints accidentals normally, but adds cautionary accidentals when an accidental is already included in the key signature.

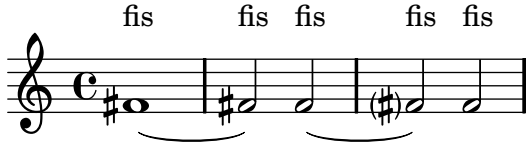
Both scores should show the same accidentals.



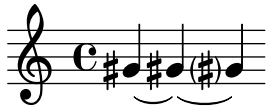
‘`accidental-double.ly`’ If two forced accidentals happen at the same time, only one sharp sign is printed.



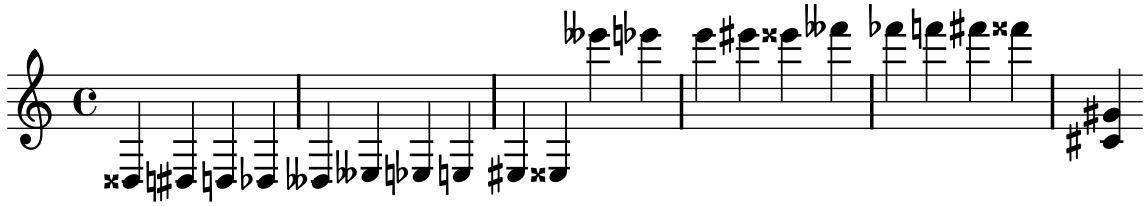
‘`accidental-forced-tie-barline.ly`’ Cautionary accidentals applied to tied notes after a bar line are valid for the whole measure.



‘`accidental-forced-tie.ly`’ Accidentals can be forced with ! and ? even if the notes are tied.

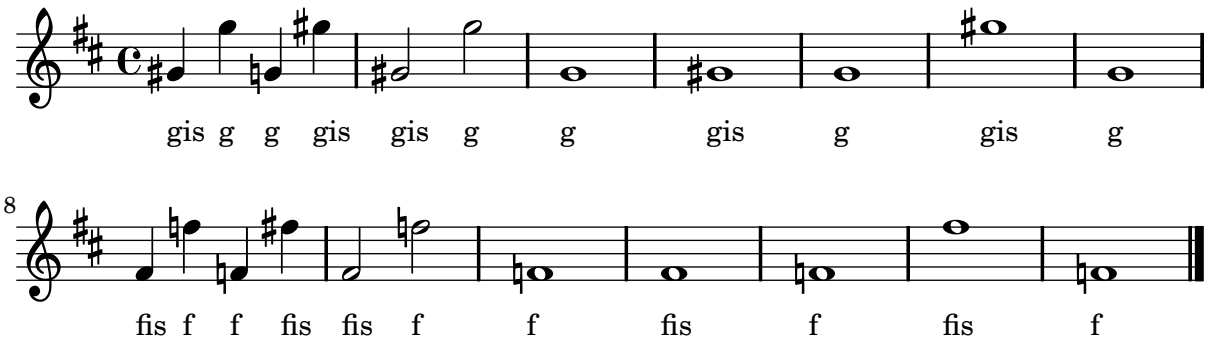


‘`accidental-ledger.ly`’ Ledger lines are shortened when there are accidentals. This happens only for the single ledger line close to the note head, and only if the accidental is horizontally close to the head.

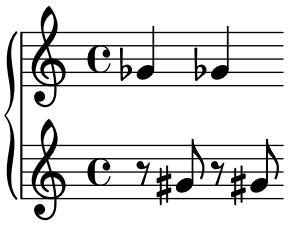


‘accidental-octave.ly’

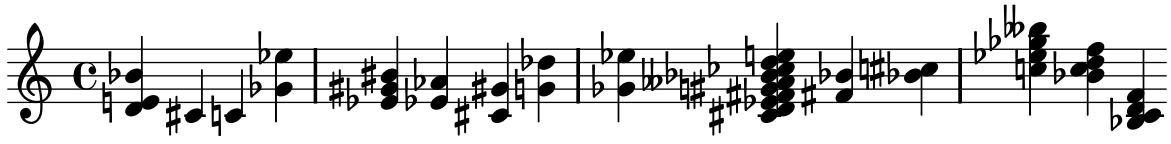
This shows how accidentals in different octaves are handled. The note names are also automatically printed but the octavation has been dropped out.



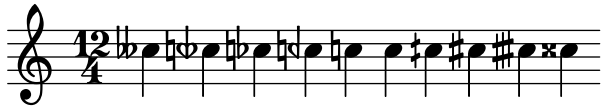
‘accidental-piano.ly’ In piano accidental style, notes in both staves influence each other. In this example, each note should have an accidental.



‘accidental-placement.ly’ Accidentals are placed as closely as possible. Accidentals in corresponding octaves are aligned. The top accidental should be nearest to the chord. The flats in a sixth should be staggered.

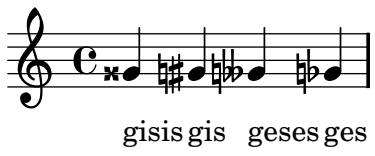


‘accidental-quarter.ly’ Quarter tone notation is supported, including threequarters flat.

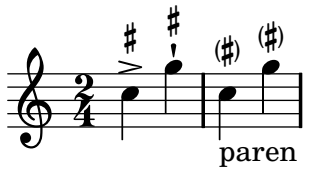


‘accidental-single-double.ly’

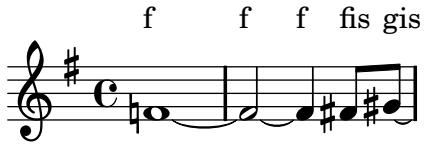
A sharp sign after a double sharp sign, as well as a flat sign after a double flat sign is automatically prepended with a natural sign.

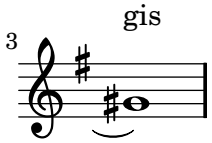


‘accidental-suggestions.ly’ setting the suggestAccidentals will print accidentals vertically relative to the note. This is useful for denoting Musica Ficta.

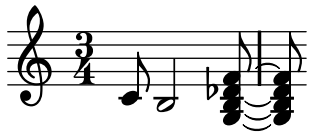


‘accidental-tie.ly’ The second and third notes should not get accidentals, because they are tied to a note. However, an accidental is present if the line is broken at the tie, which happens for the G sharp.



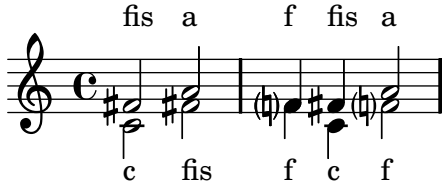


‘accidental-unbroken-tie-spacing.ly’ Tied accidentaled notes (which cause reminder accidentals) do not wreak havoc in the spacing when unbroken.



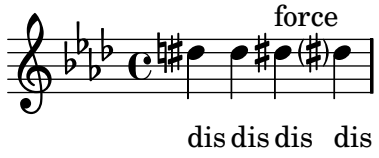
‘accidental-voice.ly’

This shows how modern cross voice auto cautionary accidentals are handled. The first two fisses get accidentals because they belong to different voices. The first f gets cautionary natural because of previous measure. The last f gets cautionary natural because fis was only in the other voice.

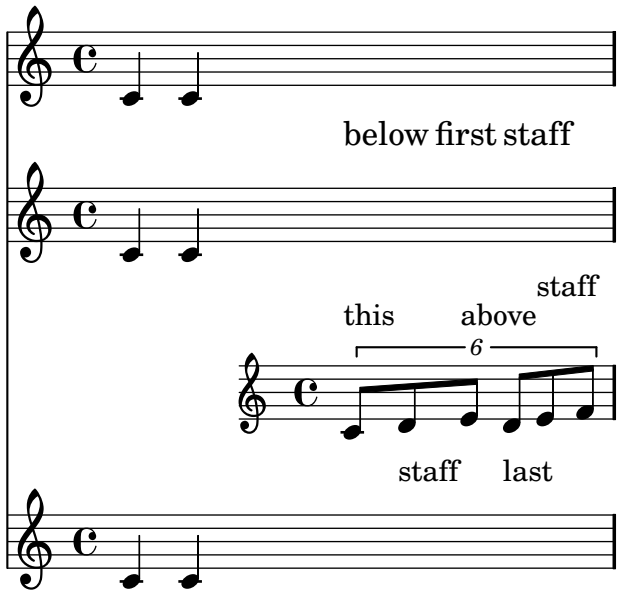


‘accidental.ly’

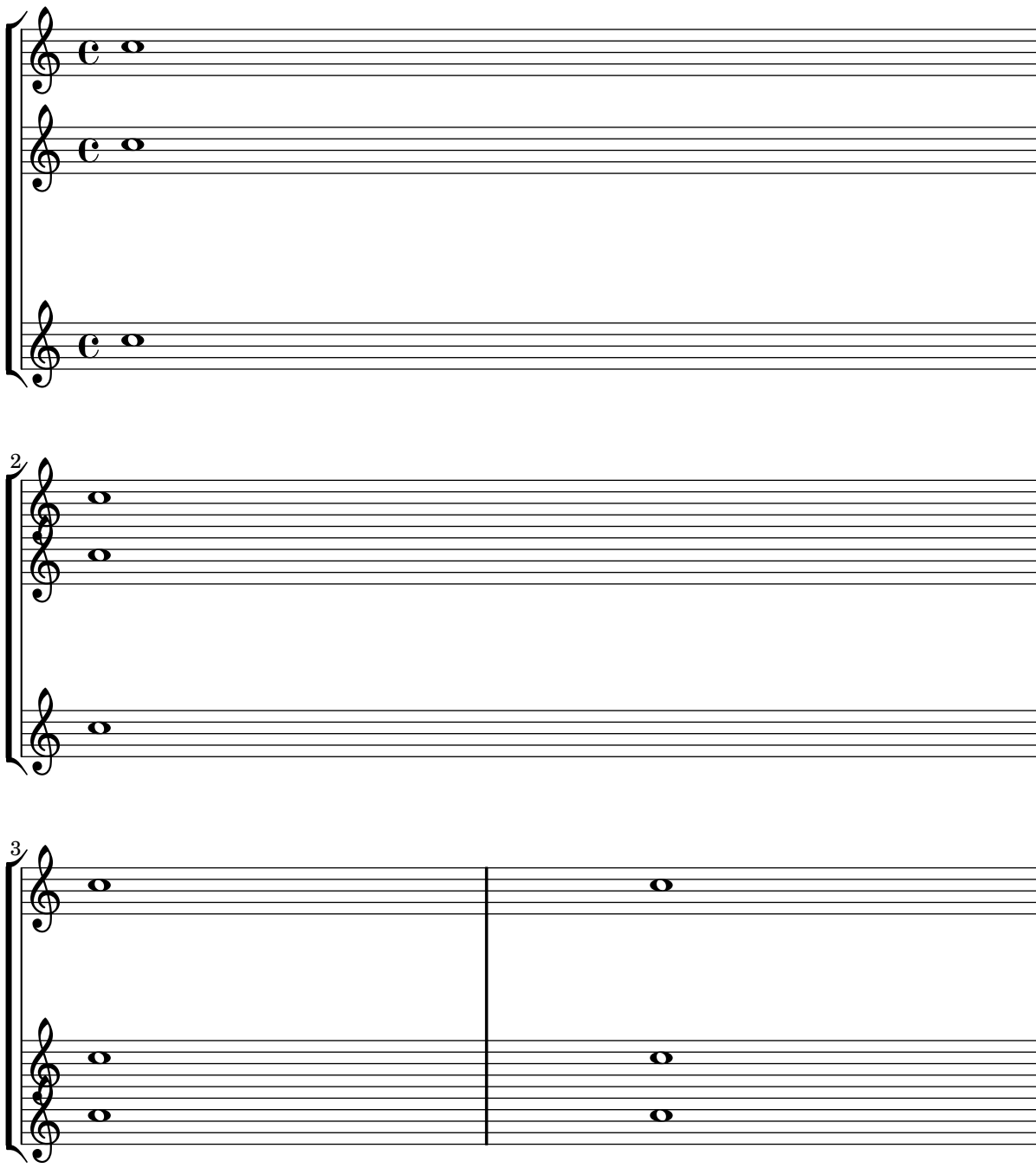
Accidentals work: the second note does not get a sharp. The third and fourth show forced and courtesy accidentals.



‘alignment-order.ly’ Newly created contexts can be inserted anywhere in the vertical alignment.



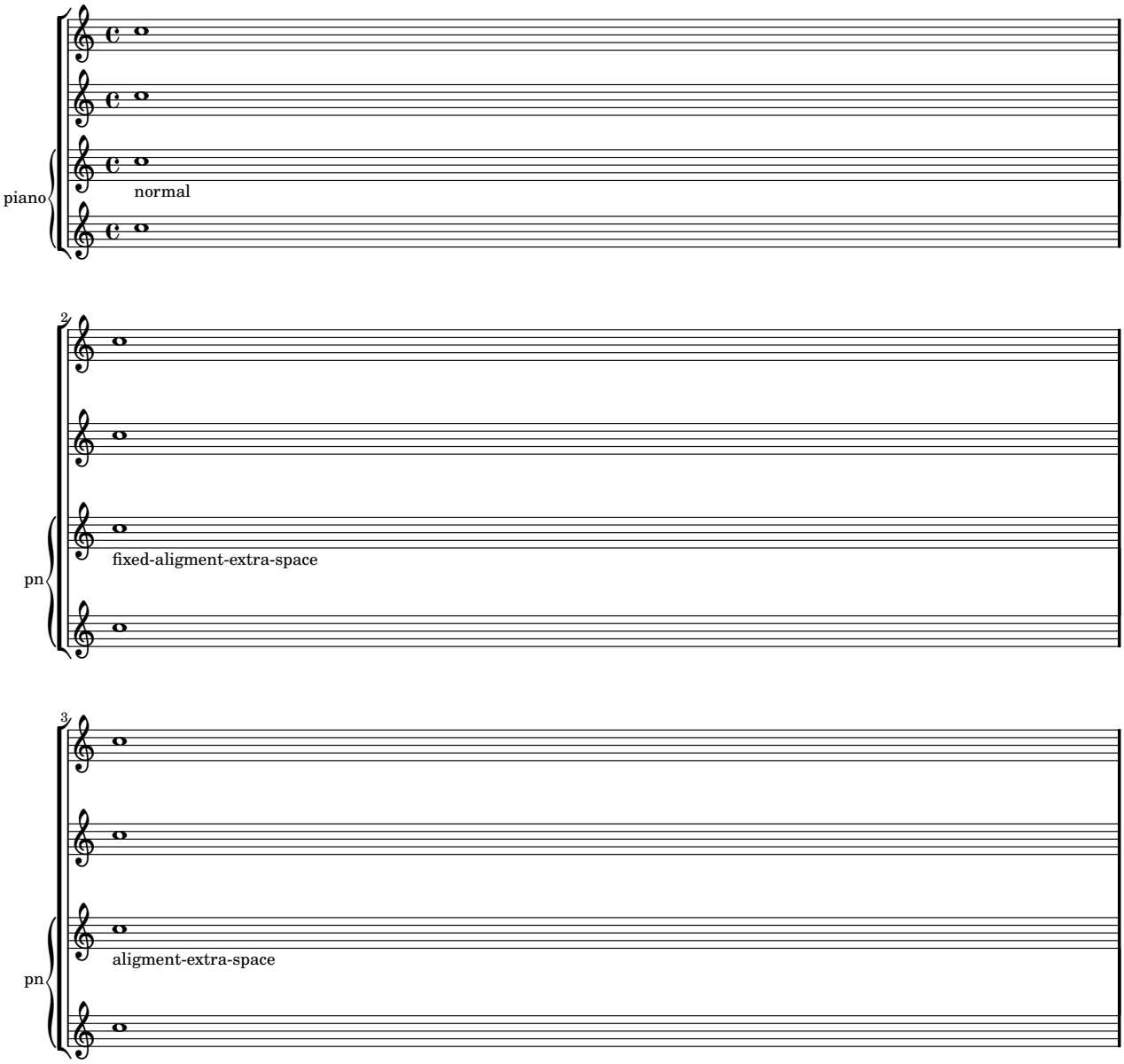
‘alignment-vertical-manual-setting.ly’ Alignments may be changed pre system by setting alignment-offsets in the line-break-system-details property



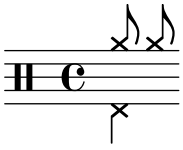
‘alignment-vertical-spacing.ly’ By setting properties in NonMusicalPaperColumn, vertical spacing of alignments can be adjusted per system.

By setting alignment-extra-space or fixed-alignment-extra-space an individual system may be stretched vertically.

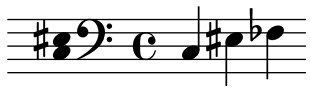
For technical reasons, overrideProperty has to be used for setting properties on individual object. \override in a \context block may still be used for global overrides.



‘ambitus-percussion-staves.ly’ Adding ambitus to percussion contexts does not cause crashes, since the Ambitus_engraver will only acknowledge pitched note heads.

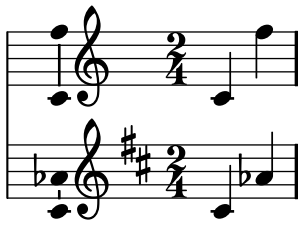


‘ambitus-pitch-ordering.ly’ Ambituses use actual pitch not lexicographic ordering.



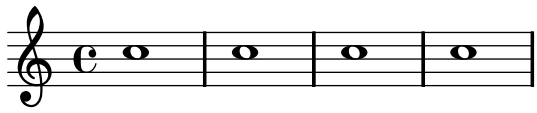
‘ambitus.ly’ Ambituses indicate pitch ranges for voices.

Accidentals only show up if they’re not part of key signature. AmbitusNoteHead grobs also have ledger lines.



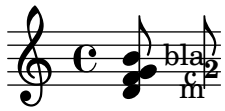
‘apply-context.ly’ With \applyContext, \properties can be modified procedurally. Applications include: checking bar numbers, smart octavation.

This example prints a bar-number during processing on stdout.



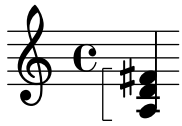
‘apply-output.ly’ The \applyOutput expression is the most flexible way to tune properties for individual grobs.

Here, the layout of a note head is changed depending on its vertical position.

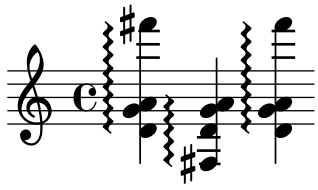


‘arpeggio-bracket.ly’

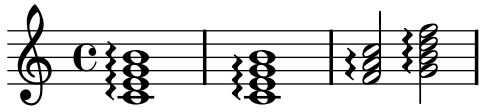
A square bracket on the left indicates that the player should not arpeggiate the chord.



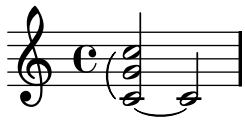
‘arpeggio-collision.ly’ Arpeggio stays clear of accidentals and flipped note heads.



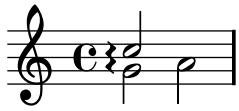
‘arpeggio-no-overshoot.ly’ Arpeggios do not overshoot the highest note head. The first chord in this example simulates overshoot using ’positions for comparison with the correct behaviour.



‘`arpeggio-parenthesis.ly`’ There is a variant of the arpeggio sign that uses a ‘vertical slur’ instead of the wiggle.

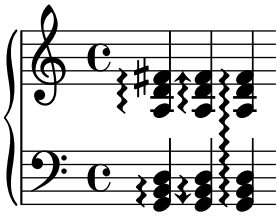


‘`arpeggio-span-one-staff.ly`’ Span arpeggios within one staff also work

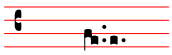


‘`arpeggio.ly`’

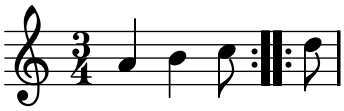
Arpeggios are supported, both cross-staff and broken single staff.



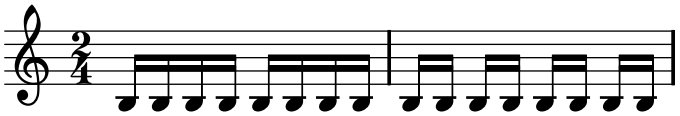
‘`augmentum.ly`’ Augmentum dots are accounted for in horizontal spacing.



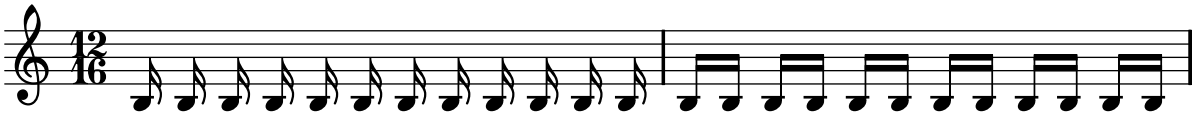
‘`auto-beam-bar.ly`’ No auto beams will be put over (manual) repeat bars.

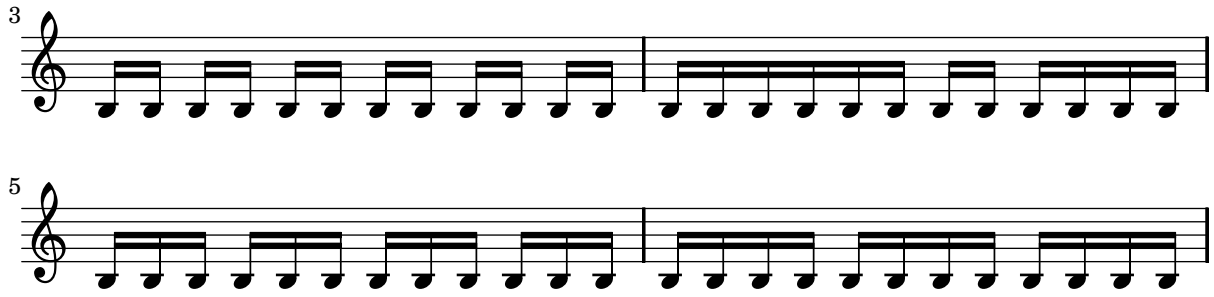


‘`auto-beam-beaming-override.ly`’ Autobeamer remembers `subdivideBeams` and other beaming pattern related functions at the start of an autobeam.

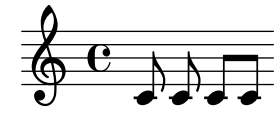


‘`auto-beam-beat-grouping.ly`’ Autobeaming will break beams according to beatGrouping if the total length of the beat groups is equal to measureLength. Otherwise, it will break beams according to beatLength.

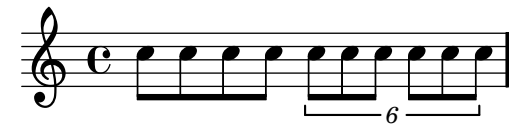




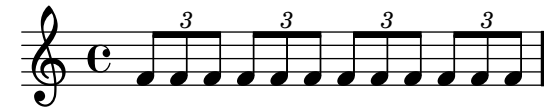
‘auto-beam-no-beam.ly’ The autobeamer may be switched off for a single note with \noBeam.



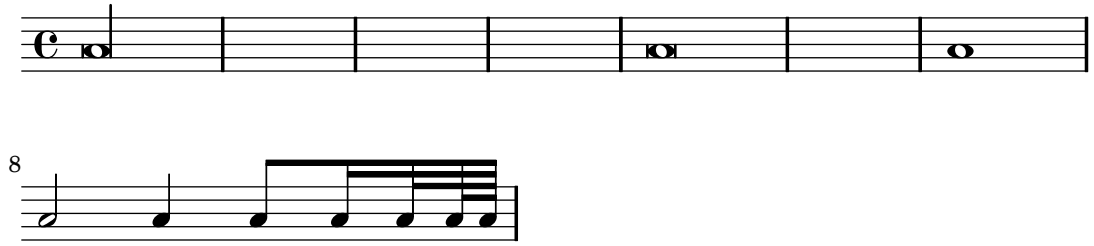
‘auto-beam-triplet.ly’ Automatic beaming is also done on tuplets.



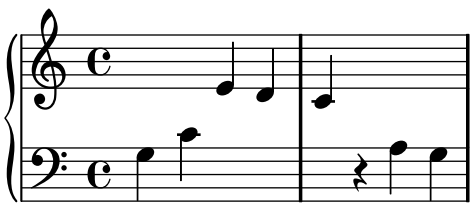
‘auto-beam-tuplets.ly’ Tuplet-spanner should not put (visible) brackets on beams even if they’re auto generated.



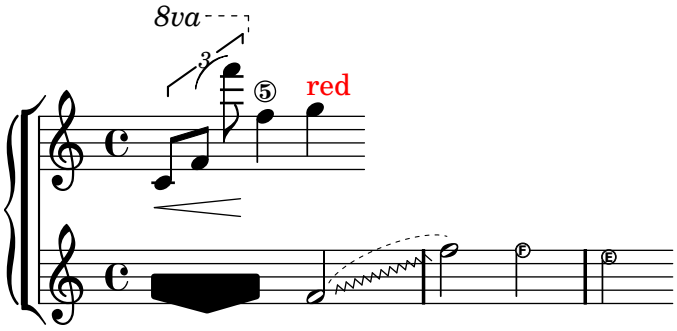
‘auto-beam.ly’ Beams are placed automatically; the last measure should have a single beam.



‘auto-change.ly’ Auto change piano staff switches voices between up and down staves automatically; rests are switched along with the coming note. When central C is reached, staff is not yet switched (by default).

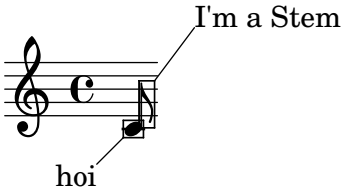


‘backend-excercise.ly’ Excercise all output functions

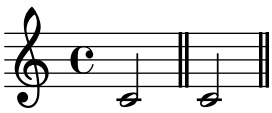


‘`backend-svg.ly`’

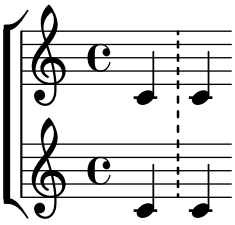
‘`balloon.ly`’ With balloon texts, objects in the output can be marked, with lines and explanatory text added.



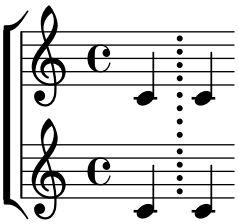
‘`bar-check-redefine.ly`’ The meaning of `|` is stored in the identifier `pipeSymbol`.



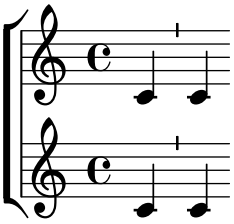
‘`bar-line-dashed.ly`’ The dashes in a dashed bar line covers staff lines exactly. Dashed barlines between staves start and end on a half dash precisely.



‘`bar-line-dotted.ly`’ The dots in a dotted bar line are in spaces.

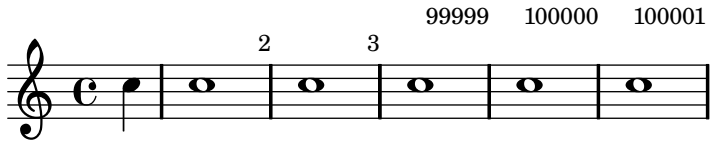


‘`bar-line-tick.ly`’ A ticked bar line is a short line of the same length as a staff space, centered on the top-most barline.



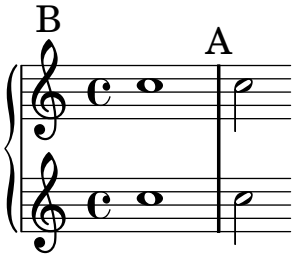
‘bar-number.ly’ Bar numbers may be set and their padding adjusted individually. The counting of bar numbers is started after the anacrusis.

To prevent clashes at the beginning of a line, the padding may have to be increased.

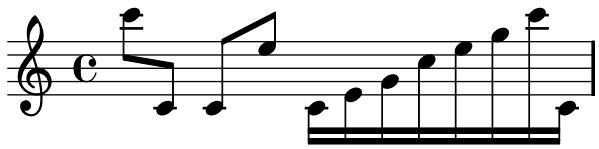


‘bar-scripts.ly’

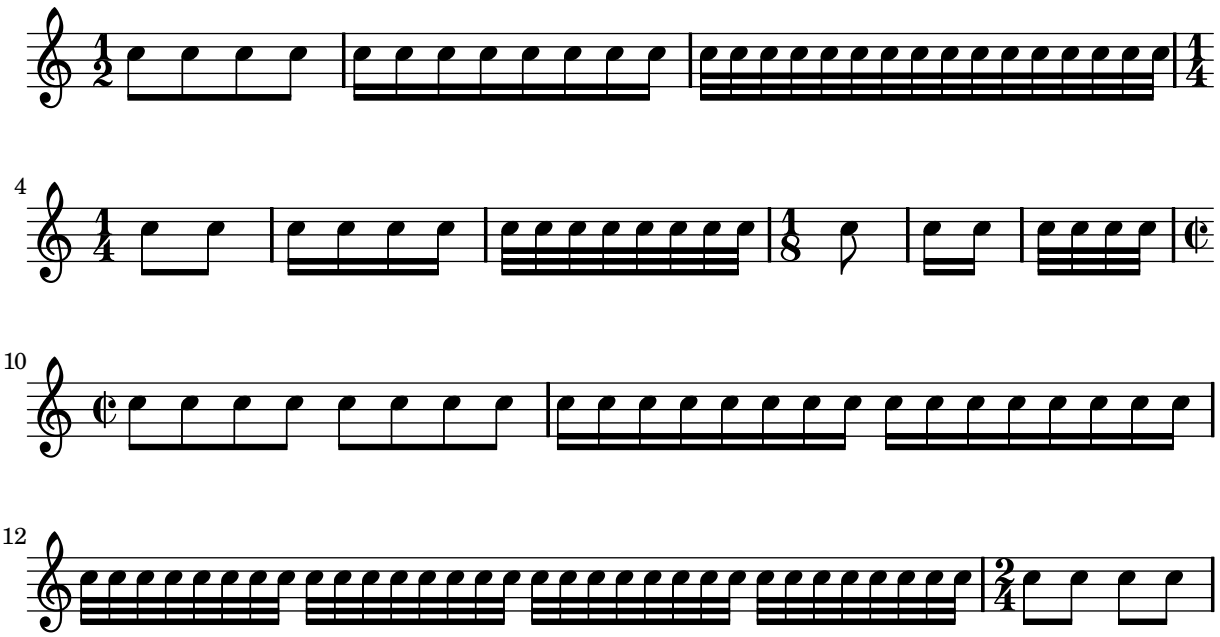
Markings can be attached to (invisible) barlines.

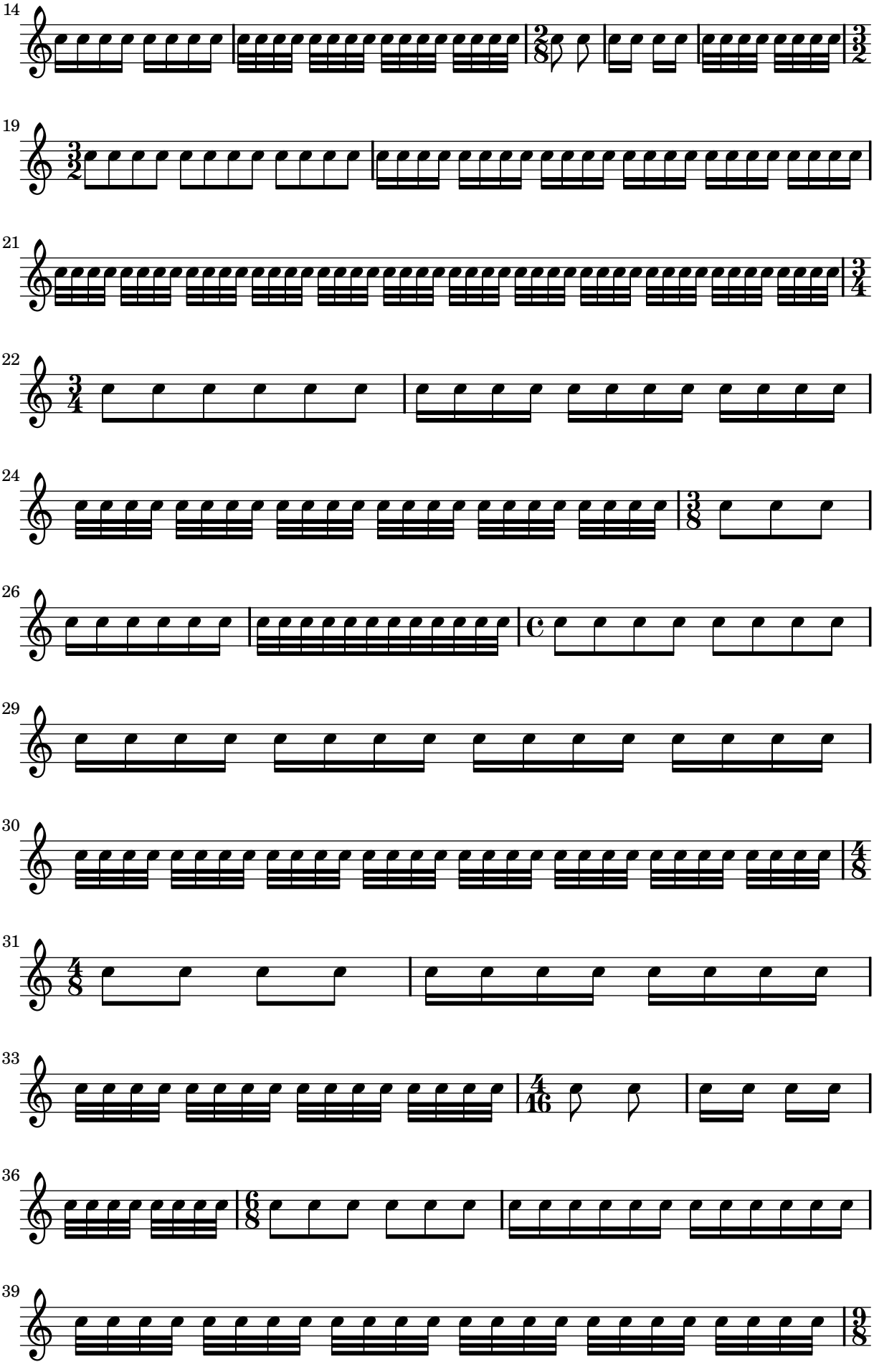


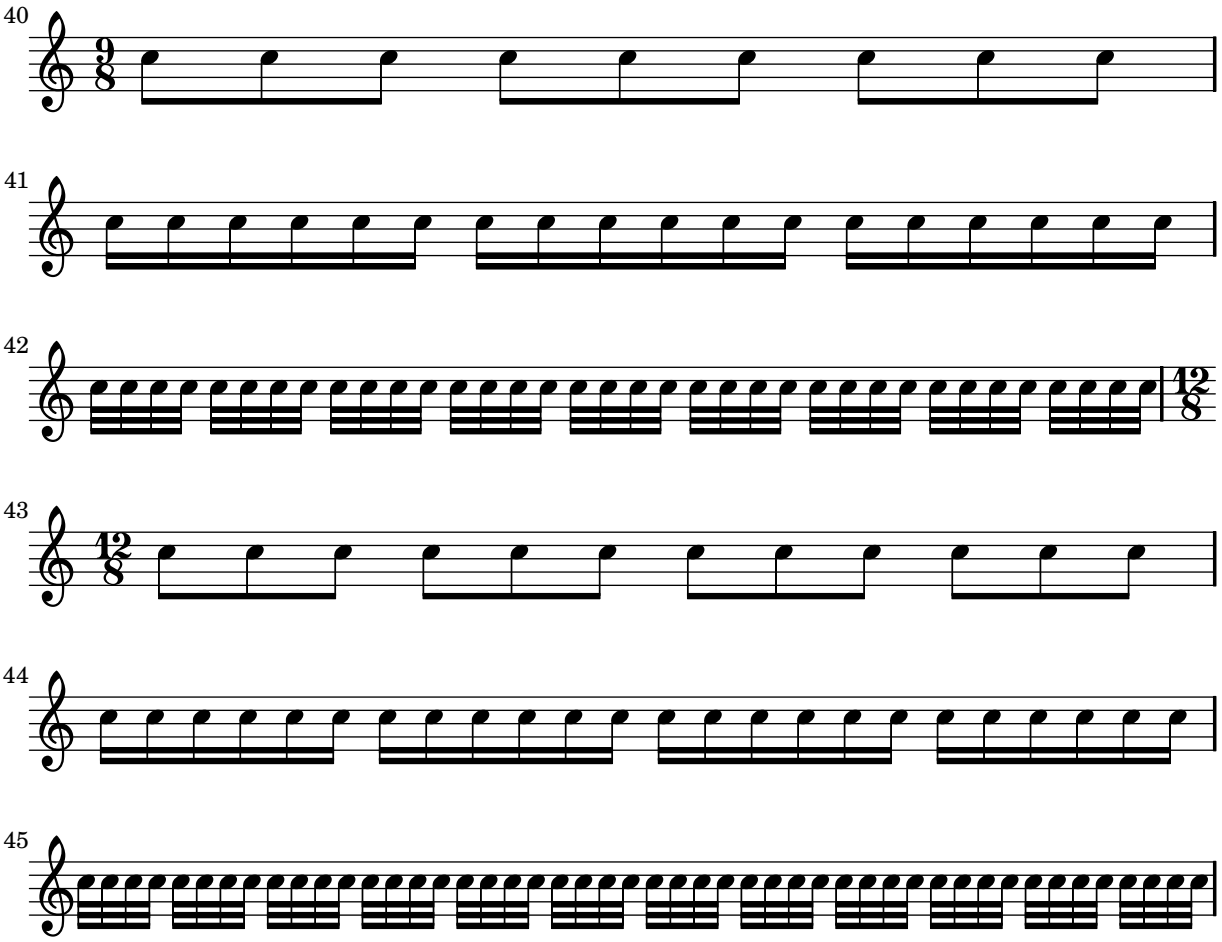
‘beam-auto-knee.ly’ A knee is made automatically when a horizontal beam fits in a gap between note heads that is larger than a predefined threshold.



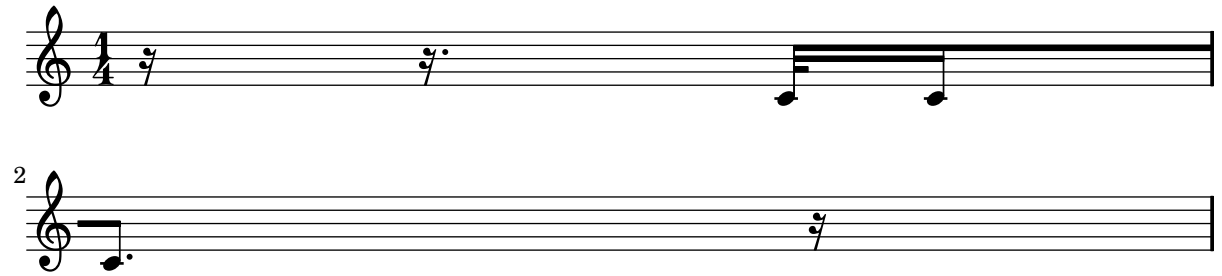
‘beam-auto.ly’ There are presets for the auto-beam engraver in the case of common time signatures.



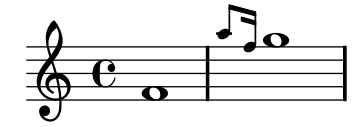




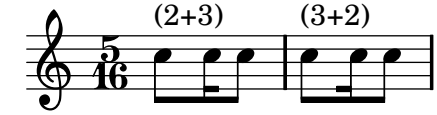
‘beam-beamlet-break.ly’ beamlets don’t run to end of line if there are no other beamlets on the same height.



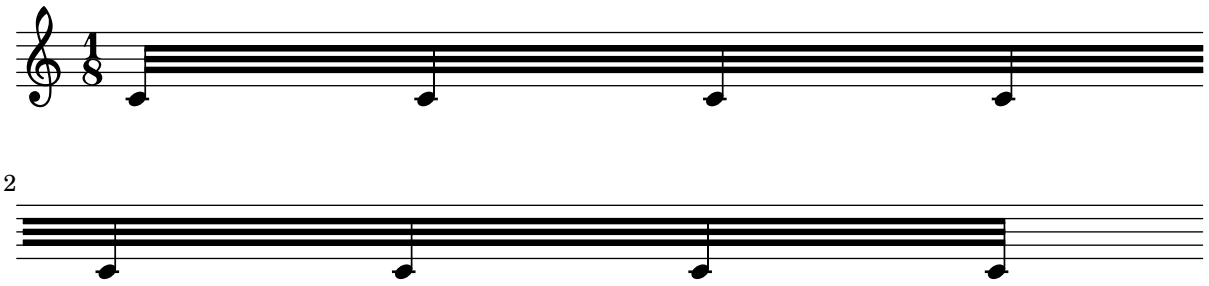
‘beam-beamlet-grace.ly’ Beamlets in grace notes remain readable.



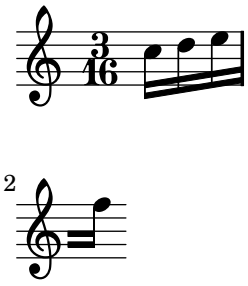
‘beam-beat-grouping.ly’ Beaming patterns obey the beatGrouping property.



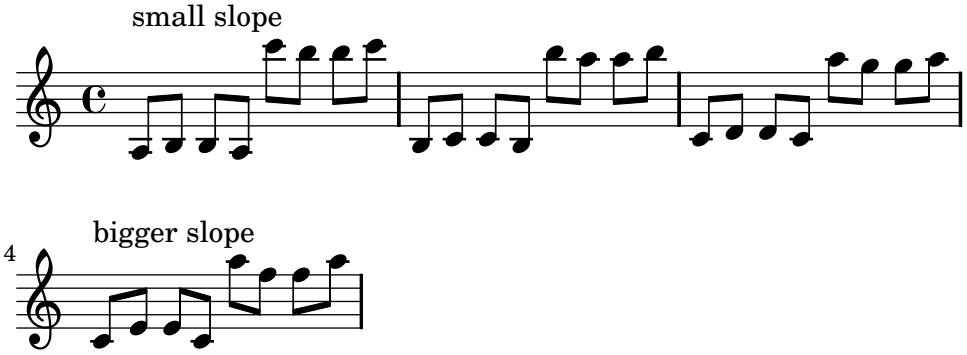
‘beam-break-no-bar.ly’ Broken beams have sane endings even if grobs are not present at the broken end.



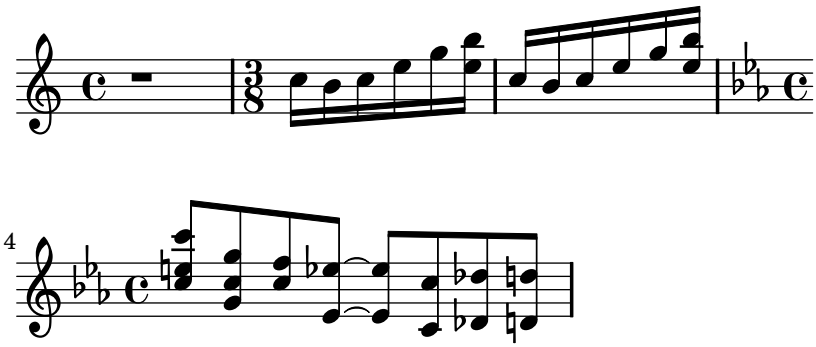
‘beam-break.ly’ Beams can be printed across line breaks, if forced.



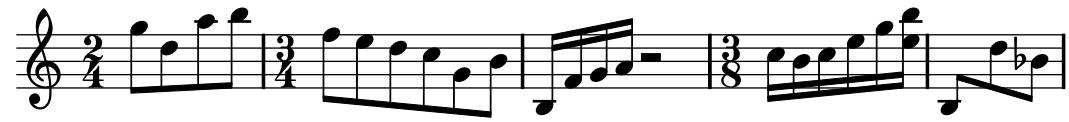
‘beam-center-slope.ly’ Simple beams on middle staffline are allowed to be slightly sloped, even if the notes have ledgers. Beams reaching beyond middle line can have bigger slope.



‘beam-concave-chord.ly’

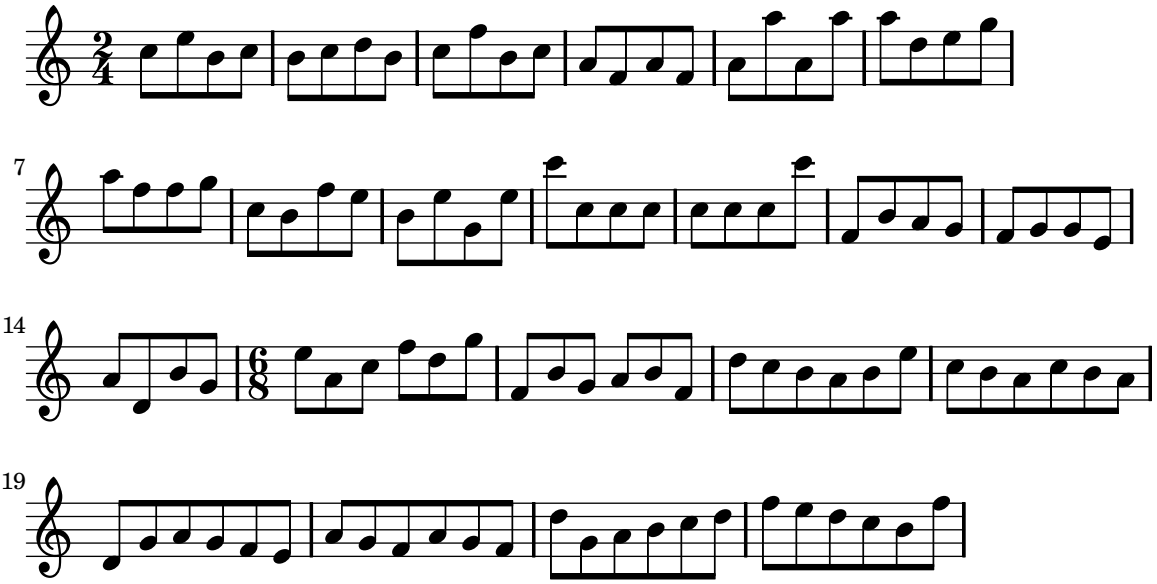


‘beam-concave-damped.ly’ Beams that are not strictly concave are damped according to their concaveness.

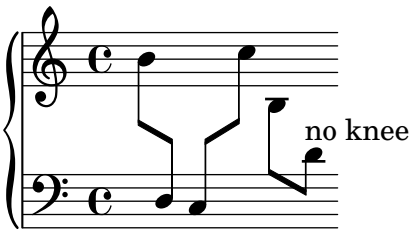


‘`beam-concave.ly`’ Fully concave beams should be horizontal. Informally spoken, concave refers to the shape of the notes that are opposite a beam. If an up-beam has high notes on its center stems, then we call it concave.

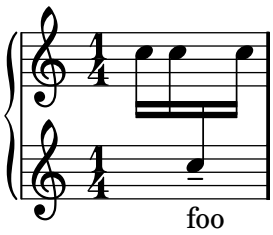
If a beam is fails a test, the desired slope is printed next to it.



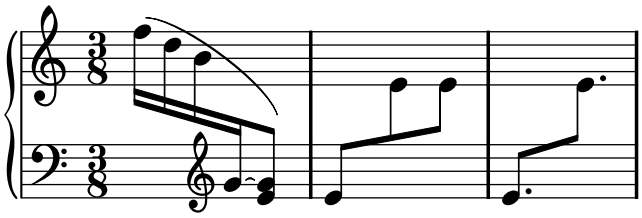
‘`beam-cross-staff-auto-knee.ly`’ Automatic cross-staff knees work also (here they were produced with explicit staff switches).



‘`beam-cross-staff-script.ly`’ scripts don’t trigger beam formatting. If this does happen, we can have a cyclic dependency on Y-positions of staves.

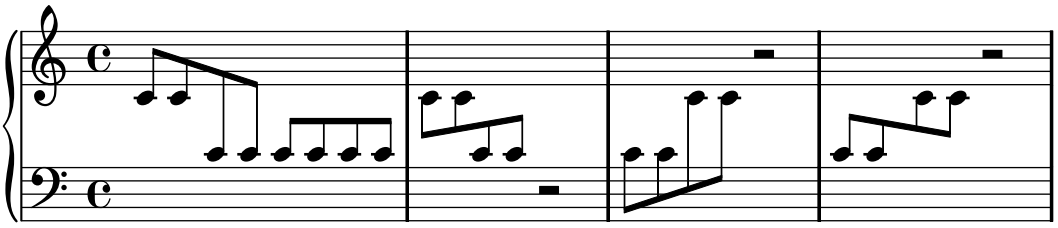


‘`beam-cross-staff-slope.ly`’ Cross staff (kneed) beams do not cause extreme slopes.

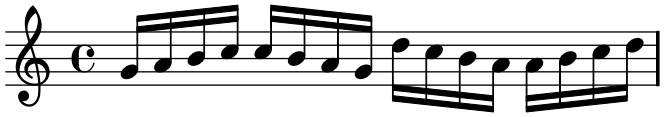


‘beam-cross-staff.ly’

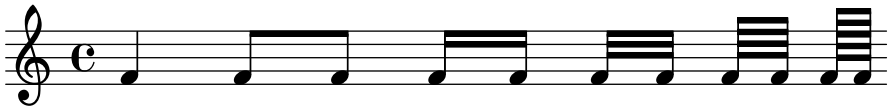
Beams can be typeset over fixed distance aligned staves, beam beautification does not really work, but knees do. Beams should be behave well, wherever the switching point is.



‘beam-damp.ly’ Beams are less steep than the notes they encompass.

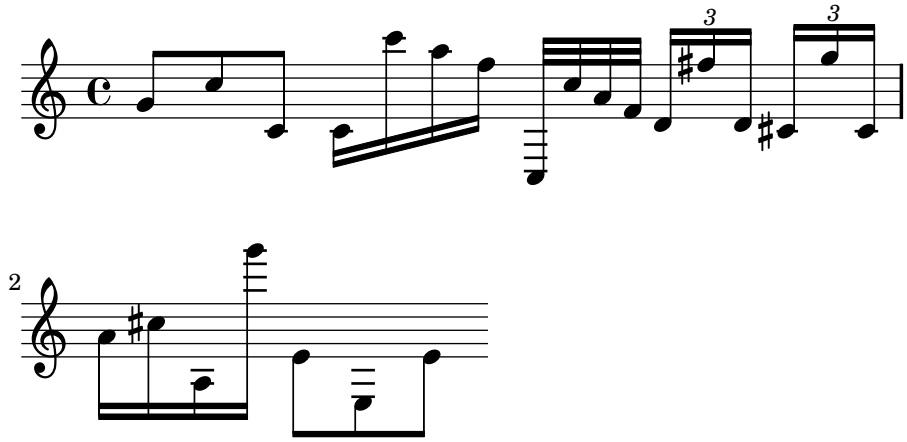


‘beam-default-lengths.ly’ Beamed stems have standard lengths if possible. Quantization is switched off in this example.

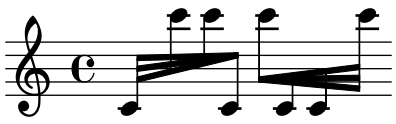


‘beam-extreme.ly’

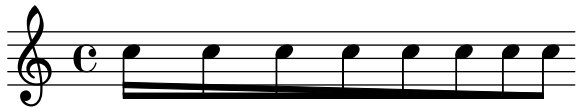
Beams should behave reasonably well, even under extreme circumstances. Stems may be short, but noteheads should never touch the beam. Note that under normal circumstances, these beams would get knees. Here `Beam.auto-knee-gap` was set to false.



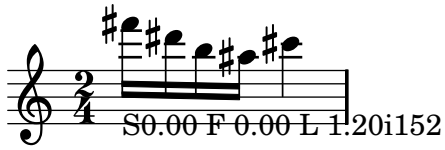
‘beam-feather-knee-stem-length.ly’ In feathered beams, stems in knees reach up to the feathered part correctly.



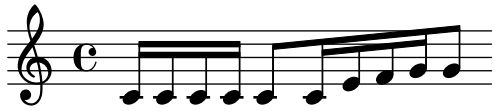
‘`beam-feather.ly`’ Specifying `grow-direction` on a beam, will cause feathered beaming. The `\featherDurations` function can be used to adjust note durations.



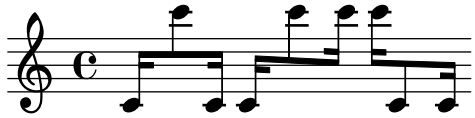
‘`beam-flat-retain-direction.ly`’ Even very flat but slanted patterns should give slanted beams.



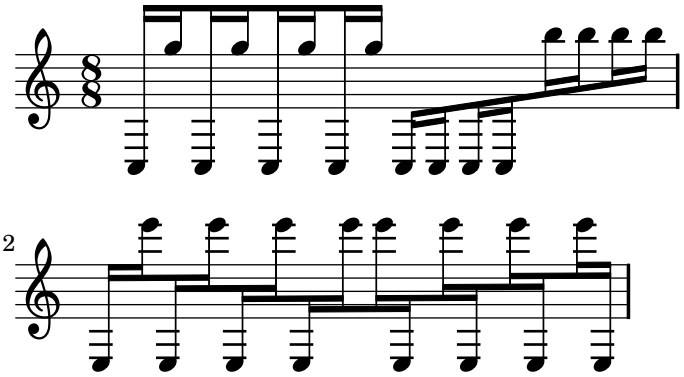
‘`beam-french.ly`’ In French style beaming, the stems do not go between beams.



‘`beam-funky-beamlet.ly`’ Funky kneed beams with beamlets also work. The beamlets should be pointing to the note head.

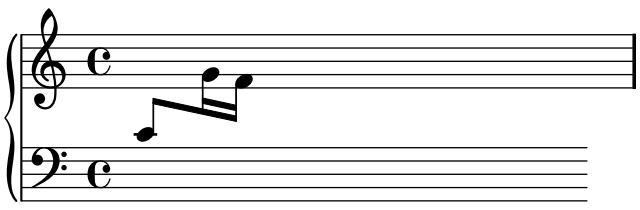


‘`beam-funky.ly`’ In complex configurations of knee beaming, according to Paul Roberts, the first stem of a beam determines the direction of the beam, and as such the way that following (kneed) stems attach to the beam. This is in disagreement with the current algorithm.

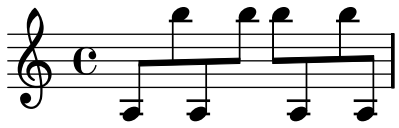


‘`beam-isknee.ly`’

Beams can be placed across a `PianoStaff`.

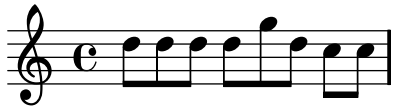


‘beam-knee-symmetry.ly’ Point-symmetric beams should receive the same quanting. There is no up/down bias in the quanting code.

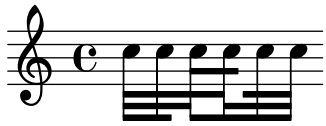


‘beam-length.ly’

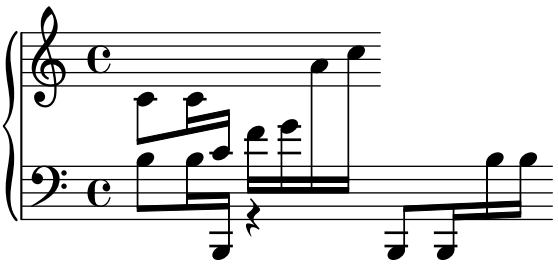
Beams should look the same.



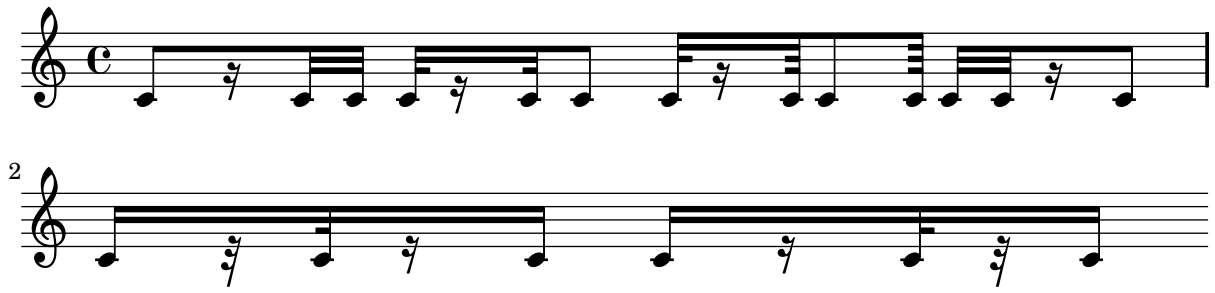
‘beam-manual-beaming.ly’ Beaming can be overidden for individual stems.



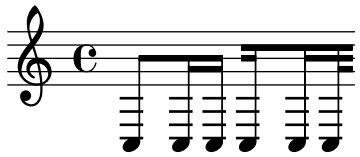
‘beam-multiple-cross-staff.ly’ Kneed beams (often happens with cross-staff beams) should look good when there are multiple beams: all the beams should go on continuously at the staff change. Stems in both staves reach up to the last beam.



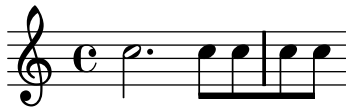
‘beam-multiplicity-over-rests.ly’ When a beam goes over a rest, there should not be any beamlets pointing towards the rest unless absolutely necessary.



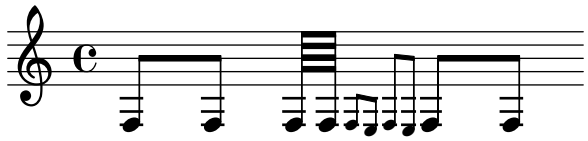
‘beam-outside-beamlets.ly’ Beams may overshoot stems. This is also controlled with break-overshoot.



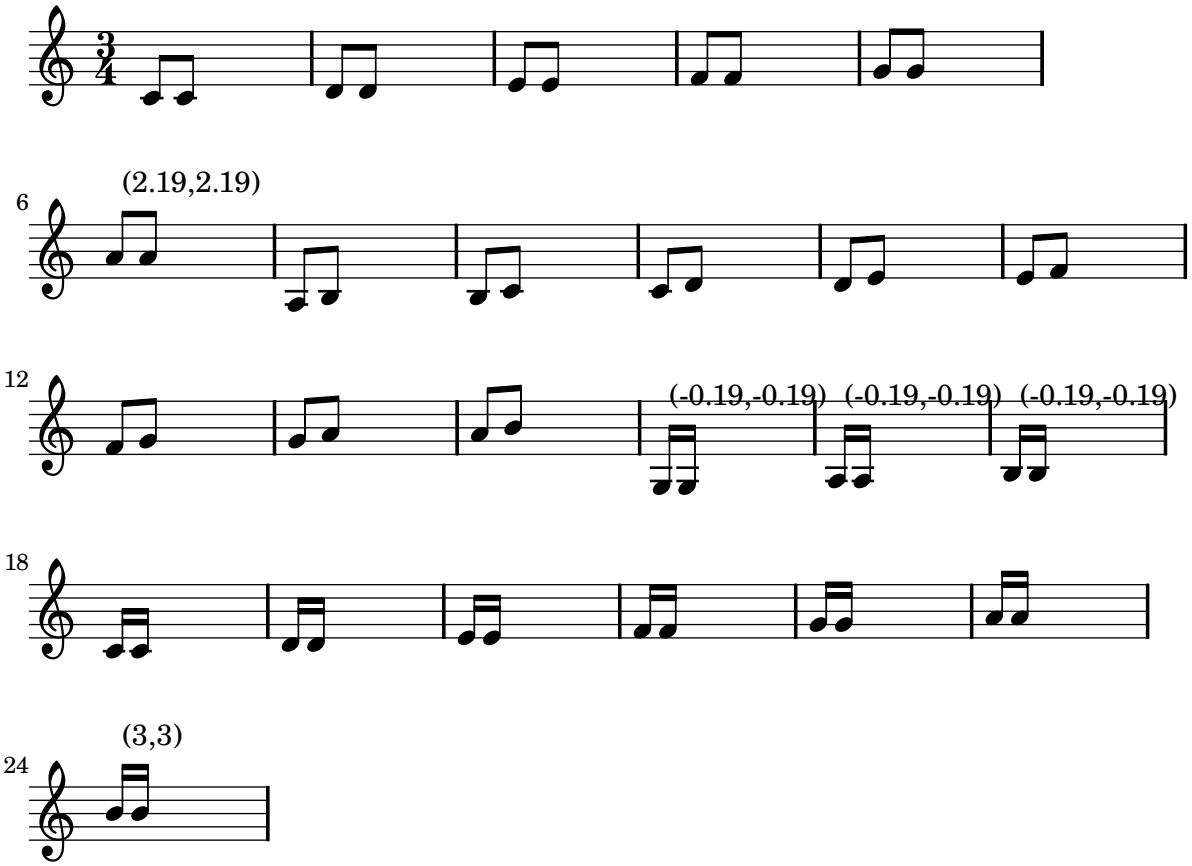
‘`beam-over-barline.ly`’ Explicit beams may cross barlines.



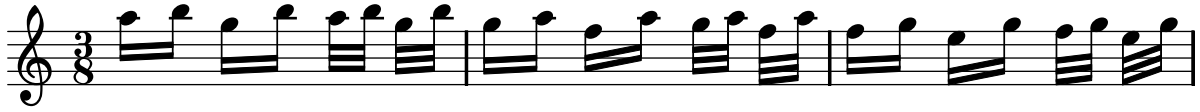
‘`beam-position.ly`’ Beams on ledgered notes should always reach the middle staff line. The second beam, counting from the note head side, should never be lower than the second staff line. This does not hold for grace note beams. Override with `no-stem-extend`.

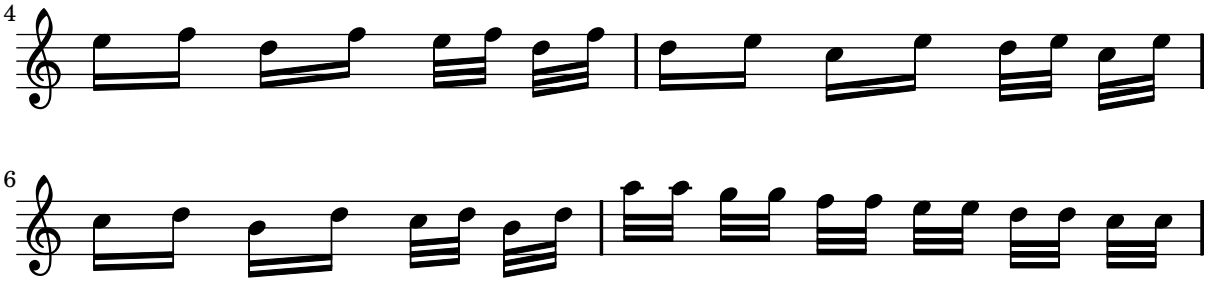


‘`beam-quant-standard.ly`’ This file tests a few standard beam quants, taken from Ted Ross’ book. If LilyPond finds another quant, the correct quant is printed over the beam.

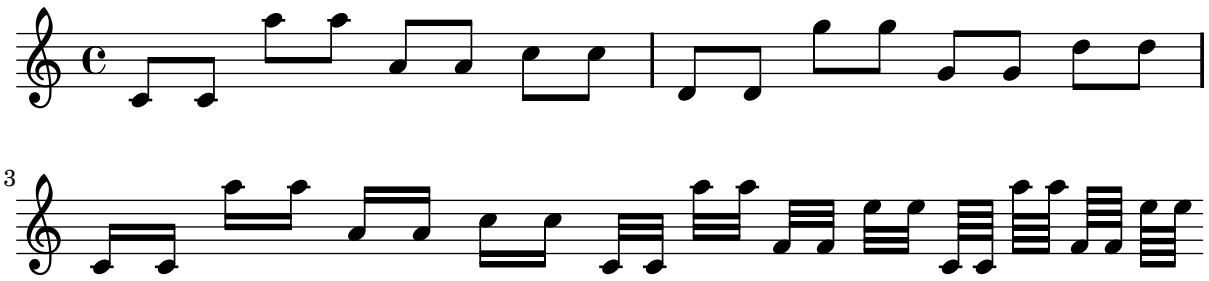


‘`beam-quanting-32nd.ly`’ Stem lengths take precedence over beam quants: ‘forbidden’ quants are only avoided for 32nd beams when they are outside of the staff. However, that leads to very long stems, which is even worse.

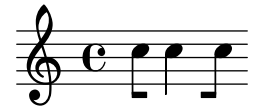




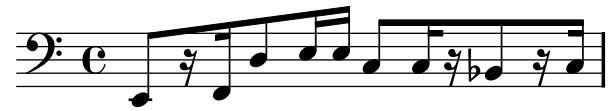
‘beam-quanting-horizontal.ly’ In this test for beam quant positions for horizontal beams, staff lines should be covered in all cases. For 32nd beams, the free stem lengths are between 2 and 1.5.



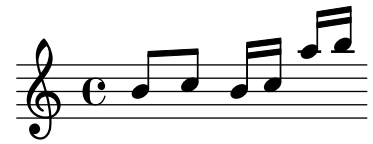
‘beam-quarter.ly’ Quarter notes may be beamed: the beam is halted momentarily.



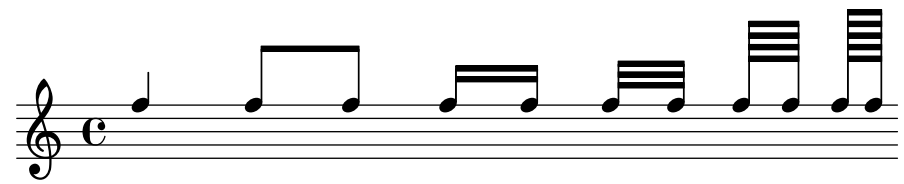
‘beam-rest.ly’ The number of beams does not change on a rest.



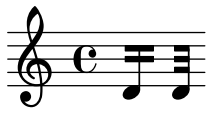
‘beam-second.ly’ Engraving second intervals is tricky. We used to have problems with seconds being too steep, or getting too long stems. In a file like this, showing seconds, you’ll spot something fishy very quickly.



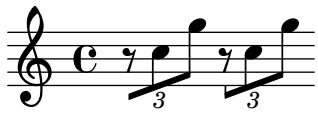
‘beam-shortened-lengths.ly’ Beams in unnatural direction, have shortened stems, but do not look too short.



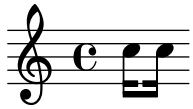
‘beam-single-stem.ly’ Single stem beams are also allowed. For such beams, clip-edges is switched off automatically.



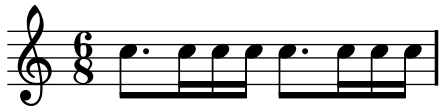
‘`beam-slope-stemlet.ly`’ For slope calculations, stemlets are treated as invisible stems.



‘`beam-unconnected-beamlets.ly`’ By setting `max-beam-connect`, it is possible to create pairs of unconnected beamlets.

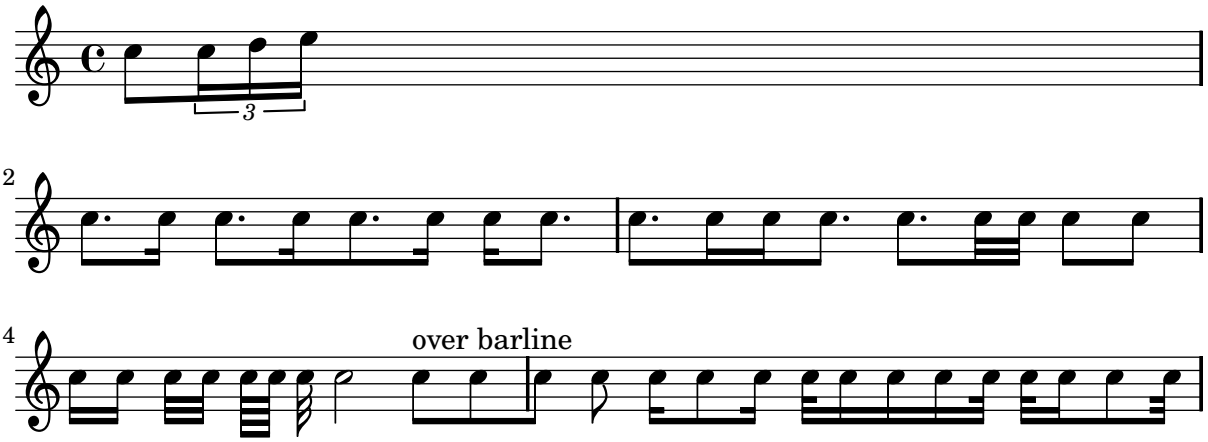


‘`beaming-ternary-metrum.ly`’ Automatic beaming works also in ternary time sigs. In this case, the 8th is a beat, so the 16ths are split into two groups. This can be avoided by overriding `beatLength` to be three 8th notes.

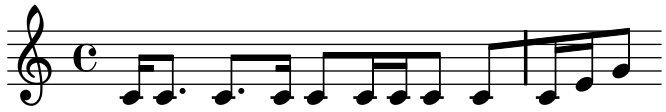


‘`beaming.ly`’

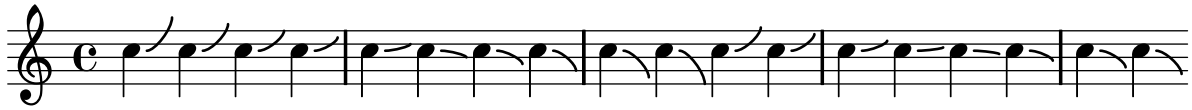
Beaming is generated automatically. Beams may cross bar lines. In that case, line breaks are forbidden.



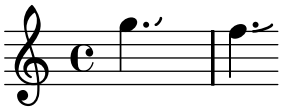
‘`beams.ly`’ Beaming can be also given explicitly.



‘`bend-after.ly`’ Falls and doits can be created with bendAfter. They run to the next note, or to the next barline. Microtone bends (i.e. \bendAfter #3.5) are also supported.



‘`bend-dot.ly`’ Bends avoid dots, but only if necessary.



‘`bookparts.ly`’ A book can be split into several parts with different paper settings, using `\bookpart`.

Fonts are loaded into the top-level paper. Page labels are also collected into the top-level paper.

Book with several parts

First part

with default paper settings.

II SECOND PART

Second part, with different margins
and page header.

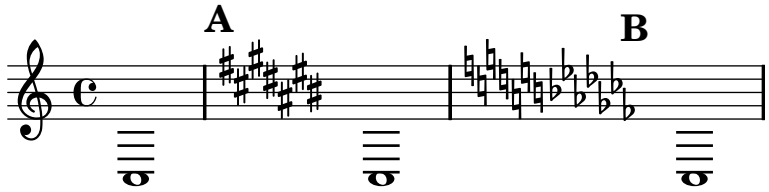


Table of Contents

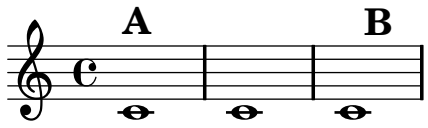
First part 1
Second part 2
Third part 3

Music engraving by LilyPond 2.12.2—www.lilypond.org

‘`break-alignment-anchor-alignment.ly`’ The default callback for break-align-anchor in clefs and time/key signatures reads the break-align-anchor-aligment property to align the anchor to the extent of the break-aligned grob.

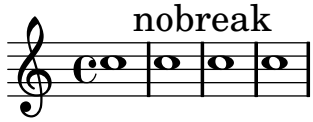


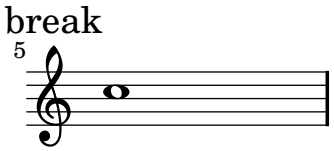
‘`break-alignment-anchors.ly`’ The break-align-anchor property of a break-aligned grob gives the horizontal offset at which other grobs should attach.

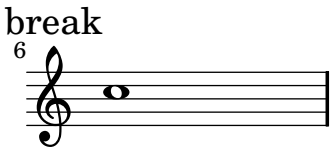


‘`break.ly`’

Breaks can be encouraged and discouraged using `\break` and `\noBreak`.

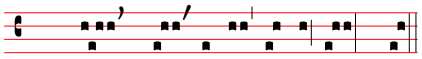






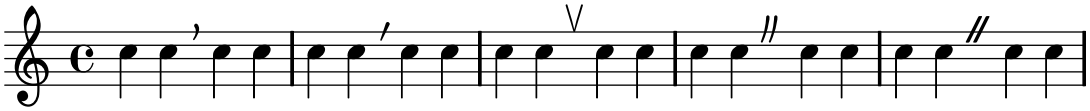
‘`breathing-sign-ancient.ly`’

Gregorian chant notation sometimes also uses commas and ticks, but in smaller font size (we call it ’virgula’ and ’caesura’). However, the most common breathing signs are divisio minima/maior/maxima and finalis, the latter three looking similar to bar glyphs.

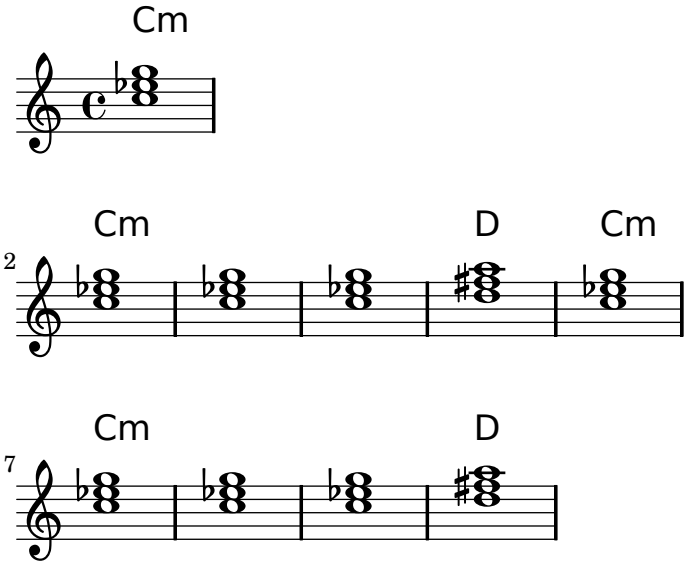


‘`breathing-sign.ly`’

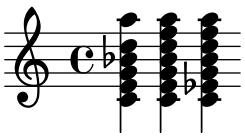
Breathing signs are available in different tastes: commas (default), ticks, vees and ‘railroad tracks’ (caesura).



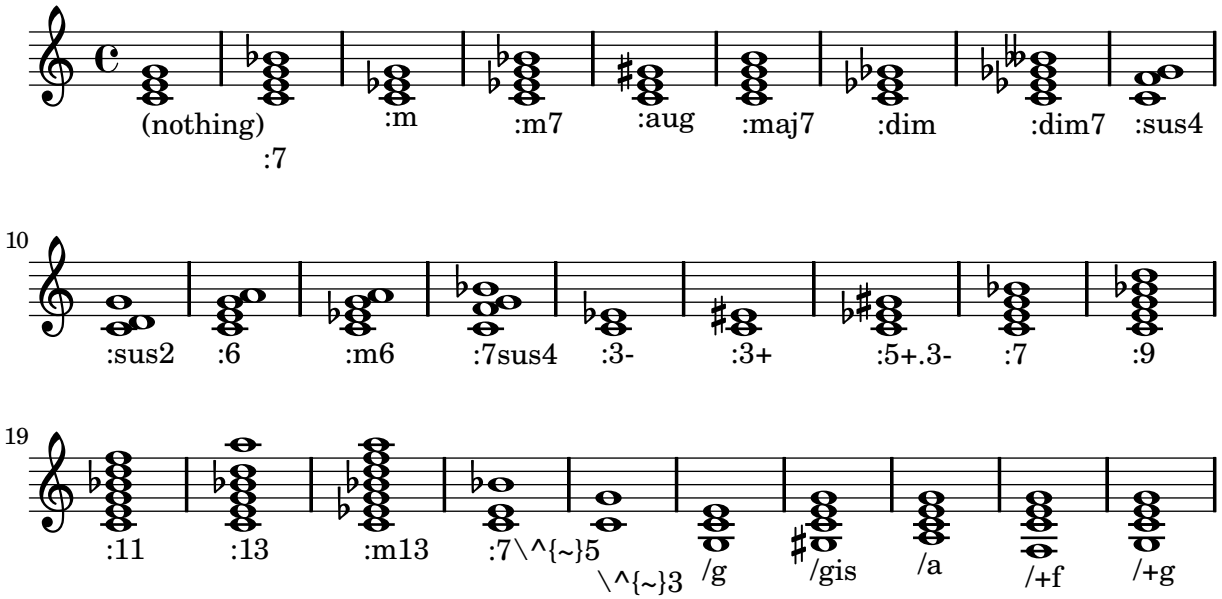
‘`chord-changes.ly`’ Property chordChanges: display chord names only when there’s a change in the chords scheme, but always display the chord name after a line break.



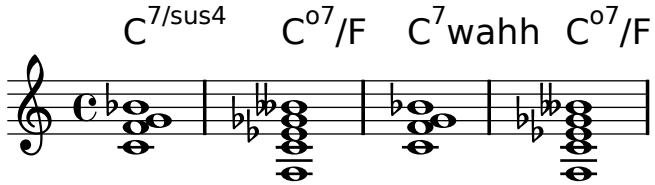
‘`chord-name-entry-11.ly`’ The 11 is only added to major-13 if it is mentioned explicitly.



‘chord-name-entry.ly’ Chords can be produced with the chordname entry code (\chordmode mode), using a pitch and a suffix. Here, the suffixes are printed below pitches.



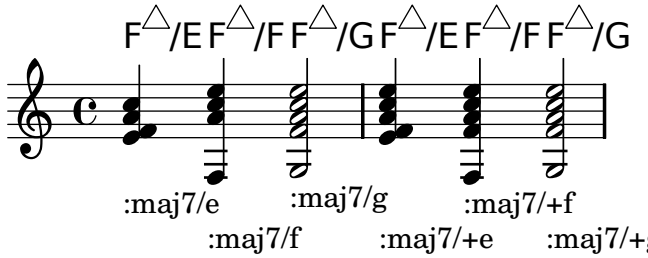
‘chord-name-exceptions.ly’ The property chordNameExceptions can used to store a list of special notations for specific chords.



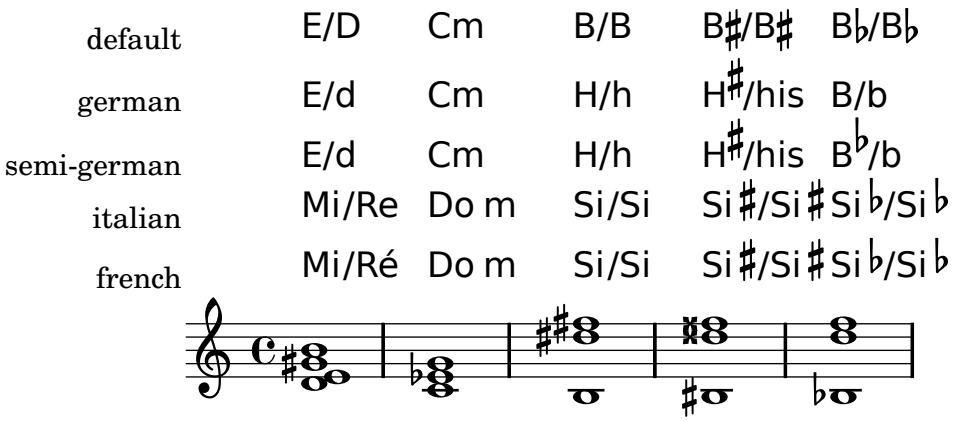
‘chord-name-major7.ly’ The layout of the major 7 can be tuned with majorSevenSymbol.



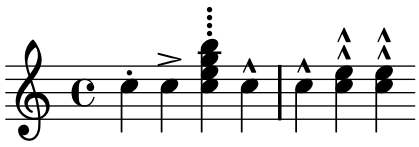
‘chord-names-bass.ly’ In ignatzek inversions, a note is dropped down to act as the bass note of the chord. Bass note may be also added explicitly. Above the staff: computed chord names. Below staff: entered chord name.



‘chord-names-languages.ly’ The english naming of chords (default) can be changed to german (\germanChords replaces B and Bes to H and B), semi-german (\semiGermanChords replaces B and Bes to H and Bb), italian (\italianChords uses Do Re Mi Fa Sol La Si), or french (\frenchChords replaces Re to R).

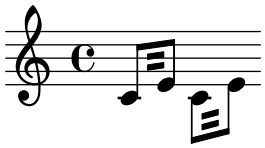


‘`chord-scripts.ly`’ Scripts can also be attached to chord elements.

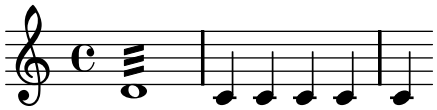


‘`chord-tremolo-short.ly`’

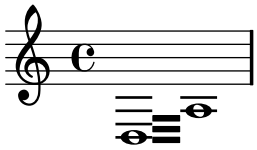
Tremolo repeats can be constructed for short tremolos (total duration smaller than 1/4) too. Only some of the beams are connected to the stems.



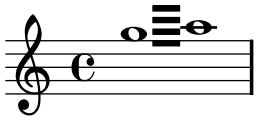
‘`chord-tremolo-single.ly`’ Chord tremolos on a single note.



‘`chord-tremolo-stem-direction.ly`’ Stem directions influence positioning of whole note tremolo beams.



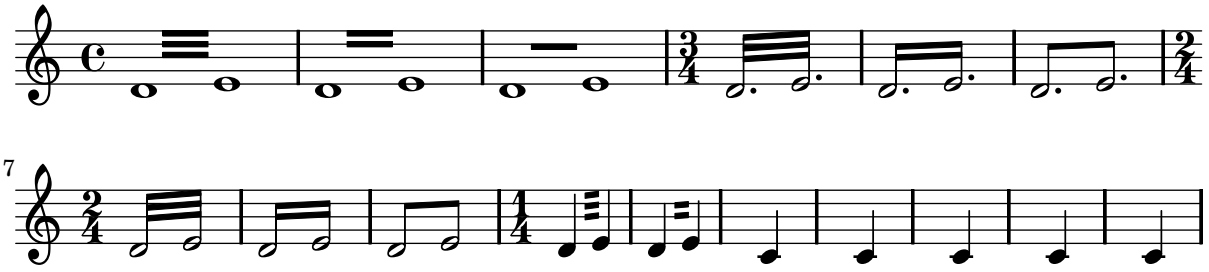
‘`chord-tremolo-whole.ly`’ chord tremolos don’t collide with whole notes.



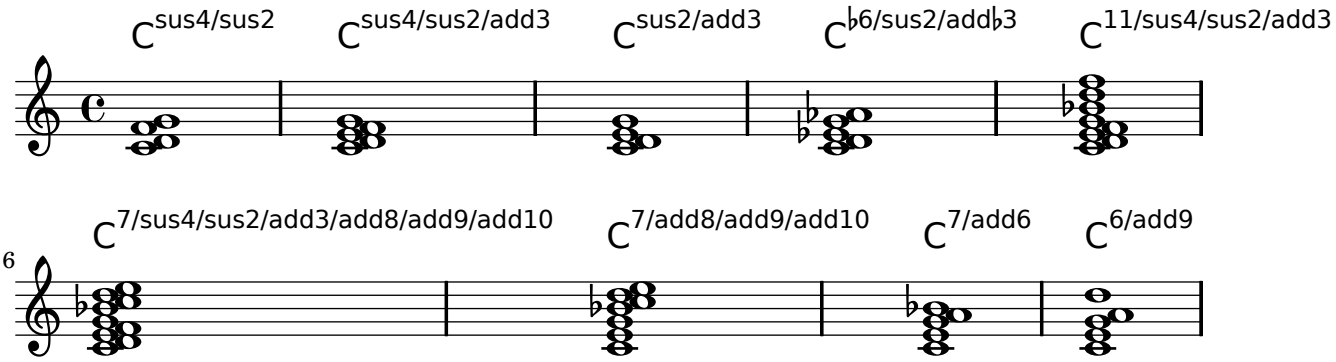
‘`chord-tremolo.ly`’

Chord tremolos look like beams, but are a kind of repeat symbol. To avoid confusion, chord tremolo beams do not reach the stems, but leave a gap. Chord tremolo beams on half notes are not ambiguous, as half notes cannot appear in a regular beam, and should reach the stems.

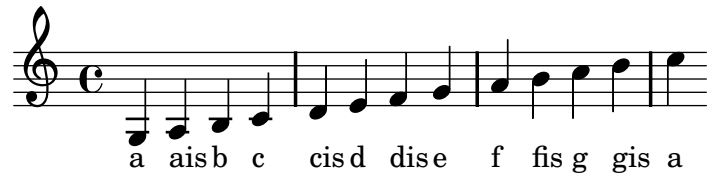
In this example, each tremolo lasts exactly one measure.
(To ensure that the spacing engine is not confused we add some regular notes as well.)



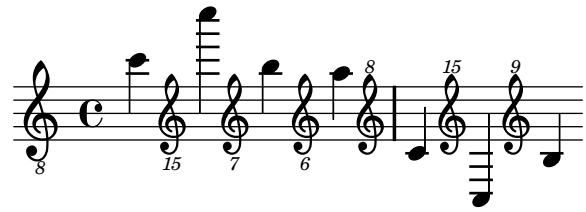
‘`chords-funky-ignatzek.ly`’ Jazz chords may have unusual combinations.



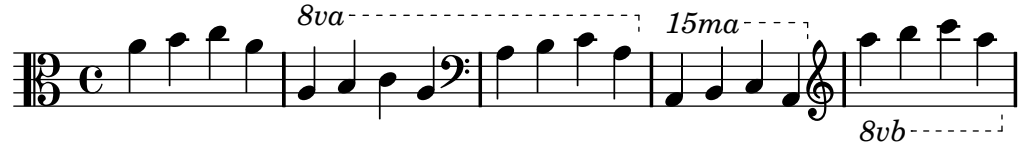
‘`chromatic-scales.ly`’ `staffLineLayoutFunction` is used to change the position of the notes. This sets `staffLineLayoutFunction` to `ly:pitch-semitones` to produce a chromatic scale with the distance between a consecutive space and line equal to one semitone.



‘`clef-oct.ly`’ Octavation signs may be added to clefs. These octavation signs may be placed below or above (meaning an octave higher or lower), and can take any value, including 15 for two octaves.



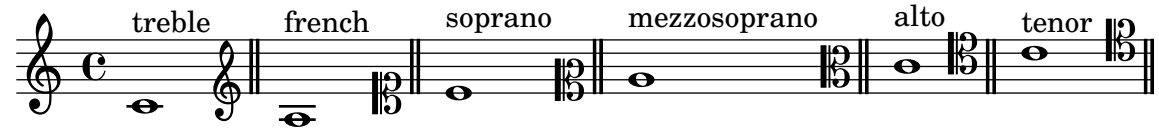
‘`clef-ottava.ly`’ Ottava brackets and clefs both modify Staff.middleCPosition, but they don’t confuse one another.

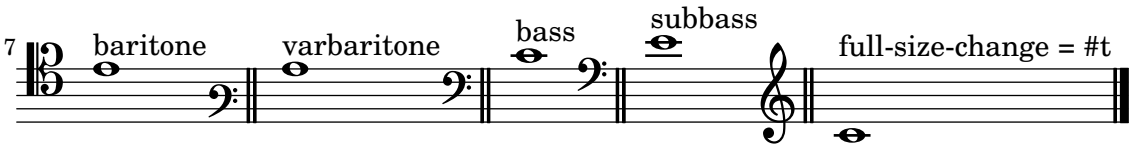


‘`clef-warn.ly`’ Unknown clef name warning displays available clefs



‘`clefs.ly`’ Clefs with `full-size-change` should be typeset in full size.





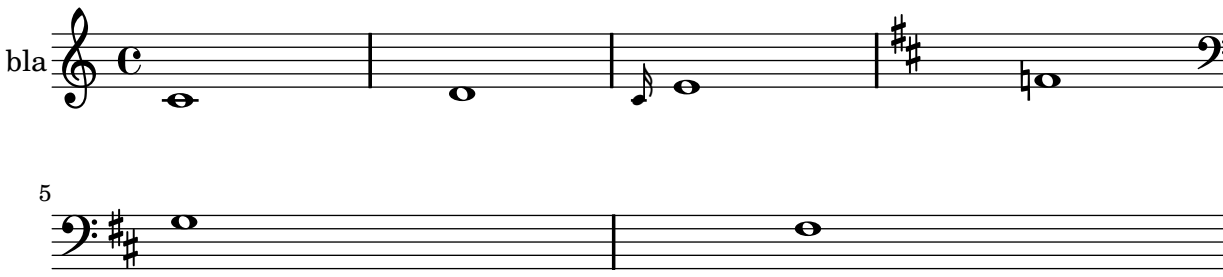
‘`clip-systems.ly`’ Clipping snippets from a finished score

Notes:

- If system starts and ends are included, they include extents of the System grob, eg. instrument names.
- Grace notes at the end point of the region are not included
- Regions can span multiple systems. In this case, multiple EPS files are generated.

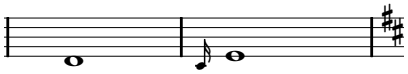
This file needs to be run separately with `-dclip-systems`; the collated-files.html of the regression test does not adequately show the results.

The result will be files named ‘*base*`-from-`*start*`-to-`*end*`[-`*count*`].eps`’.

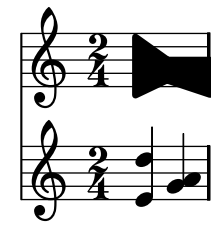


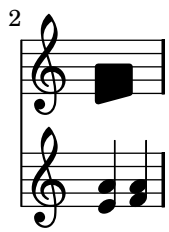
clips

from-2.0.1-to-4.0.1-clip.eps

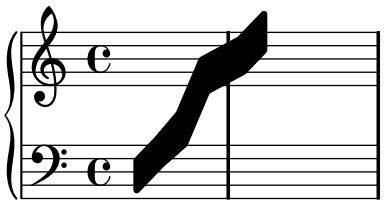


‘cluster-break.ly’ Clusters behave well across line breaks.





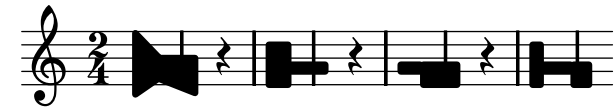
‘cluster-cross-staff.ly’ Clusters can be written across staves.



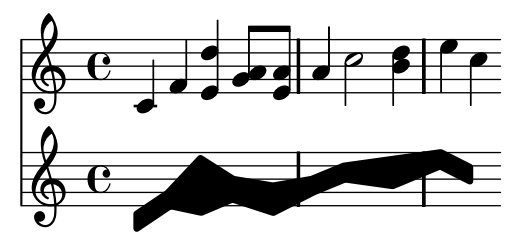
‘cluster-single-note.ly’ don’t crash on single chord clusters.



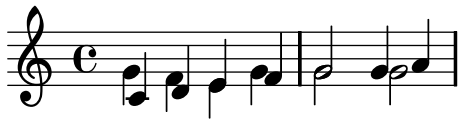
‘cluster-style.ly’ Clusters behave well across line breaks.



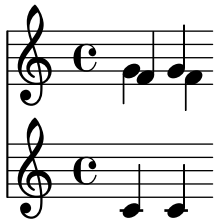
‘cluster.ly’ Clusters are a device to denote that a complete range of notes is to be played.



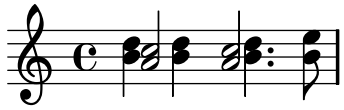
‘collision-2.ly’ Single head notes may collide.



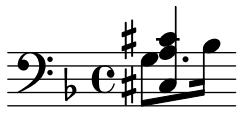
‘`collision-alignment.ly`’ Notes in different staves should be aligned to the left-most note, in case of collisions.



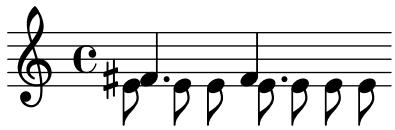
‘`collision-dots-invert.ly`’ When notes are colliding, the resolution depends on the dots: notes with dots should go to the right, if there could be confusion to which notes the dots belong.



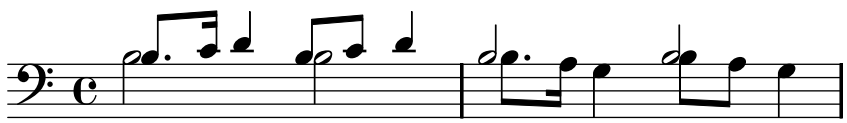
‘`collision-dots-move.ly`’ If dotted note heads must remain on the left side, collision resolution moves the dots to the right.



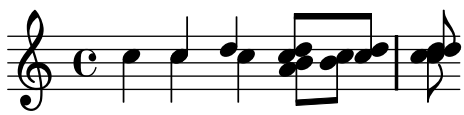
‘`collision-dots-up-space-dotted.ly`’ For collisions where the upper note is dotted and in a space, the upper is moved to right. This behavior can be tuned by prefer-dotted-right.



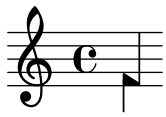
‘`collision-dots.ly`’ Collision resolution tries to put notes with dots on the right side.



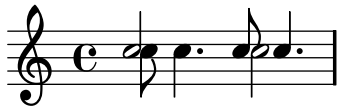
‘`collision-head-chords.ly`’ Note heads in collisions should be merged if they have the same positions in the extreme note heads.



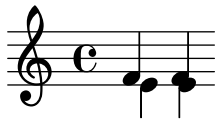
‘`collision-head-solfa-fa.ly`’ The FA note (a triangle) is merged to avoid creating a block-shaped note.



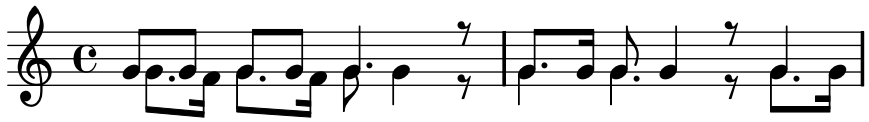
‘collision-heads.ly’ Open and black note heads are not merged by default.



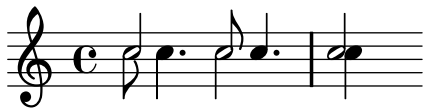
‘collision-manual.ly’ Collision resolution may be forced manually with `force-hshift`.



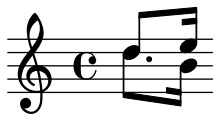
‘collision-merge-differently-dotted.ly’ If `NoteCollision` has `merge-differently-dotted = ##t` note heads that have differing dot counts may be merged anyway. Dots should not disappear when merging similar note heads.



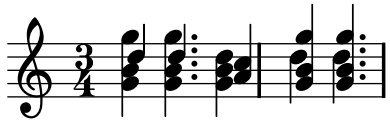
‘collision-merge-differently-headed.ly’ If `merge-differently-headed` is enabled, then open note heads may be merged with black noteheads, but only if the black note heads are from 8th or shorter notes.



‘collision-merge-dots.ly’ When merging heads, the dots are merged too.



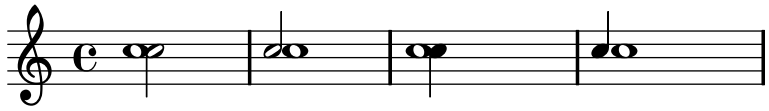
‘collision-mesh.ly’ Oppositely stemmed chords, meshing into each other, are resolved.



‘collision-seconds.ly’ Seconds do not confuse the collision algorithm too much. The best way to format this would be to merge the two Ds, but we will be happy for now if the upstem D does not collide with the downstem C.

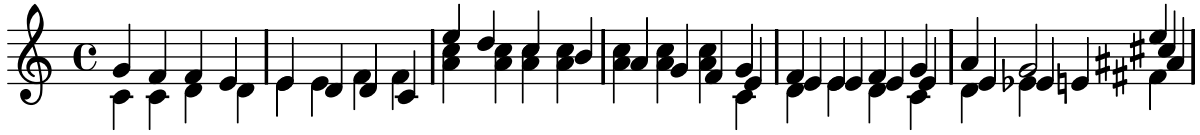


‘`collision-whole.ly`’ Mixed collisions with whole notes require asymmetric shifts.

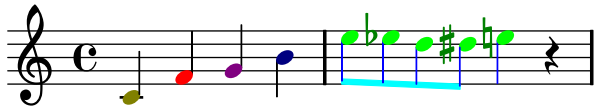


‘`collisions.ly`’

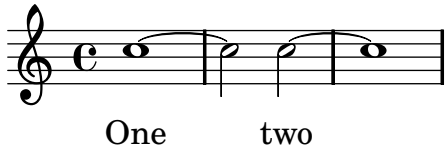
In addition to normal collision rules, there is support for polyphony, where the collisions are avoided by shifting middle voices horizontally.



‘`color.ly`’ Each grob can have a color assigned to it. Use the `\override` and `\revert` expressions to set the `color` property.

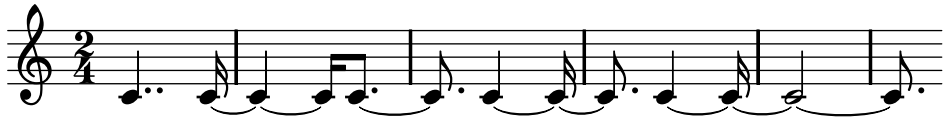


‘`completion-heads-lyrics.ly`’ You can put lyrics under completion heads.

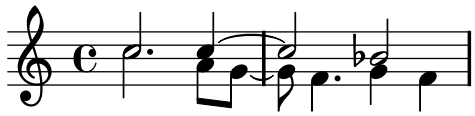


‘`completion-heads-multiple-ties.ly`’

The `Completion_heads_engraver` correctly handles notes that need to be split into more than 2 parts.



‘`completion-heads-polyphony.ly`’ Completion heads are broken across bar lines. This was intended as a debugging tool, but it can be used to ease music entry. Completion heads are not fooled by polyphony with a different rhythm.

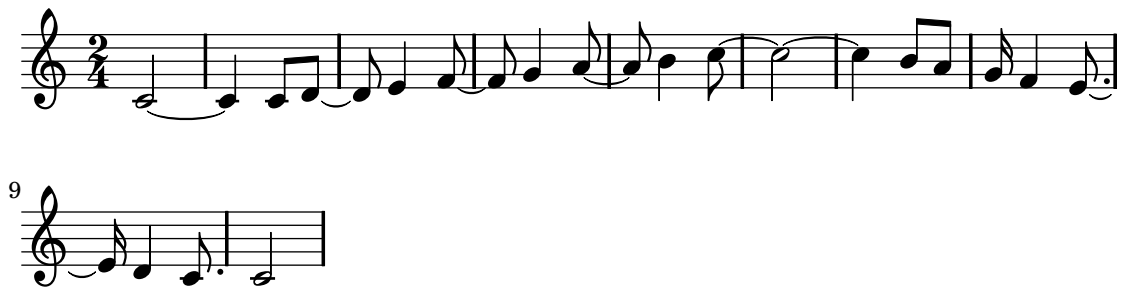


‘`completion-heads-tie.ly`’ Completion heads will remember ties, so they are started on the last note of the split note.

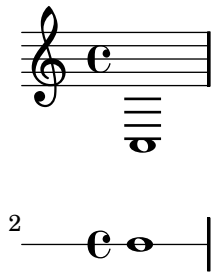


‘`completion-heads.ly`’

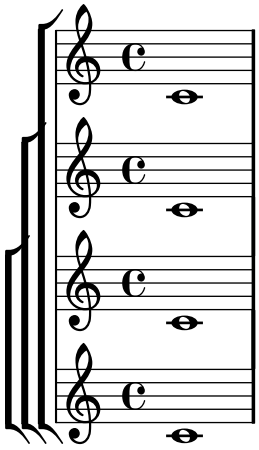
If the `Note_heads_engraver` is replaced by the `Completion_heads_engraver`, notes that cross bar lines are split into tied notes.



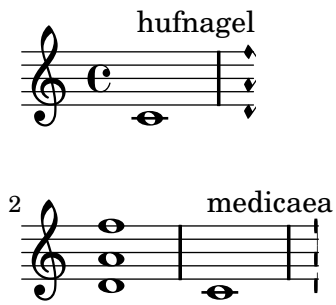
‘`context-die-staff.ly`’ a staff should die if there is reference to it.

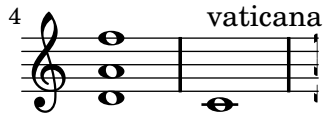


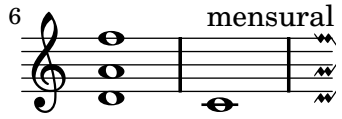
‘`context-nested-staffgroup.ly`’ Contexts of the same type can be nested.

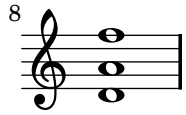


‘`custos.ly`’ Custodes may be engraved in various styles.







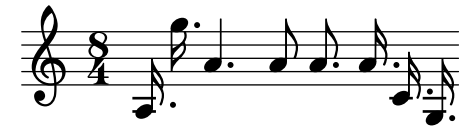


‘`display-lily-tests.ly`’ This is a test of the display-lily-music unit. Problems are reported on the stderr of this run.

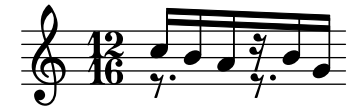
‘`dot-column-rest-collision.ly`’ Dot columns do not trigger beam slanting too early.



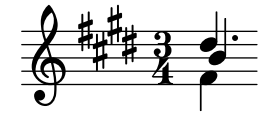
‘`dot-flag-collision.ly`’ Dots move to the right when a collision with the (up)flag happens.



‘`dot-rest-beam-trigger.ly`’ Dotted rests connected with beams do not trigger premature beam calculations. In this case, the beam should be sloped, and there should be no programming_error() warnings.



‘`dot-up-voice-collision.ly`’ in collisions, the stems of outer voice are added to the dot support of the inner voices.

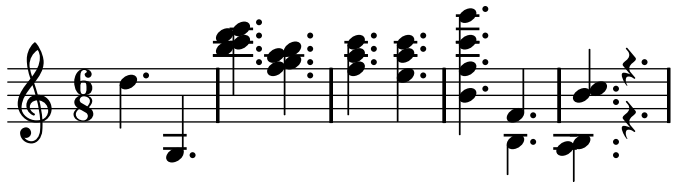


‘`dots.ly`’ Both noteheads and rests can have dots. Augmentation dots should never be printed on a staff line, but rather be shifted vertically. They should go up, but in case of multiple parts, the down stems have down shifted dots. In case of chords, all dots should be in a column. The dots follow the shift of rests when avoiding collisions.

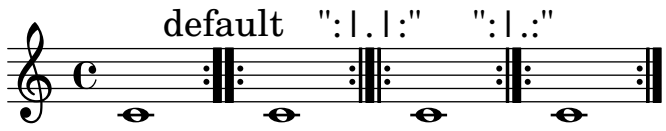
The priorities to print the dots are (ranked in importance):

- keeping dots off staff lines,
- keeping dots close to their note heads,

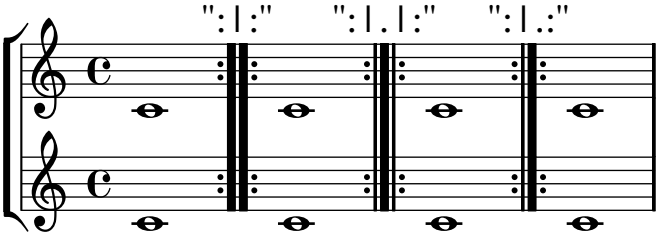
- moving dots in the direction specified by the voice,
- moving dots up.



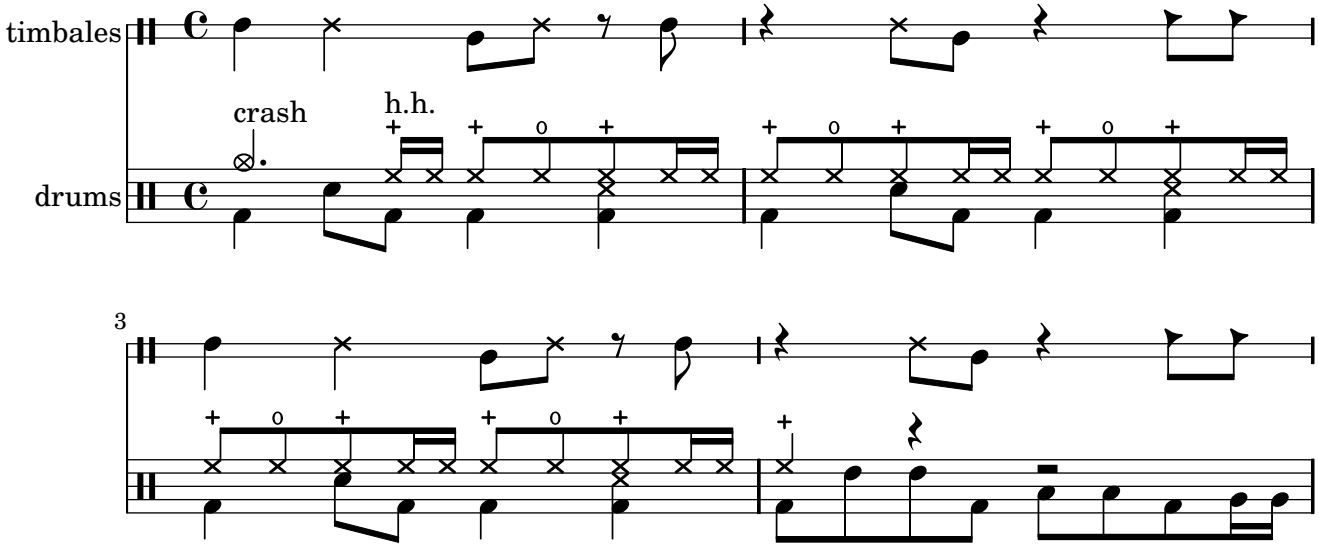
‘`double-repeat-default-volta.ly`’ For volte, the style of double repeats can be set using `doubleRepeatType`.



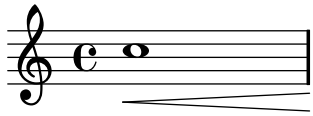
‘`double-repeat.ly`’ Three types of double repeat bar line are supported.

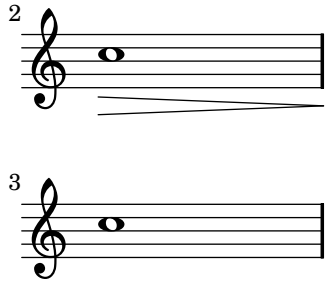


‘`drums.ly`’ In drum notation, there is a special clef symbol, drums are placed to their own staff positions and have note heads according to the drum, an extra symbol may be attached to the drum, and the number of lines may be restricted.

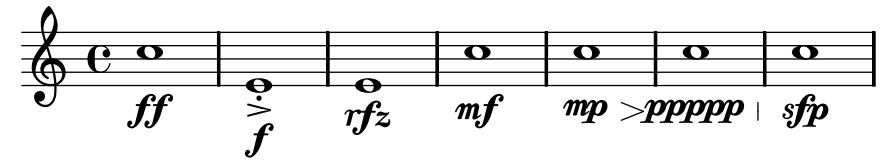


‘`dynamics-broken-hairpin.ly`’ Broken crescendi should be open on one side.

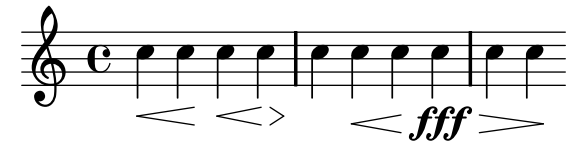




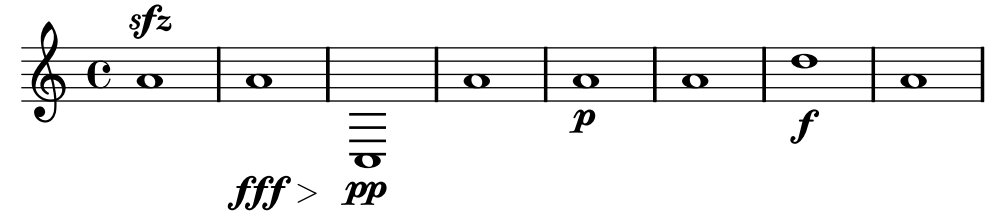
‘dynamics-glyphs.ly’ Dynamic letters are kerned, and their weight matches that of the hairpin signs. The dynamic scripts should be horizontally centered on the note head. Scripts that should appear closer to the note head (staccato, accent) are reckoned with.



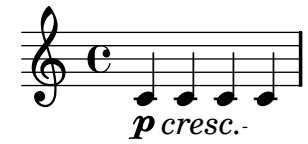
‘dynamics-hairpin-length.ly’ Hairpins extend to the extremes of the bound if there is no adjacent hairpin or dynamic-text. If there is, the hairpin extends to the center of the column or the bound of the text respectively.



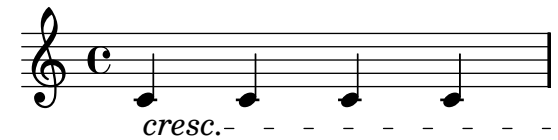
‘dynamics-line.ly’ Dynamics appear below or above the staff. If multiple dynamics are linked with (de)crescendi, they should be on the same line. Isolated dynamics may be forced up or down.

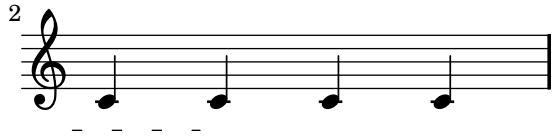


‘dynamics-text-spanner-abs-dynamic.ly’ left attach dir for text crescendi starting on an absolute dynamic is changed, so cresc. and the absolute dynamic don’t overstrike.

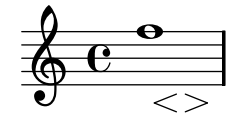


‘dynamics-text-spanner-padding.ly’ The 2nd half of the cresc. stays at a reasonable distance from the notes.

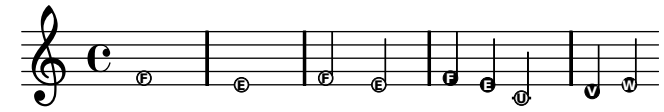




‘dynamics-unbound-hairpin.ly’ Crescendi may start off-notes, however, they should not collapse into flat lines.

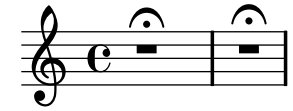


‘easy-notation.ly’ Easy-notation (or Ez-notation) prints names in note heads. You also get ledger lines, of course.

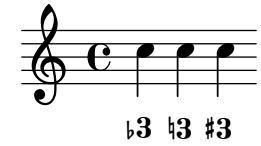


‘fermata-rest-position.ly’

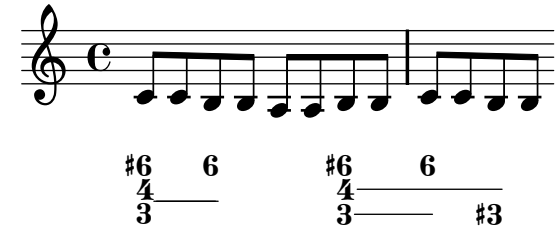
Fermatas over multimeasure rests are positioned as over normal rests.



‘figured-bass-alteration.ly’ Bass figures can carry alterations.



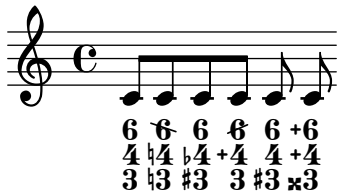
‘figured-bass-continuation-center.ly’ Pairs of congruent figured bass extender lines are vertically centered if figuredBassCenterContinuations is set to true.



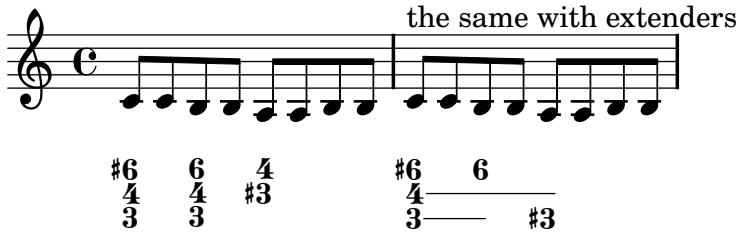
‘figured-bass-continuation-forbid.ly’ By adorning a bass figure with \!, an extender may be forbidden.



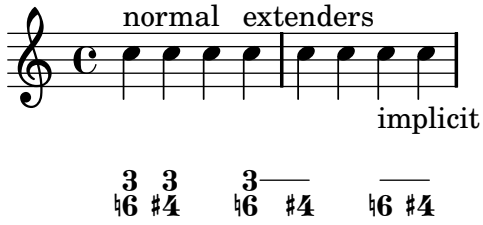
‘figured-bass-continuation-modifiers.ly’ Figured bass extender lines shall be broken when a figure has a different alteration, augmentation or diminishment.



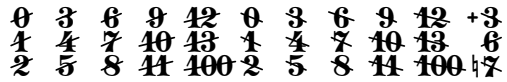
‘figured-bass-continuation.ly’ Figured bass extender lines run between repeated bass figures. They are switched on with useBassFigureExtenders



‘figured-bass-implicit.ly’ Implicit bass figures are not printed, but they do get extenders.

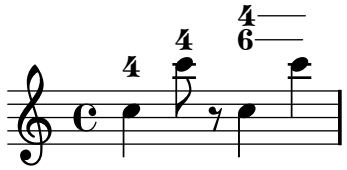


‘figured-bass-slashed-numbers.ly’



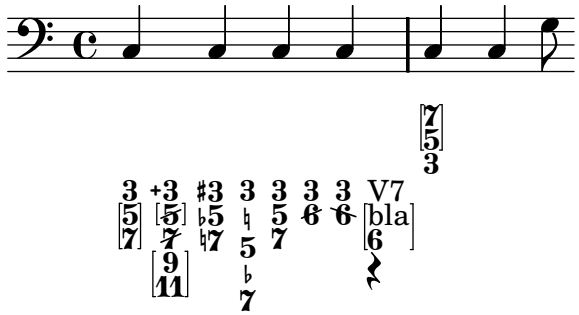
‘figured-bass-staff.ly’ Figured bass can also be added to Staff context directly. In that case, the figures must be entered with \figuremode and be directed to an existing Staff context.

Since these engravers are on Staff level, properties controlling figured bass should be set in Staff context.

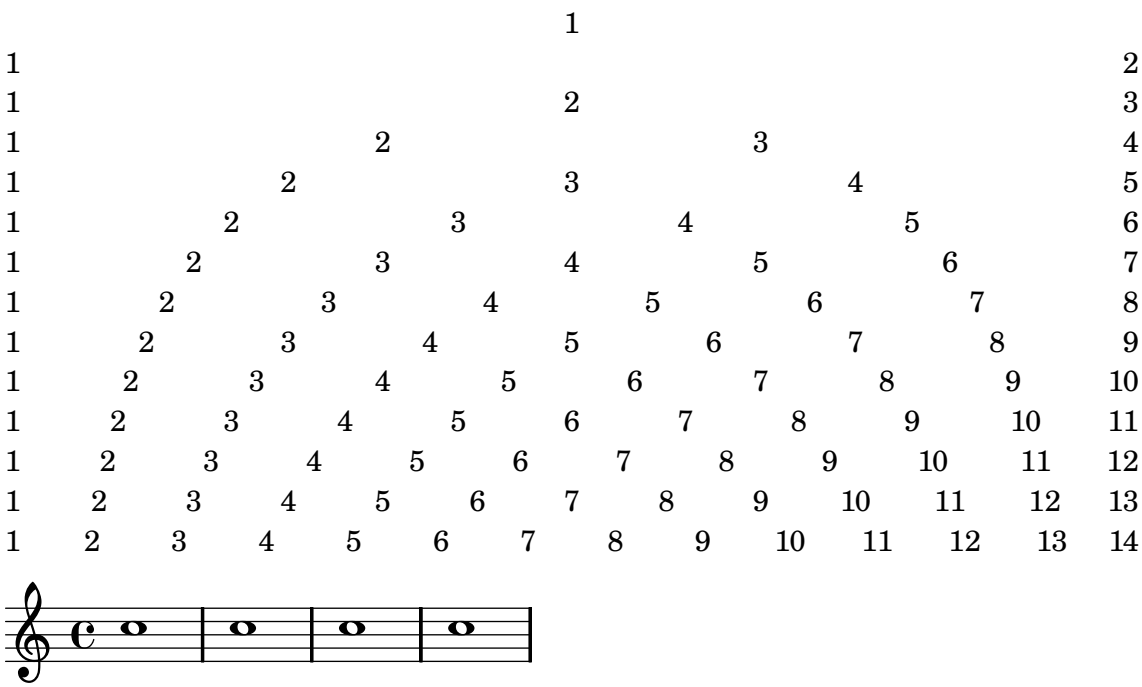


‘figured-bass.ly’ Figured bass is created by the FiguredBass context which responds to figured bass events and rest events. You must enter these using the special \figuremode { } mode, which allows you to type numbers, like <4 6+> and add slashes, backslashes and pluses.

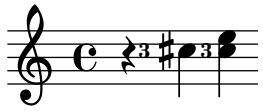
You can also enter markup strings. The vertical alignment may also be tuned.



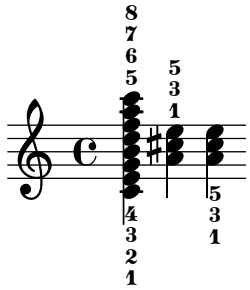
‘`fill-line-test.ly`’ The fill-line markup command should align texts in columns. For example, the characters in the center should form one column.


1
1 2
1 2 3
1 2 3 4
1 2 3 4 5
1 2 3 4 5 6
1 2 3 4 5 6 7
1 2 3 4 5 6 7 8
1 2 3 4 5 6 7 8 9
1 2 3 4 5 6 7 8 9 10
1 2 3 4 5 6 7 8 9 10 11
1 2 3 4 5 6 7 8 9 10 11 12
1 2 3 4 5 6 7 8 9 10 11 12 13
1 2 3 4 5 6 7 8 9 10 11 12 13 14

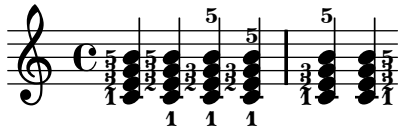
‘`finger-chords-accidental.ly`’ Scripts left of a chord avoid accidentals.



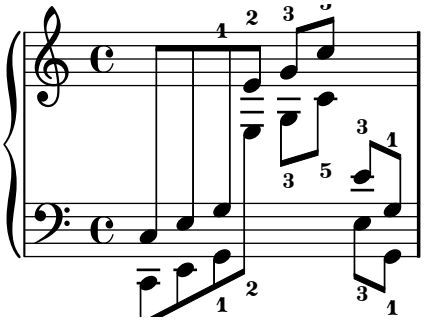
‘`finger-chords-order.ly`’ Ordering of the fingerings depends on vertical ordering of the notes, and is independent of up/down direction.



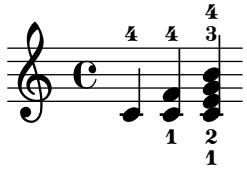
‘`finger-chords.ly`’ It is possible to associate fingerings uniquely with notes. This makes it possible to add horizontal fingerings to notes.



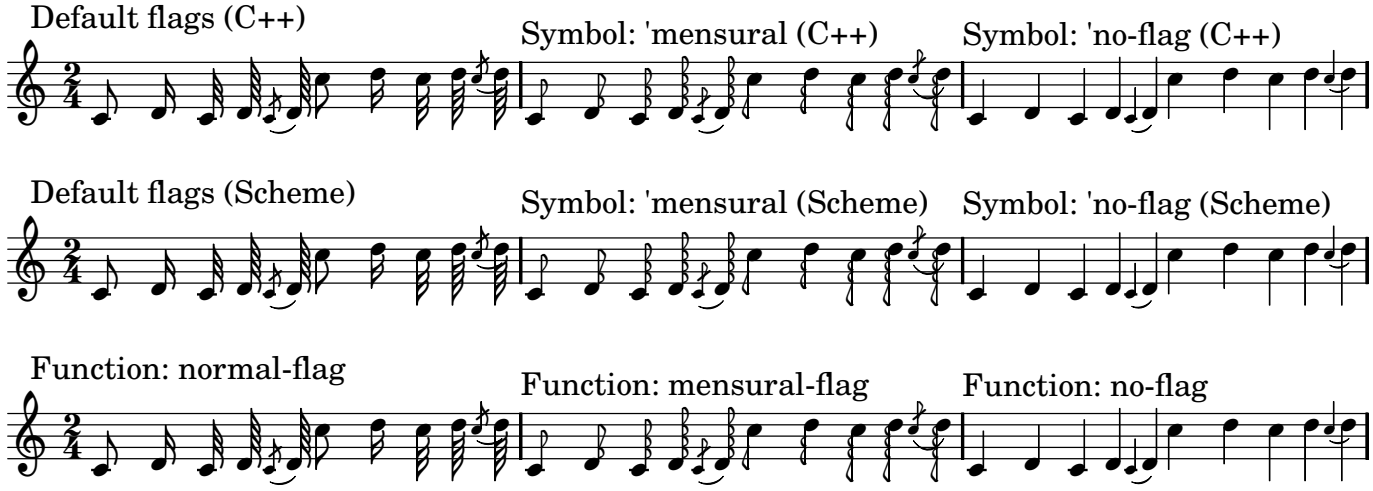
‘`fingering-cross-staff.ly`’ Fingerings work correctly with cross-staff beams.



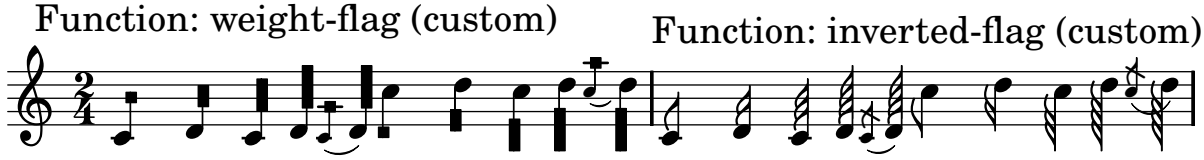
‘`fingering.ly`’ Automatic fingering tries to put fingering instructions next to noteheads.



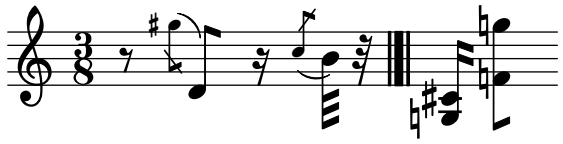
‘`flags-default.ly`’ Default flag styles: ’(), ’mensural and ’no-flag. Compare all three methods to print them: (1) C++ default implementation, (2) Scheme implementation using the ’flag-style grob property and (3) setting the ’flag property explicitly to the desired Scheme function. All three systems should be absolutely identical.



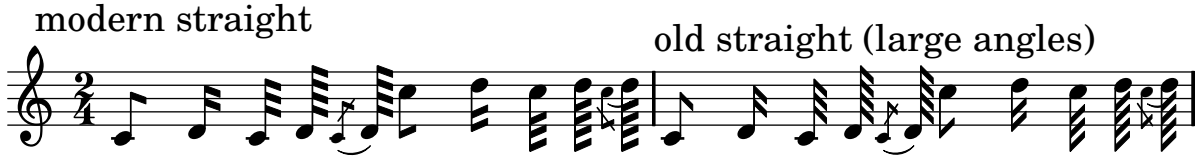
‘`flags-in-scheme.ly`’ The ’flag property of the Stem grob can be set to a custom scheme function to generate the glyph for the flag.



‘`flags-straight-stockhausen-boulez.ly`’

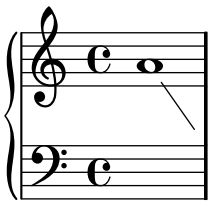


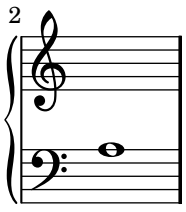
‘`flags-straight.ly`’ Straight flag styles.



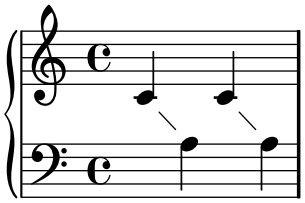
‘`follow-voice-break.ly`’

The line-spanners connects to the Y position of the note on the next line. When put across line breaks, only the part before the line break is printed.

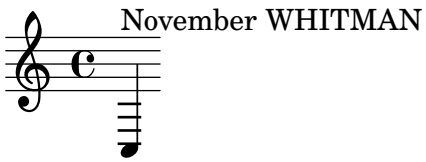




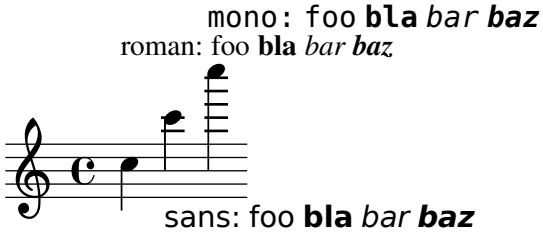
‘`follow-voice-consecutive.ly`’ The voice follower is not confused when set for consecutive sets of staff switches.



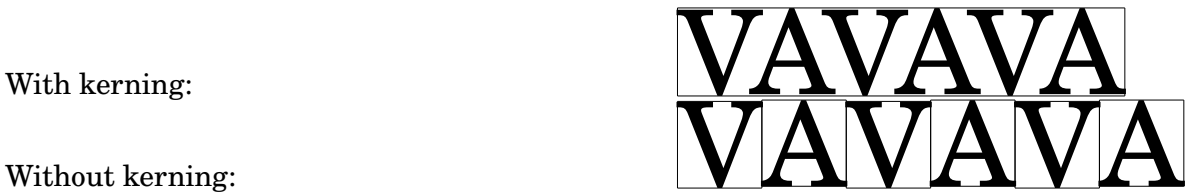
‘`font-bogus-ligature.ly`’ TM and No should not be changed into trademark/number symbols. This may happen with incorrect font versions.



‘`font-family-override.ly`’ The default font families for text can be overridden with `make-pango-font-tree`



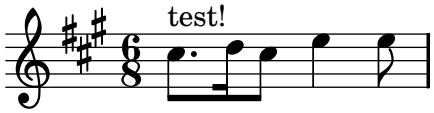
‘`font-kern.ly`’ Text set in TrueType Fonts that contain kerning tables, are kerned.



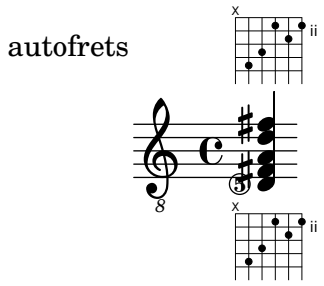
‘`font-name.ly`’ Other fonts can be used by setting `font-name` for the appropriate object. The string should be a Pango font description without size specification.



‘`font-postscript.ly`’ This file demonstrates how to load different (postscript) fonts. The file ‘`font.scm`’ shows how to define the scheme-function `make-century-schoolbook-tree`.

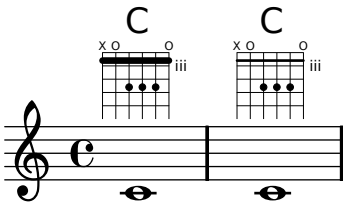


‘`fret-boards.ly`’ Frets can be assigned automatically. The results will be best when one string number is indicated in advance



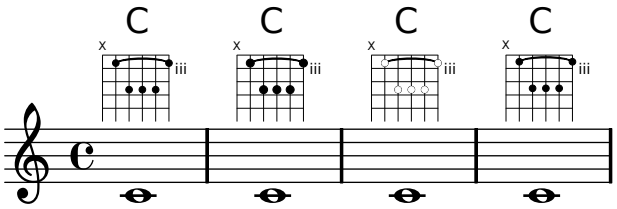
‘`fret-diagrams-capo.ly`’

A capo indicator can be added with a fret-diagram-verbose string, and its thickness can be changed.



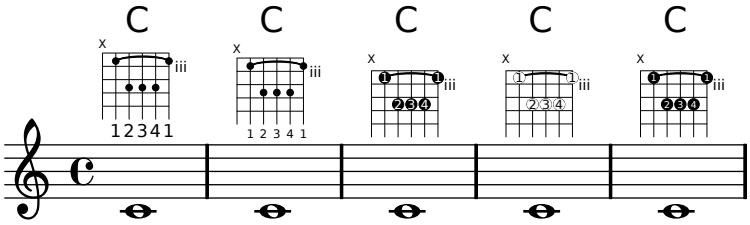
‘`fret-diagrams-dots.ly`’

Dots indicating fingerings can be changed in location, size, and coloring.



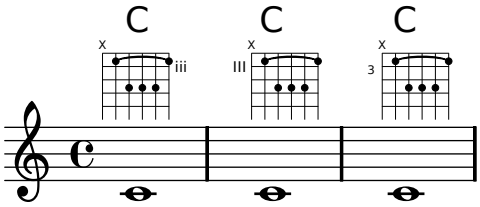
‘`fret-diagrams-fingering.ly`’

Finger labels can be added, either in dots or below strings. Dot color can be changed, and fingering label font size can be adjusted.

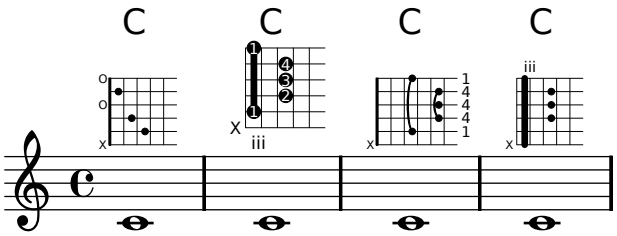


‘`fret-diagrams-fret-label.ly`’

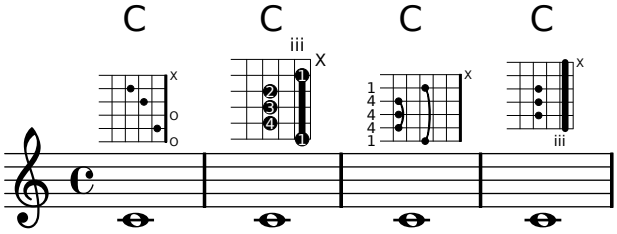
The label for the lowest fret can be changed in location, size, and number type.



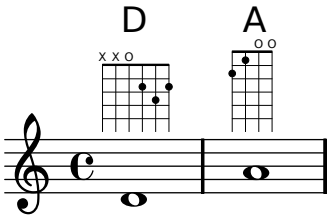
‘`fret-diagrams-landscape.ly`’
Fret diagrams can be presented in landscape mode.



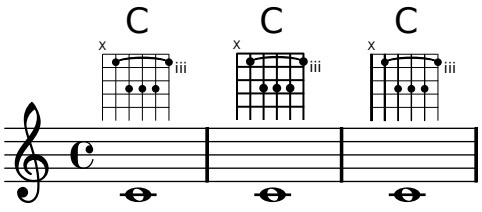
‘`fret-diagrams-opposing-landscape.ly`’
Fret diagrams can be presented in landscape mode.



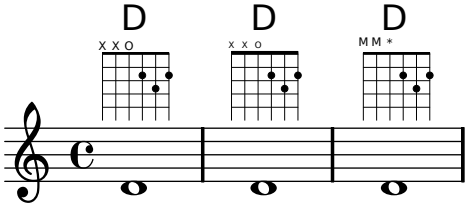
‘`fret-diagrams-string-frets.ly`’
Number of frets and number of strings can be changed from the defaults.



‘`fret-diagrams-string-thickness.ly`’
String thickness can be changed, and diagrams can have variable string thickness.



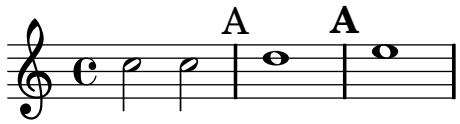
‘`fret-diagrams-xo-label.ly`’
The label for the lowest fret can be changed in location, size, and number type.



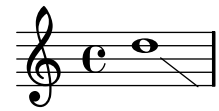
‘general-scheme-bindings.ly’ This file tests various Scheme utility functions.

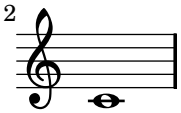
‘generic-output-property.ly’

As a last resort, the placement of grobs can be adjusted manually, by setting the extra-offset of a grob.

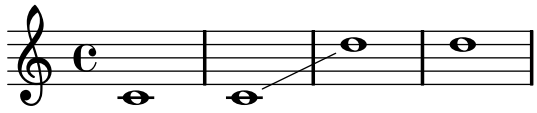


‘glissando-broken.ly’ If broken, Glissandi anticipate on the pitch of the next line.



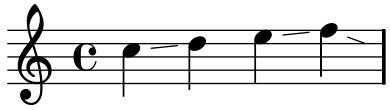


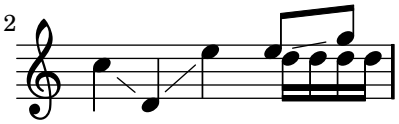
‘glissando-no-break.ly’ Glissandi are not broken. Here a \break is ineffective. Use breakable grob property to override.

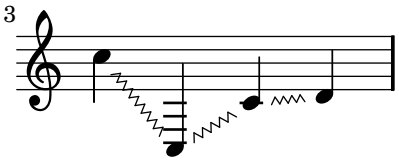


‘glissando.ly’ Between notes, there may be simple glissando lines. Here, the first two glissandi are not consecutive.

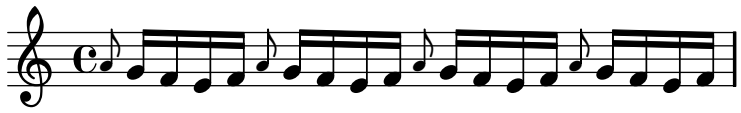
The engraver does no time-keeping, so it involves some trickery to get << { s8 s8 s4 } { c4 \gliss d4 } >> working correctly.



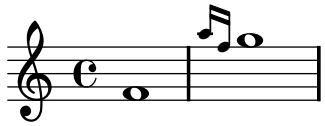




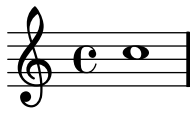
‘grace-auto-beam.ly’ The autobeamer is not confused by grace notes.

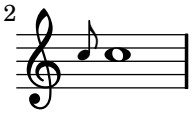


‘grace-bar-line.ly’ Bar line should come before the grace note.

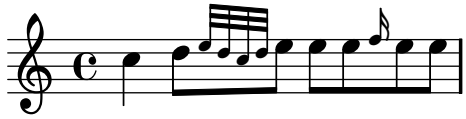


‘grace-bar-number.ly’ Grace notes do tricky things with timing. If a measure starts with a grace note, the measure does not start at 0, but earlier. Nevertheless, lily should not get confused. For example, line breaks should be possible at grace notes, and the bar number should be printed correctly.

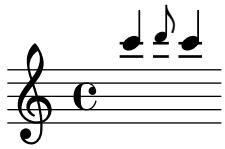




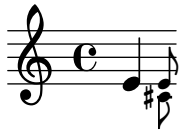
‘grace-beam.ly’ Grace beams and normal beams may occur simultaneously. Unbeamed grace notes are not put into normal beams.



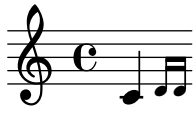
‘grace-direction-polyphony.ly’ The `\voiceOne` setting is retained after finishing the grace section.



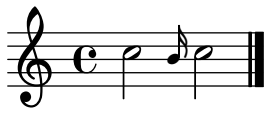
‘grace-end-2.ly’ Grace notes at the end of an expression don’t cause crashes.



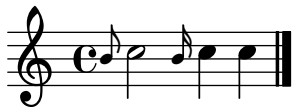
‘grace-end.ly’ Grace notes after the last note do not confuse the timing code.



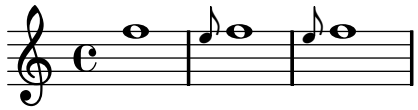
‘grace-nest1.ly’ Grace code should not be confused by nested sequential music containing grace notes; practically speaking, this means that the end-bar and measure bar coincide in this example.



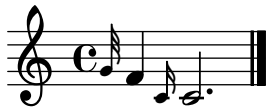
‘grace-nest2.ly’ Grace code should not be confused by nested sequential music containing grace notes; practically speaking, this means that the end-bar and measure bar coincide in this example.



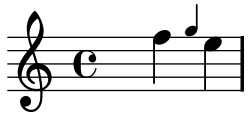
‘grace-nest3.ly’ In nested syntax, graces are still properly handled.



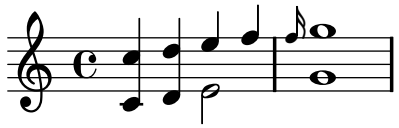
‘grace-nest4.ly’ Also in the nested syntax here, grace notes appear rightly.



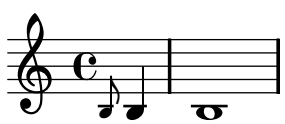
‘grace-nest5.ly’ Graces notes may have the same duration as the main note.



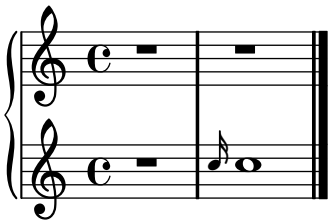
‘grace-part-combine.ly’ Grace notes may be put in a partcombiner.



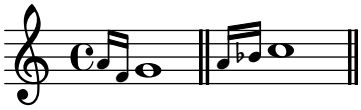
‘grace-partial.ly’ A \partial may be combined with a \grace.



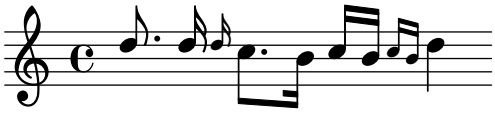
‘grace-staff-length.ly’ Stripped version of trip.ly. Staves should be of correct length.



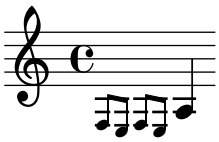
‘grace-start.ly’ Pieces may begin with grace notes.



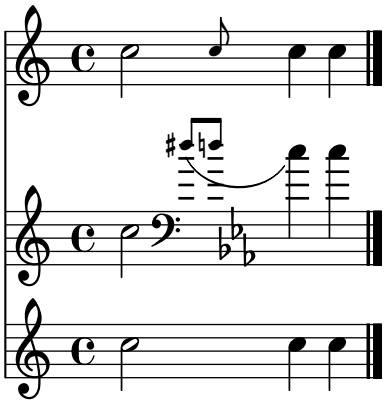
‘grace-stem-length.ly’ Stem lengths for grace notes should be shorter than normal notes, if possible. They should never be longer, even if that would lead to beam quanting problems.



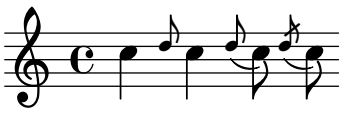
‘grace-stems.ly’ Here startGraceMusic should set no-stem-extend to true; the two grace beams should be the same here.



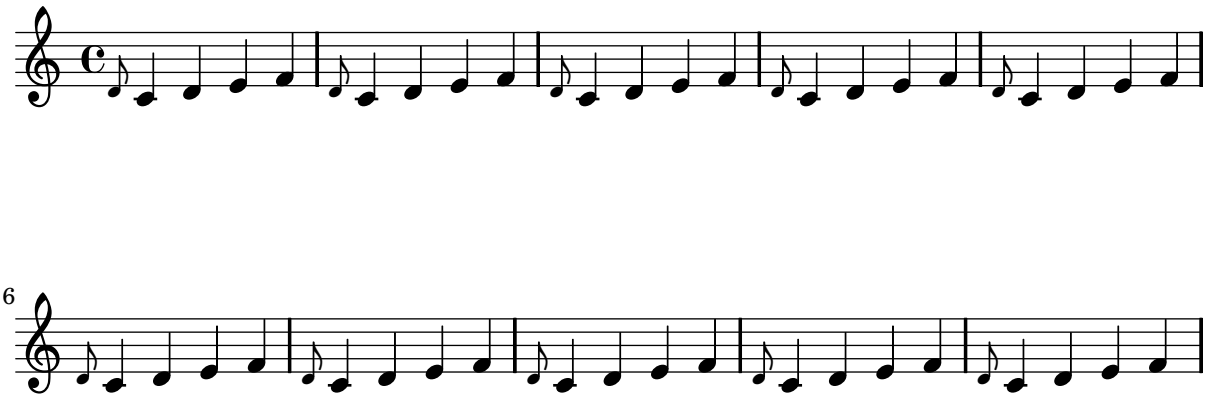
‘grace-sync.ly’ Grace notes in different voices/staves are synchronized.



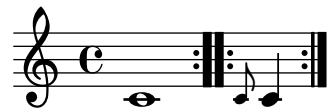
‘grace-types.ly’ There are three different kinds of grace types: the base grace switches to smaller type, the appoggiatura inserts also a slur, and the acciaccatura inserts a slur and slashes the stem.



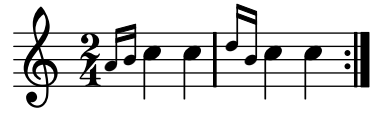
‘grace-unfold-repeat.ly’ When grace notes are entered with unfolded repeats, line breaks take place before grace notes.



‘`grace-volta-repeat-2.ly`’ A volta repeat may begin with a grace. Consecutive ending and starting repeat bars are merged into one `:||:`.

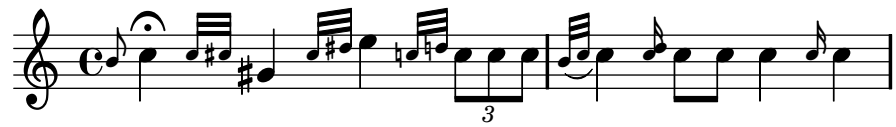


‘`grace-volta-repeat.ly`’ Repeated music can start with grace notes. Bar checks preceding the grace notes do not cause synchronization effects.



‘`grace.ly`’ You can have beams, notes, chords, stems etc. within a `\grace` section. If there are tuplets, the grace notes will not be under the brace.

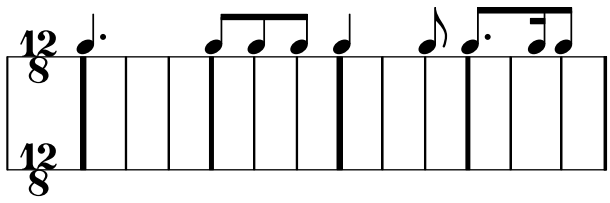
Main note scripts do not end up on the grace note.



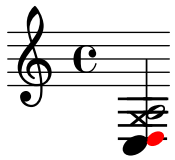
‘`graphviz.ly`’ The graphviz feature draws dependency graphs for grob properties.



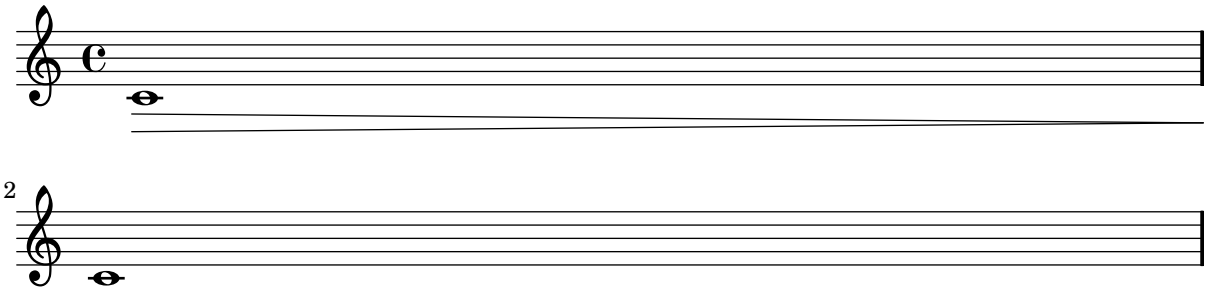
‘`grid-lines.ly`’ With grid lines, vertical lines can be drawn between staves synchronized with the notes.



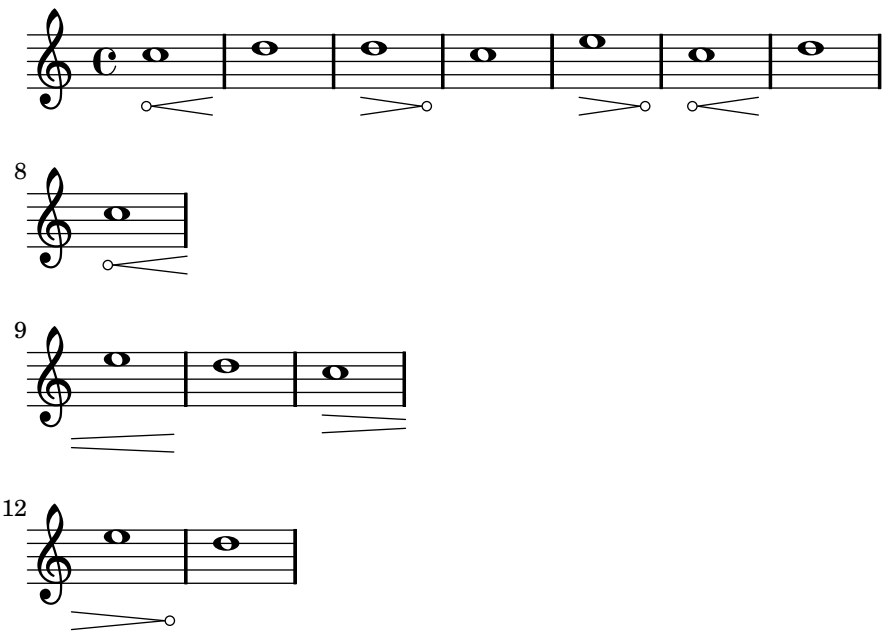
‘`grob-tweak.ly`’ With the `\tweak` function, individual grobs that are directly caused by events may be tuned directly.



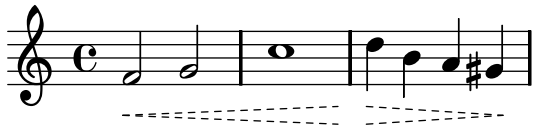
‘`hairpin-barline-break.ly`’ If a hairpin ends on the first note of a new stave, we do not print that ending. But on the previous line, this hairpin should not be left open, and should end at the bar line.



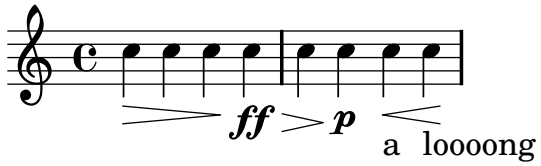
‘`hairpin-circled.ly`’ Hairpins can have circled tips. A decrescendo del niente followed by a crescendo al niente should only print one circle.



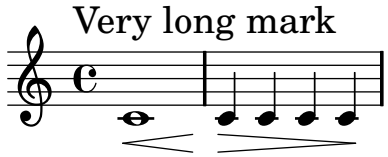
‘hairpin-dashed.ly’ Hairpin crescendi may be dashed.



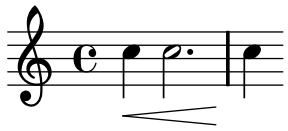
‘hairpin-ending.ly’ Hairpin dynamics start under notes if there are no text-dynamics. If there are text dynamics, the hairpin does not run into them.



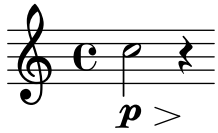
‘hairpin-to-barline-mark.ly’ ’to-barline is not confused by very long marks.



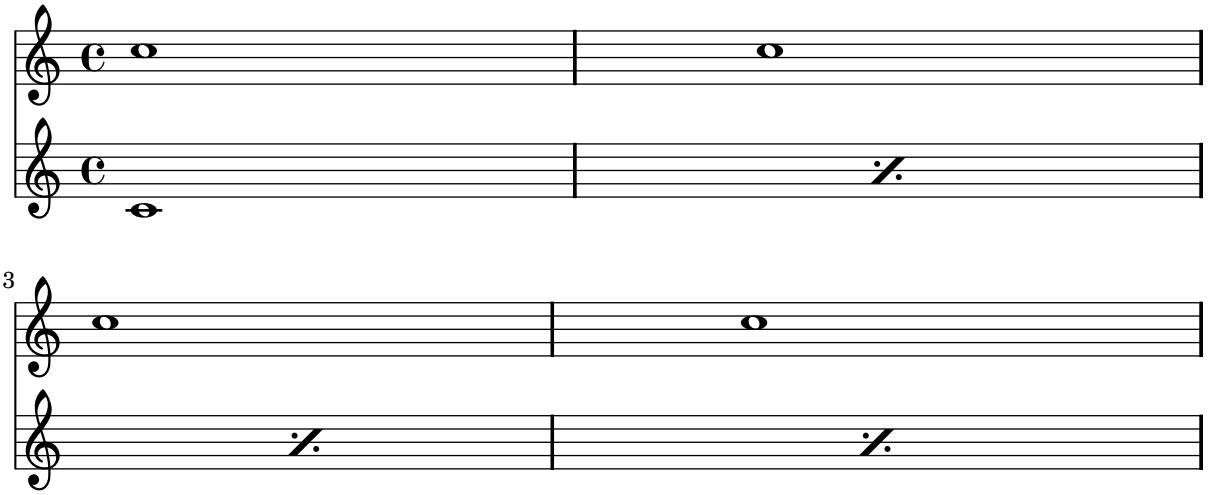
‘hairpin-to-barline.ly’ Hairpins whose end note is preceded by a bar line should end at that bar line.



‘hairpin-to-rest.ly’ Hairpins end at the left edge of a rest.



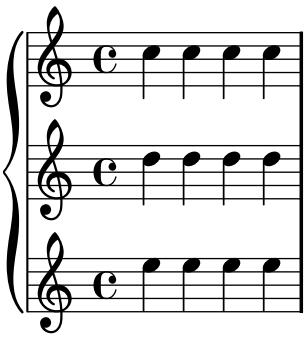
‘hara-kiri-percent-repeat.ly’ Staves with percent repeats are not killed.



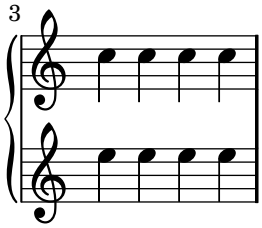
‘`hara-kiri-pianostaff.ly`’ Hara-kiri staves kill themselves if they are empty. This example really contains three staves, but as they progress, empty ones are removed: this example has three staves, but some of them disappear: note how the 2nd line only has the bar number 2. (That the bar number is printed might be considered a bug, however, the scenario of all staves disappearing does not happen in practice.)

Any staff brackets and braces are removed, both in the single staff and no staff case.

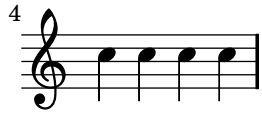
This example was done with a pianostaff, which has fixed distance alignment; this should not confuse the mechanism.



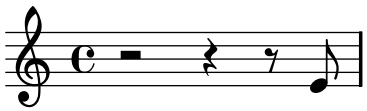
2



4

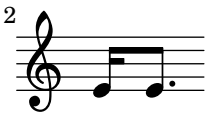


‘`hara-kiri-stanza-number.ly`’ stanza numbers remain, even on otherwise empty lyrics lines.



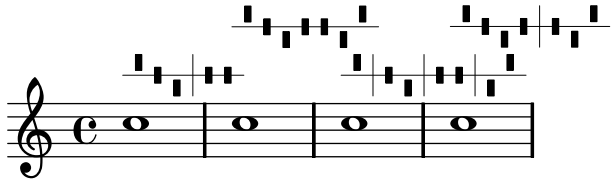
Verse 2.

2

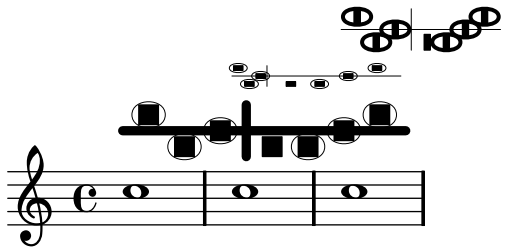


bla bla

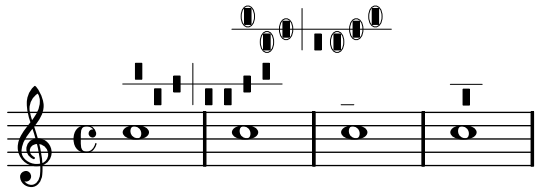
‘`harp-pedals-sanity-checks.ly`’ The harp-pedal markup function does some sanity checks. All the diagrams here violate the standard (7 pedals with divider after third), so a warning is printed out, but they should still look okay.



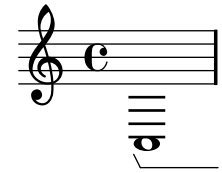
‘harp-pedals-tweaking.ly’ Harp pedals can be tweaked through the size, thickness and harp-pedal-details properties of TextScript.

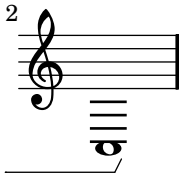


‘harp-pedals.ly’ Basic harp diagram functionality, including circled pedal boxes. The third diagram uses an empty string, the third contains invalid characters. Both cases will create warnings, but should still not fail with an error.

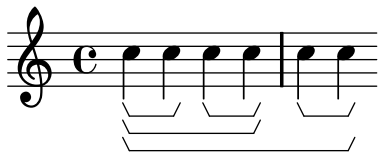


‘horizontal-bracket-break.ly’ Horizontal brackets connect over line breaks.

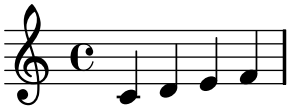




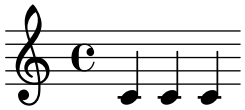
‘horizontal-bracket.ly’ Note grouping events are used to indicate where analysis brackets start and end.



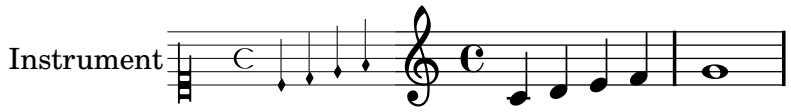
‘identifier-following-chordmode.ly’ Identifiers following a chordmode section are not interpreted as chordmode tokens. In the following snippet, the identifier ‘m’ is not interpreted by the lexer as as a minor chord modifier.



‘`identifiers.ly`’ test identifiers.

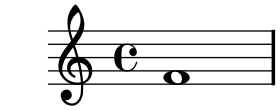


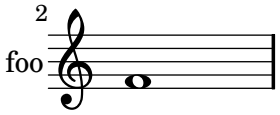
‘`incipit.ly`’ Incipit can be printed using an InstrumentName grob.

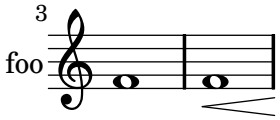


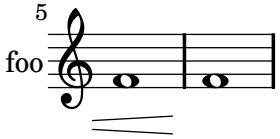
‘`instrument-name-dynamic.ly`’

Instrument names (aligned on axis group spanners) ignore dynamic and pedal line spanners.









‘`instrument-name-hara-kiri.ly`’ `PianoStaff.instrument` and `PianoStaff.instr` are removed when the staves are killed off.

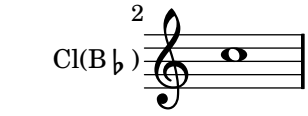
In this example, the 2nd staff (marked by the barnumber 2) disappears as does the instrument name.



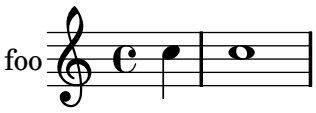
2

‘`instrument-name-markup.ly`’ Instrument names are set with `Staff.instrument` and `Staff.instr`. You can enter markup texts to create more funky names, including alterations.

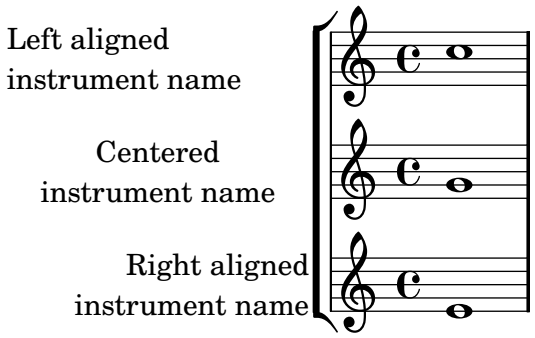


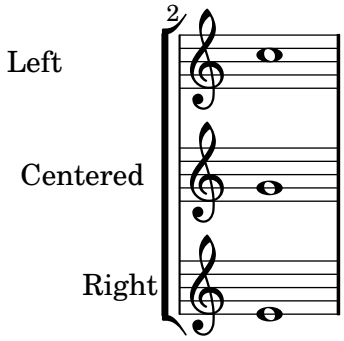


‘instrument-name-partial.ly’ Instrument names are also printed on partial starting measures.



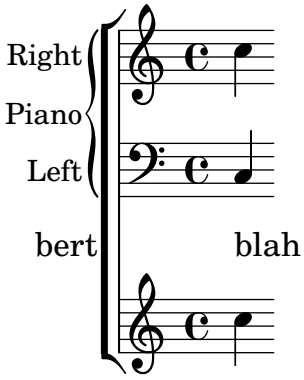
‘instrument-name-x-align.ly’ Instrument names horizontal alignment is tweaked by changing the Staff.Instrument #’self-alignment-X property. The \layout variables indent and short-indent define the space where the instrument names are aligned before the first and the following systems, respectively.



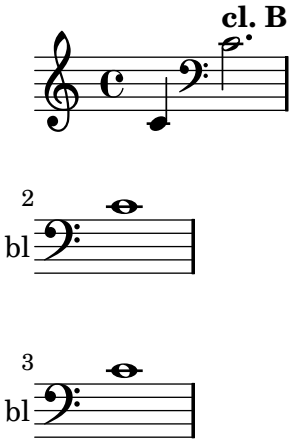


‘instrument-name.ly’

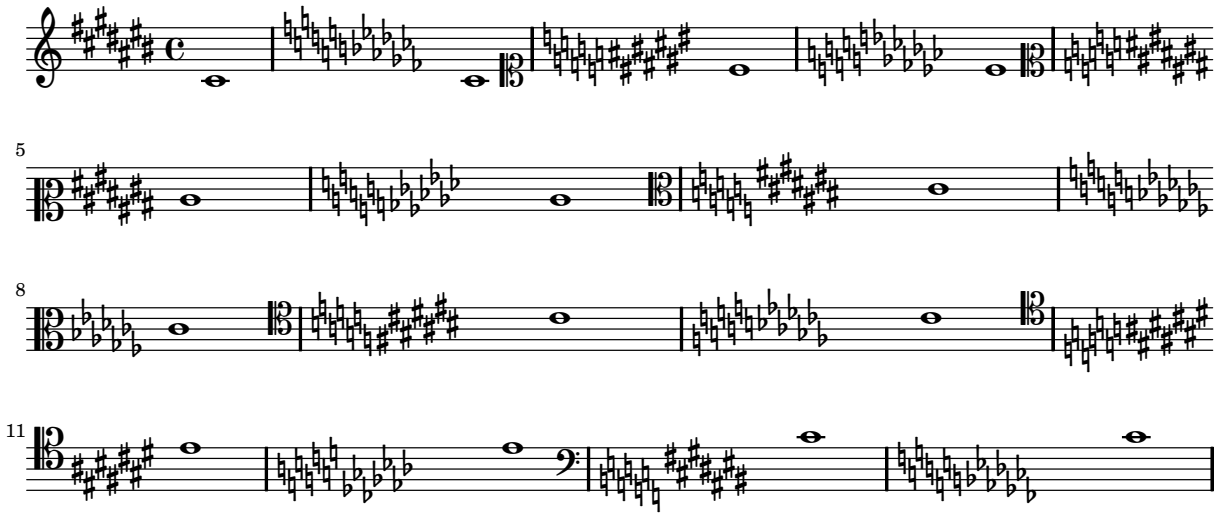
Staff margins are also markings attached to barlines. They should be left of the staff, and be centered vertically with respect to the staff. They may be on normal staves, but also on compound staves, like the PianoStaff.



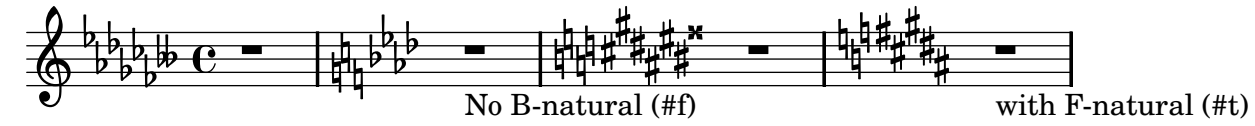
‘instrument-switch.ly’ The switchInstrument music function modifies properties for an in staff instrument switch.



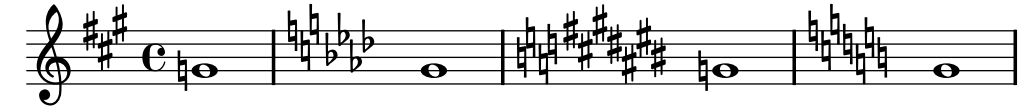
‘`key-clefs.ly`’ Each clef has its own accidental placing rules.



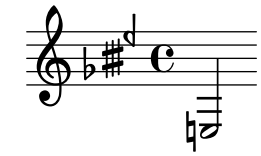
‘`key-signature-cancellation-extra-natural.ly`’ If `extraNatural` is set then keys that are not altered farther away (eg from sharp to double sharp) are cancelled. Otherwise only keys that do not occur in the new key signature are cancelled.



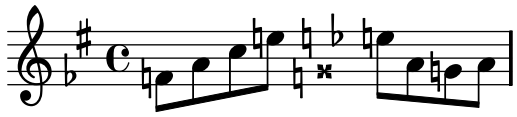
‘`key-signature-cancellation.ly`’ Key cancellation signs consists of naturals for pitches that are not in the new key signature. Naturals get a little padding so the stems don’t collide.



‘`key-signature-padding.ly`’ With the `padding-pairs` property, distances between individual key signature items can be adjusted.

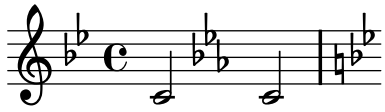


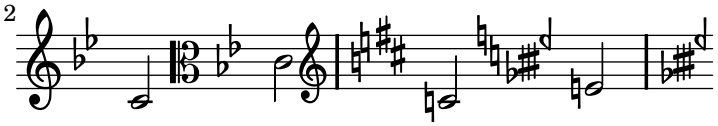
‘key-signature-scordatura.ly’ By setting Staff.keySignature directly, key signatures can be set invidually per pitch.



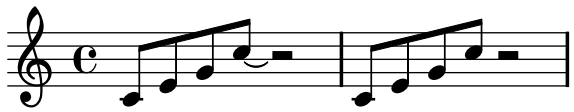
‘keys.ly’

Key signatures may appear on key changes, even without a barline. In the case of a line break, the restoration accidentals are printed at end of a line. If createKeyOnClefChange is set, key signatures are created also on a clef change.



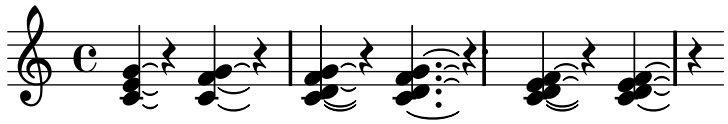


‘laissez-vibrer-tie-beam.ly’ \laissezVibrer ties on beamed notes don’t trigger premature beam slope calculation.

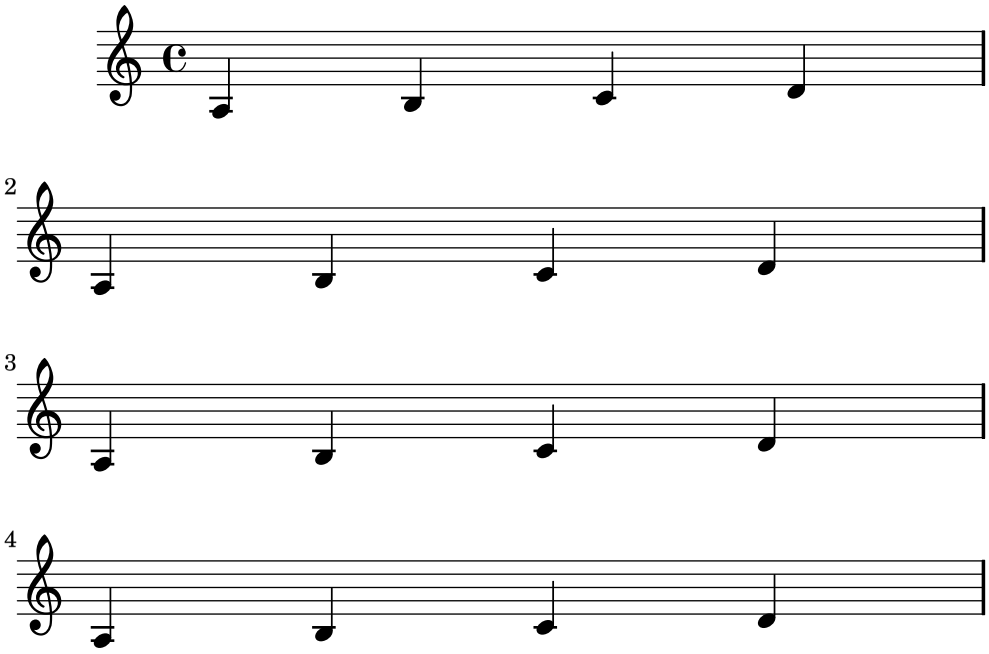


‘laissez-vibrer-ties.ly’

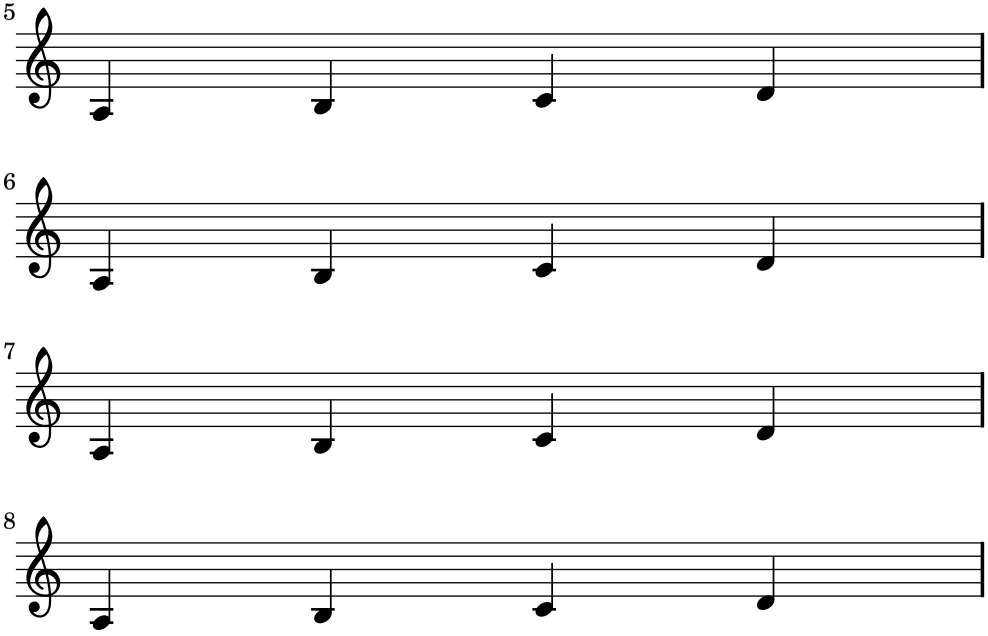
l.v. ties should avoid dots and staff lines, similar to normal ties. They have fixed size. Their formatting can be tuned with tie-configuration.

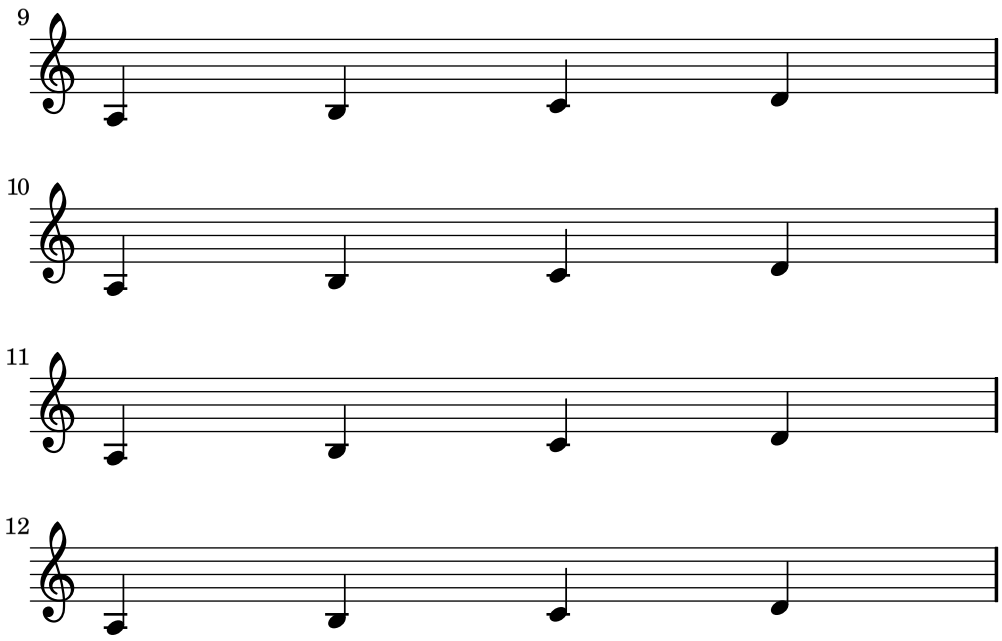


‘landscape.ly’ Scores may be printed in landcape mode.



2

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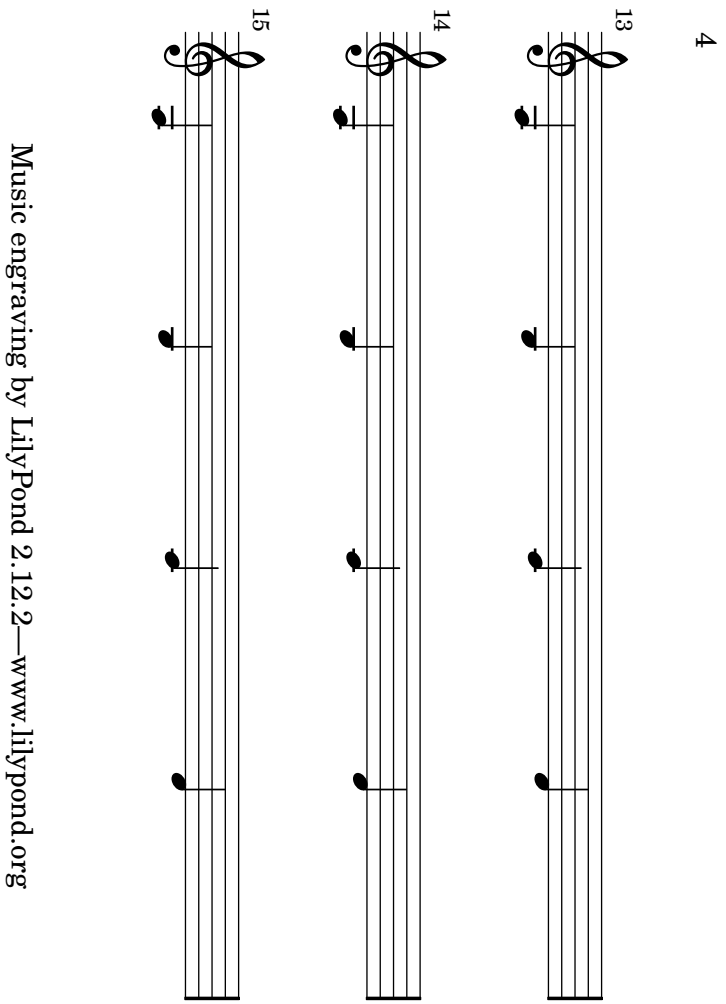
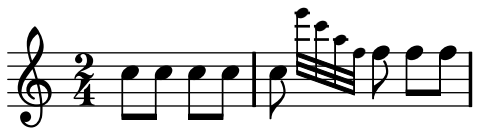
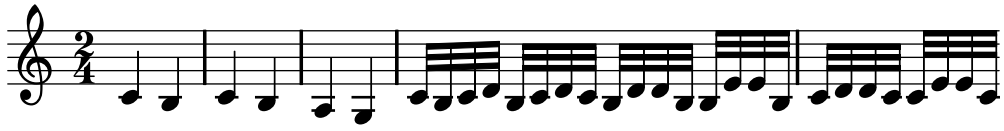


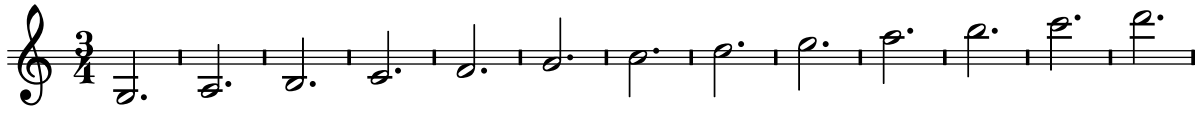
‘`ledger-line-minimum.ly`’ When ledgered notes are very close, for example, in grace notes, they are kept at a minimum distance to prevent the ledgers from disappearing.

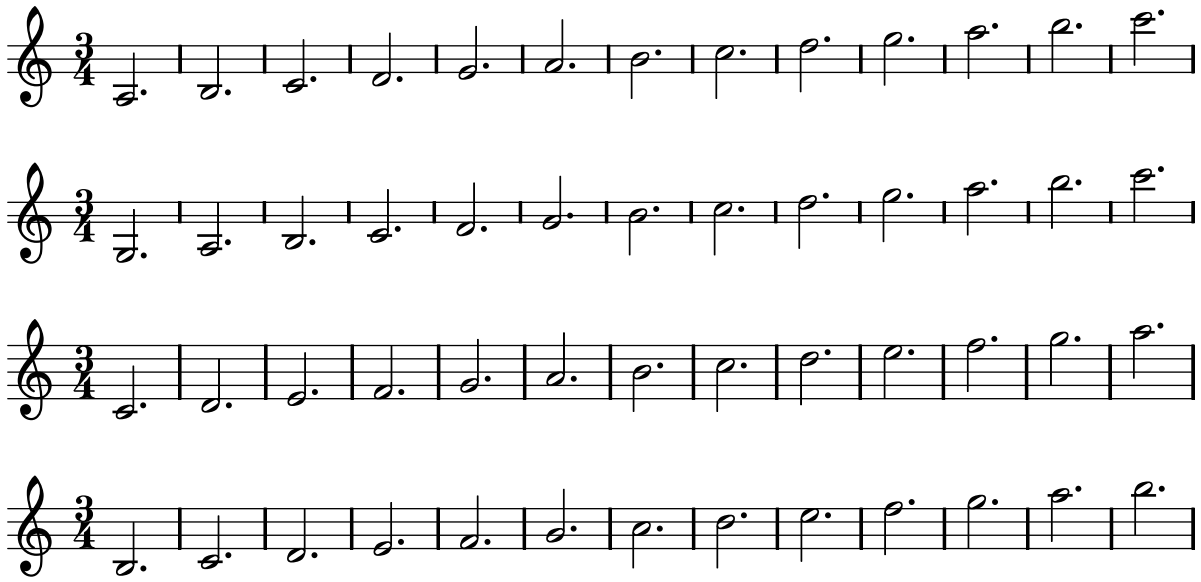


‘`ledger-line-shorten.ly`’ Ledger lines are shortened when they are very close. This ensures that ledger lines stay separate.

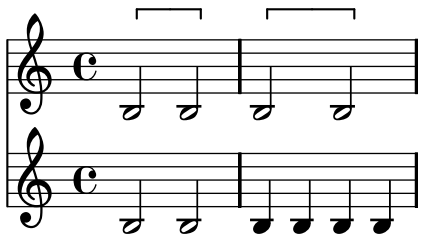


‘`ledger-lines-varying-staves.ly`’ Ledger lines should appear at every other location for a variety of staves using both `line-count` and `line-positions`.



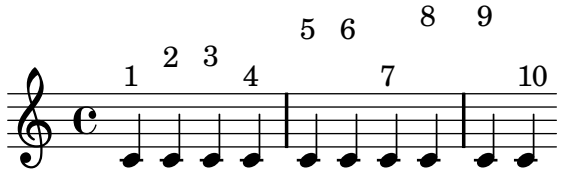


‘`ligature-bracket.ly`’ The ligature bracket right-end is not affected by other voices.

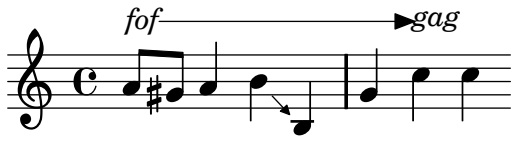


‘`lily-in-scheme.ly`’ LilyPond syntax can be used inside scheme to build music expressions, with the `#{ ... #}` syntax. Scheme forms can be introduced inside these blocks by escaping them with a `$`, both in a LilyPond context or in a Scheme context.

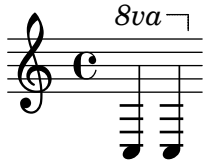
In this example, the `\withpaddingA`, `\withpaddingB` and `\withpaddingC` music functions set different kinds of padding on the `TextScript` grob.



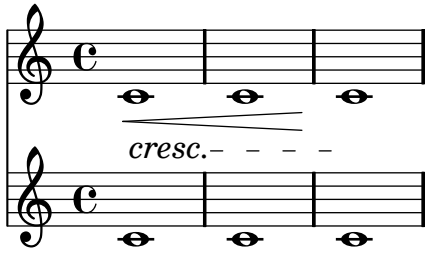
‘`line-arrows.ly`’ Arrows can be applied to text-spanners and line-spanners (such as the Glissando)



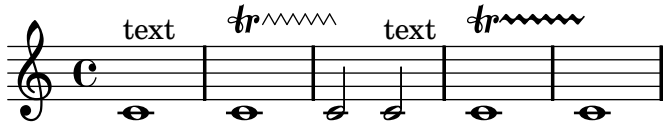
‘`line-dash-small-period.ly`’ Generate valid postscript even if dash-period is small compared to line thickness.



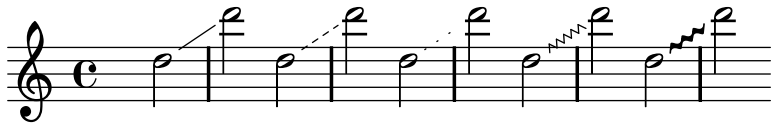
‘`line-dashed-period.ly`’ The period of a dashed line is adjusted such that it starts and ends on a full dash.



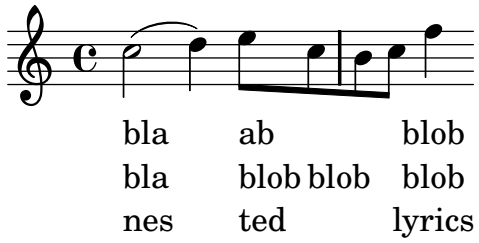
‘`line-style-zigzag-spacing.ly`’ Setting `'zigzag` style for spanners does not cause spacing problems: in this example, the first text markup and zigzag trillspanner have the same outside staff positioning as the second markup and default trillspanner.



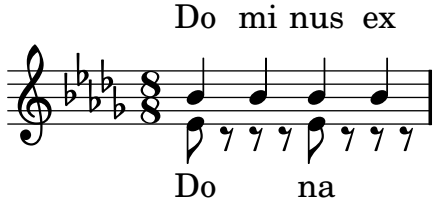
‘`line-style.ly`’ Cover all line styles available



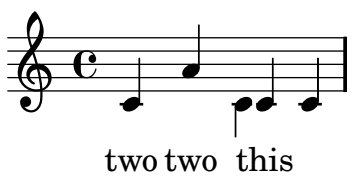
‘`lyric-combine-new.ly`’ With the `\lyricsto` mechanism, individual lyric lines can be associated with one melody line. Each lyric line can be tuned to either follow or ignore melismata.



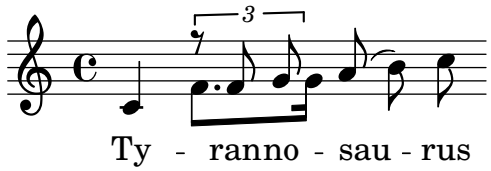
‘`lyric-combine-polyphonic.ly`’ Polyphonic rhythms and rests do not disturb `\lyricsto`.



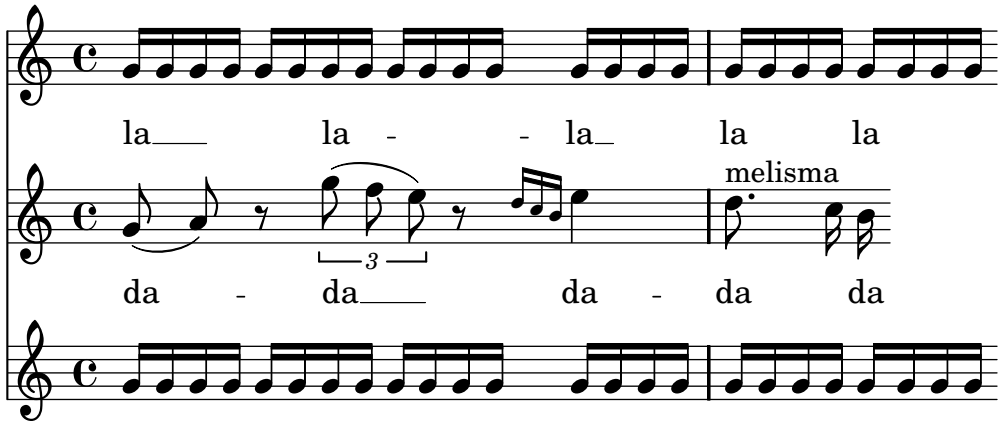
‘`lyric-combine-switch-voice-2.ly`’ switching voices in the middle of the lyrics is possible using `lyricsto`.



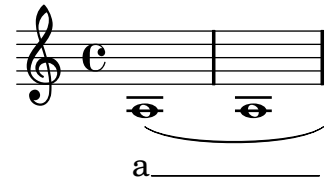
‘lyric-combine-switch-voice.ly’ Switching the melody to a different voice works even if the switch occurs together with context instantiation.

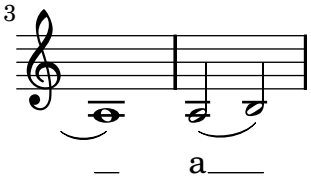


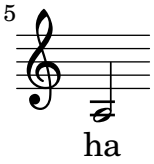
‘lyric-combine.ly’ Lyrics can be set to a melody automatically. Excess lyrics will be discarded. Lyrics will not be set over rests. You can have melismata either by setting a property melismaBusy, or by setting automaticMelismas (which will set melismas during slurs and ties). If you want a different order than first Music, then Lyrics, you must precook a chord of staves/lyrics and label those. Of course, the lyrics ignore any other rhythms in the piece.



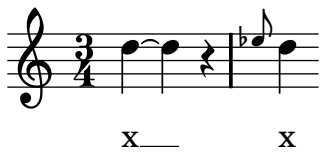
‘lyric-extender-broken.ly’ Lyric extenders run to the end of the line if it continues the next line. Otherwise, it should run to the last note of the melisma.



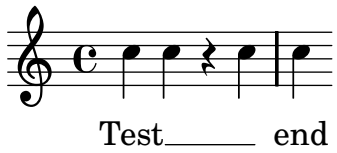




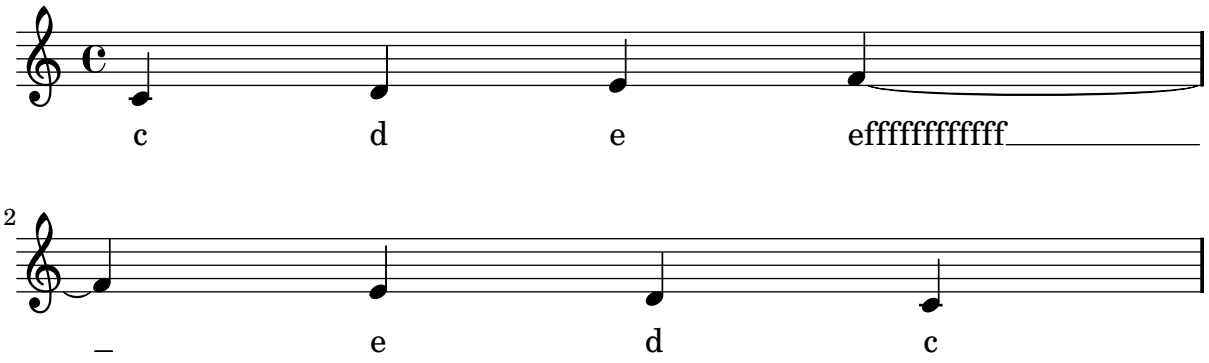
‘lyric-extender-no-heads.ly’ Extender engraver also notices the lack of note heads. Here the extender ends on the 2nd quarter note, despite the grace note without a lyric attached.



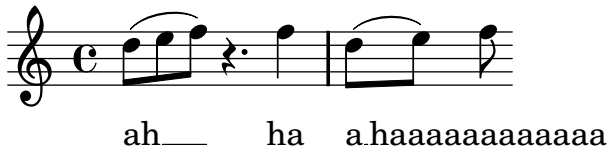
‘`lyric-extender-rest.ly`’ If `extendersOverRests` is set, an extender is not terminated upon encountering a rest.



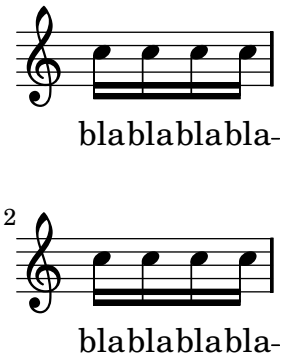
‘`lyric-extender-right-margin.ly`’ Extenders will not protrude into the right margin



‘`lyric-extender.ly`’ A LyricExtender may span several notes. A LyricExtender does not extend past a rest, or past the next lyric syllable.



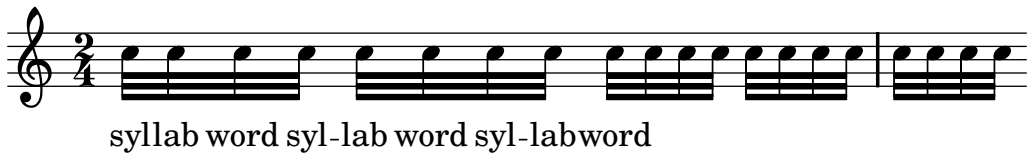
‘`lyric-hyphen-break.ly`’ Hyphens are printed at the beginning of the line only when they go past the first note.



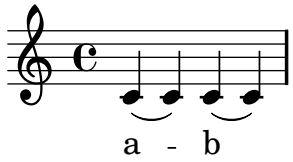
‘lyric-hyphen-retain.ly’ The minimum distance between lyrics is determined by the minimum-distance of LyricHyphen and LyricSpace.

The ideal length of a hyphen is determined by its length property, but it may be shortened down to minimum-length in tight situations. If in this it still does not fit, the hyphen will be omitted.

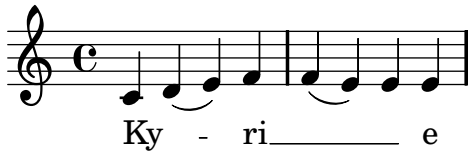
Like all overrides within \lyricsto and \addlyrics, the effect of a setting is delayed is one syllable.



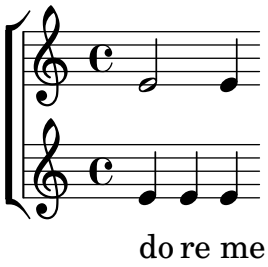
‘lyric-hyphen.ly’ In lyrics, hyphens may be used.



‘lyric-melisma-manual.ly’ Melisma’s may be entered manually by substituting _ for lyrics on notes that are part of the melisma.

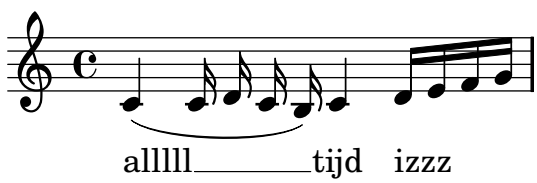


‘lyric-no-association-rhythm.ly’ When lyrics are not associated with specific voices, the lyric placement should follow lyric rhythms. In particular, the second syllable here should not be attached to the first note of the first staff.

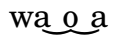


‘lyric-phrasing.ly’

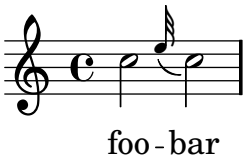
Normally, the lyric is centered on the note head. However, on melismata, the text is left aligned on the left-side of the note head.



‘lyric-tie.ly’ Tildes in lyric syllables are converted to tie symbols.

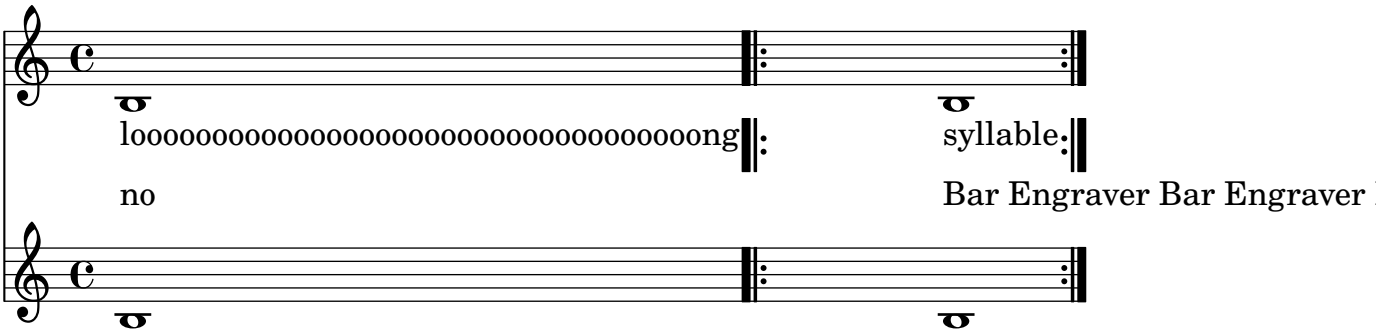


‘lyrics-after-grace.ly’ Lyrics are ignored for aftergrace notes.

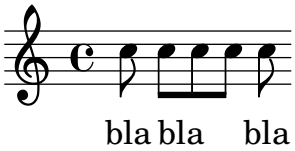


‘lyrics-bar.ly’

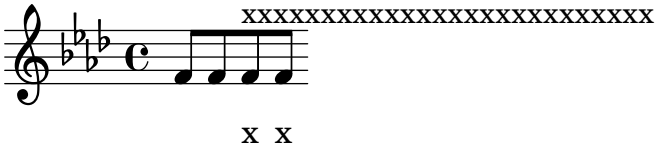
Adding a Bar_engraver to the Lyrics context makes sure that lyrics do not collide with barlines.



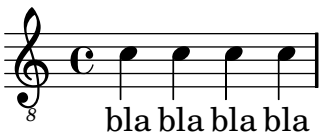
‘lyrics-melisma-beam.ly’ Melismata are triggered by manual beams.



‘lyrics-no-notes.ly’ Lyric syllables without note attachment are not centered. Centering may cause unintended effects when the paper column is very wide.



‘lyrics-tenor-clef.ly’ Lyrics are not lowered despite the presence of an octavation 8.



‘markup-arrows.ly’ The feta font has arrow heads



‘`markup-bidi-pango.ly`’ A single pango string is considered to have one direction. The hebrew in this example (including punctuation) is set right-to-left, with the first word (containing 1) on the right.

ללל1ללל, רר2רר.

‘`markup-column-align.ly`’ Fixed horizontal alignment of columns of text can be set using \left-column, \center-column and \right-column.

one	one	one
two	two	two
three	three	three

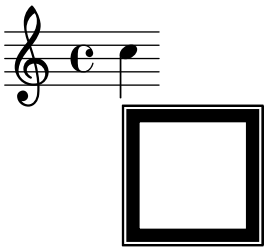
‘`markup-commands.ly`’ test various markup commands.



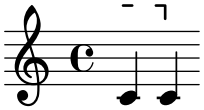
foo **foo** LOWER **normal** normal Small-Caps SMALL-CAPS
LOWER
justify:
This is a field containing text. Blah blah blah.
This is a field containing text. Blah blah blah.
This is a field containing text. Blah blah blah.
This is a field containing text. Blah blah blah.
This is a field containing text. Blah blah blah.
wordwrap:
This is a field containing text. Blah blah blah.
This is a field containing text. Blah blah blah.
This is a field containing text. Blah blah blah.
This is a field containing text. Blah blah blah.
This is a field containing text. Blah blah blah.
draw-line:

<u>underlined</u>

‘`markup-eps.ly`’ The epsfile markup command reads an EPS file



‘`markup-line-thickness.ly`’ The thickness setting between markup lines and other lines is consistent.



‘`markup-lines.ly`’ Text that can spread over pages is entered with the `\markuplines` command.

Il y avait en Westphalie, dans le château de M. le baron de Thunder-ten-tronckh, un jeune garçon à qui la nature avait donné les mœurs les plus douces. Sa physionomie annonçait son âme. Il avait le jugement assez droit, avec l'esprit le plus simple ; c'est, je crois, pour cette raison qu'on le nommait Candide. Les anciens domestiques de la maison soupçonnaient qu'il était fils de la sœur de monsieur le baron et d'un bon et honnête gentilhomme du voisinage, que cette demoiselle ne voulut jamais épouser parce qu'il n'avait pu prouver que soixante et onze quartiers, et que le reste de son arbre généalogique avait été perdu par l'injure du temps.

Monsieur le baron était un des plus puissants seigneurs de la Westphalie, car son château avait une porte et des fenêtres. Sa grande salle même était ornée d'une tapisserie. Tous les chiens de ses basses-cours composaient une

meute dans le besoin ; ses palefreniers étaient

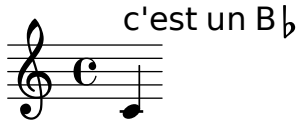
ses piqueurs; le vicaire du village était son

grand-aumônier. Ils l'appelaient tous

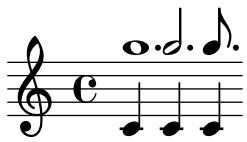
monseigneur, et ils riaient quand il faisait des

contes.

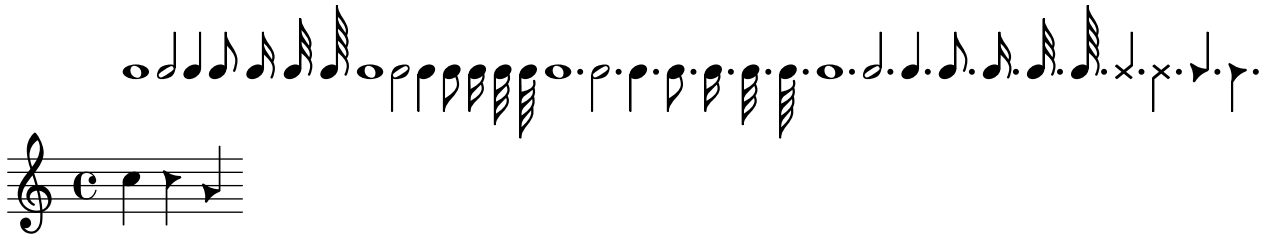
‘`markup-music-glyph.ly`’ Reset fontname for musicglyph. For unknown glyphs, we print a warning.



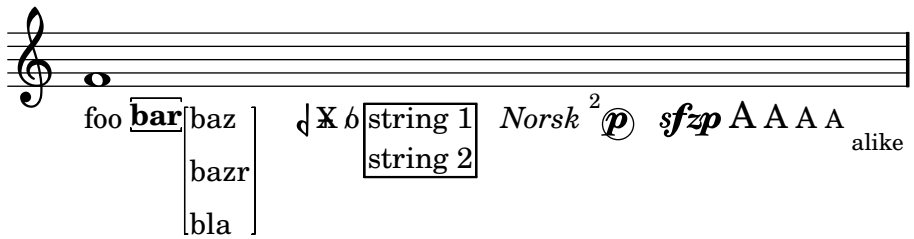
‘`markup-note-dot.ly`’ A dotted whole note displayed via the `\note` command must separate the note head and the dot. The dot avoids the upflag.

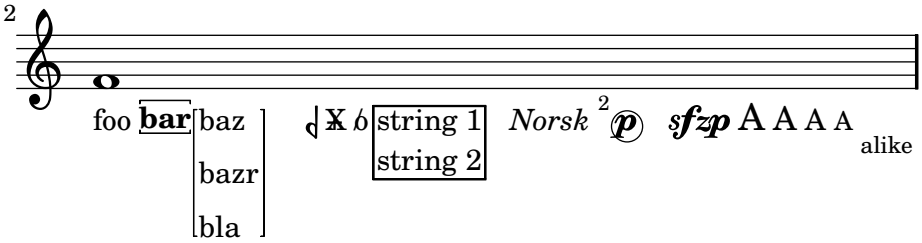


‘`markup-note.ly`’ The note markup function may be used to make metronome markings. It works for a variety of flag, dot and duration settings.



‘`markup-scheme.ly`’ There is a Scheme macro `markup` to produce markup texts using a similar syntax as `\markup`.



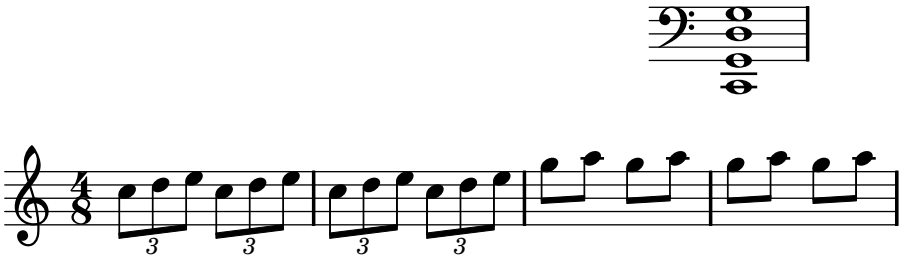


‘markup-score.ly’ Use \score block as markup command.

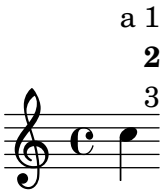
Solo Cello Suites

Suite IV

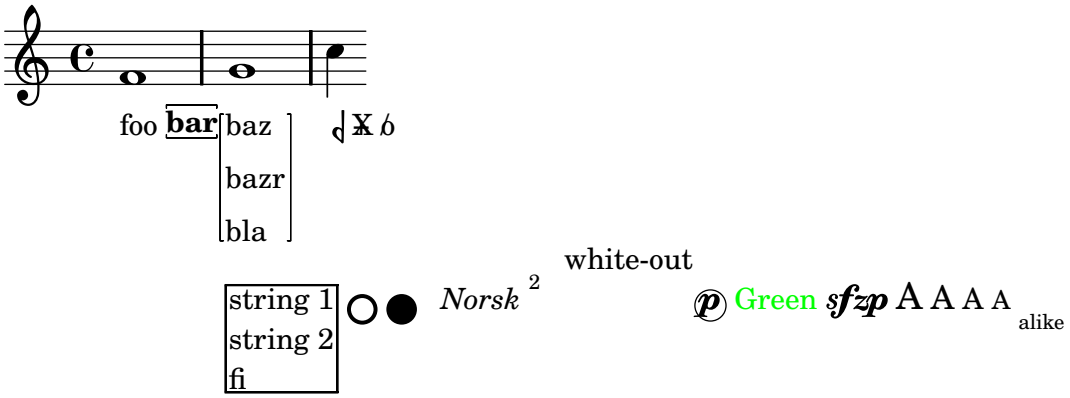
Originalstimmung:



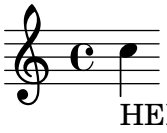
‘markup-stack.ly’ Markup scripts may be stacked.



‘markup-syntax.ly’ Demo of markup texts, using LilyPond syntax.



‘markup-user.ly’ Users may define non-standard markup commands using the `define-markup-command` scheme macro.



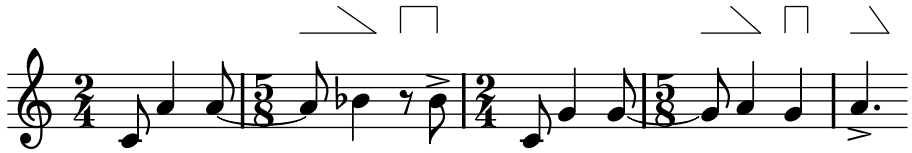
‘markup-word-wrap.ly’ The markup commands `\wordwrap` and `\justify` produce simple paragraph text.

this is normal text This is a test of the wordwrapping function. 1 This is a continuing test of the wordwrapping function. 2 This is a test of the wordwrapping function. 3 This is a test of the wordwrapping function. 4 1a111 11111 **22222** *2222*

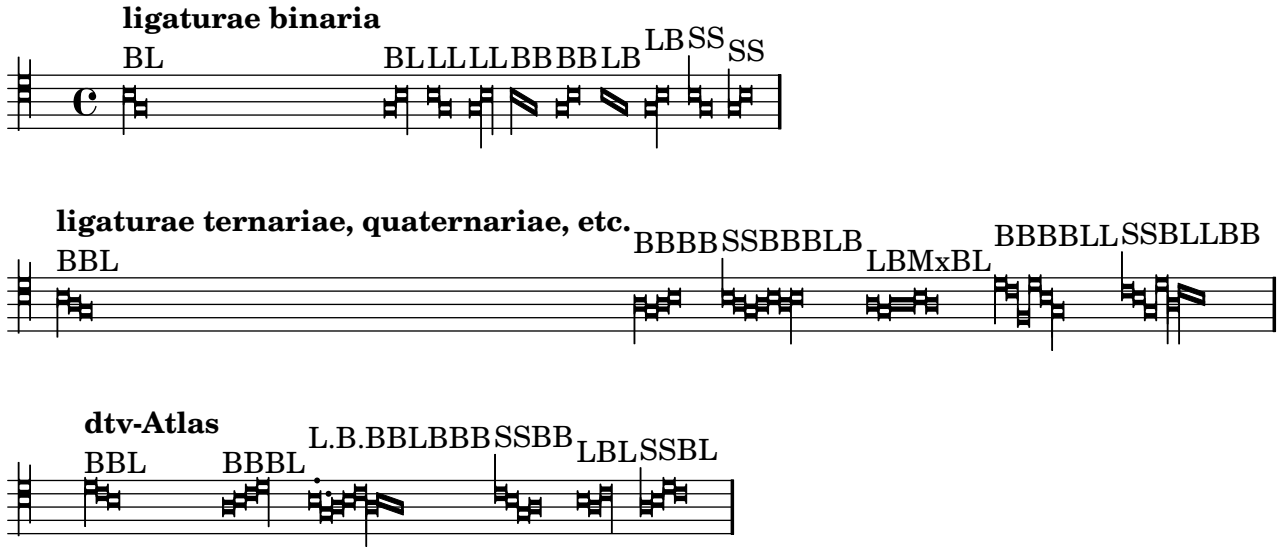
this is normal text This is a test of the wordwrapping continuing function, but with justification. 1 This is a test of the wordwrapping function, but with justification. 2 This is a test of $\frac{a}{b}$ the wordwrapping function, but with justification. 3 This is a test of the wordwrapping function, but with justification. bla bla

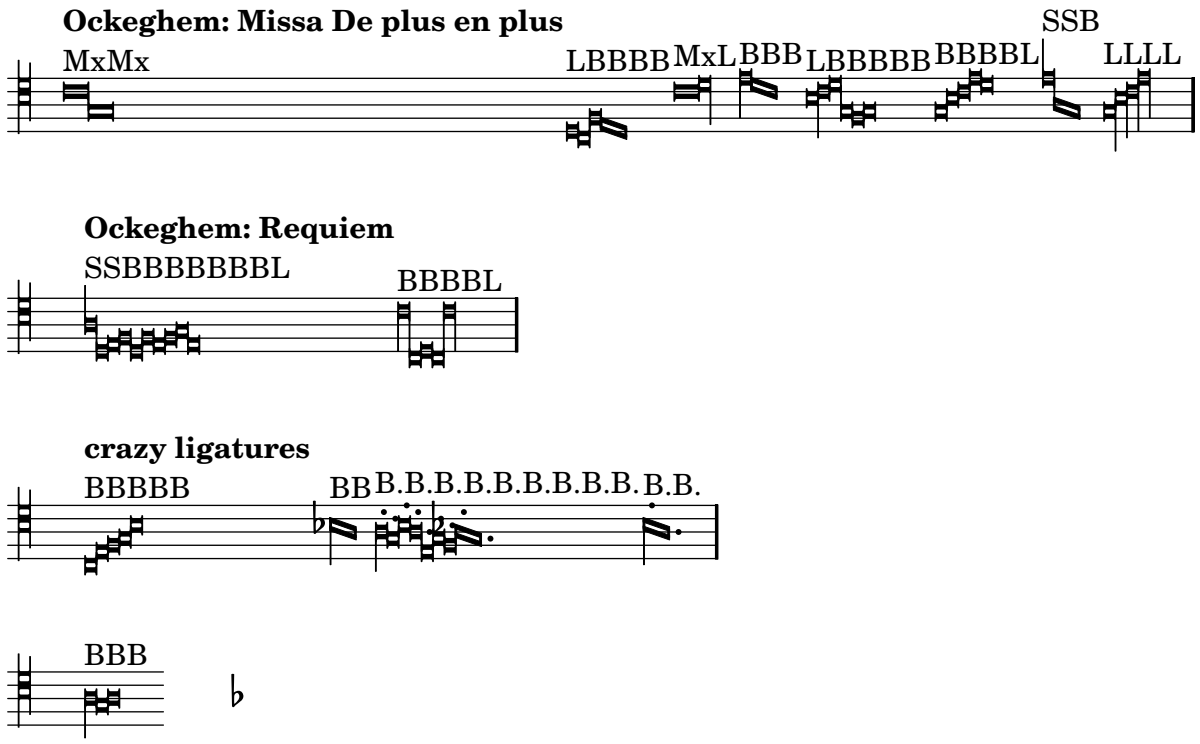
Om mani padme hum Om mani padme hum Om mani padme hum Om mani padme hum Om mani padme hum Om mani padme hum. Om mani padme hum Om mani padme hum Om mani padme hum Om mani padme hum Om mani padme hum. Gate Gate paragate Gate Gate paragate Gate Gate paragate Gate Gate paragate Gate Gate paragate Gate Gate paragate.

'`measure-grouping.ly`' The `Measure_grouping_engraver` adds triangles and brackets above beats when the beats of a time signature are grouped.

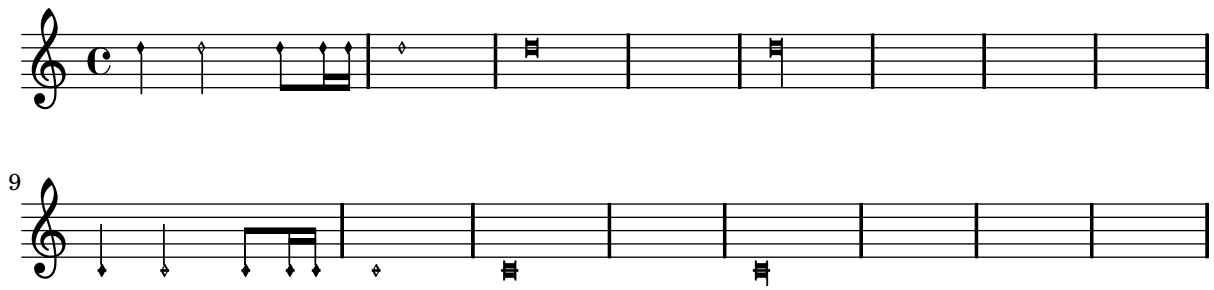


'`mensural-ligatures.ly`' Mensural ligatures show different shapes, depending on the rhythmical pattern and direction of the melody line.



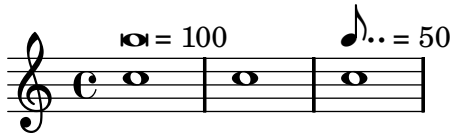


‘`mensural.ly`’ There is limited support for mensural notation: note head shapes are available. Mensural stems are centered on the note heads, both for up and down stems.



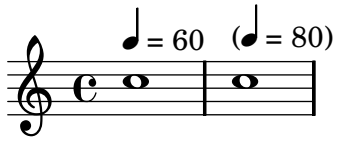
‘`metronome-marking.ly`’ Here `\tempo` directives are printed as metronome markings.

The marking is left aligned with the time signature, if there is one.



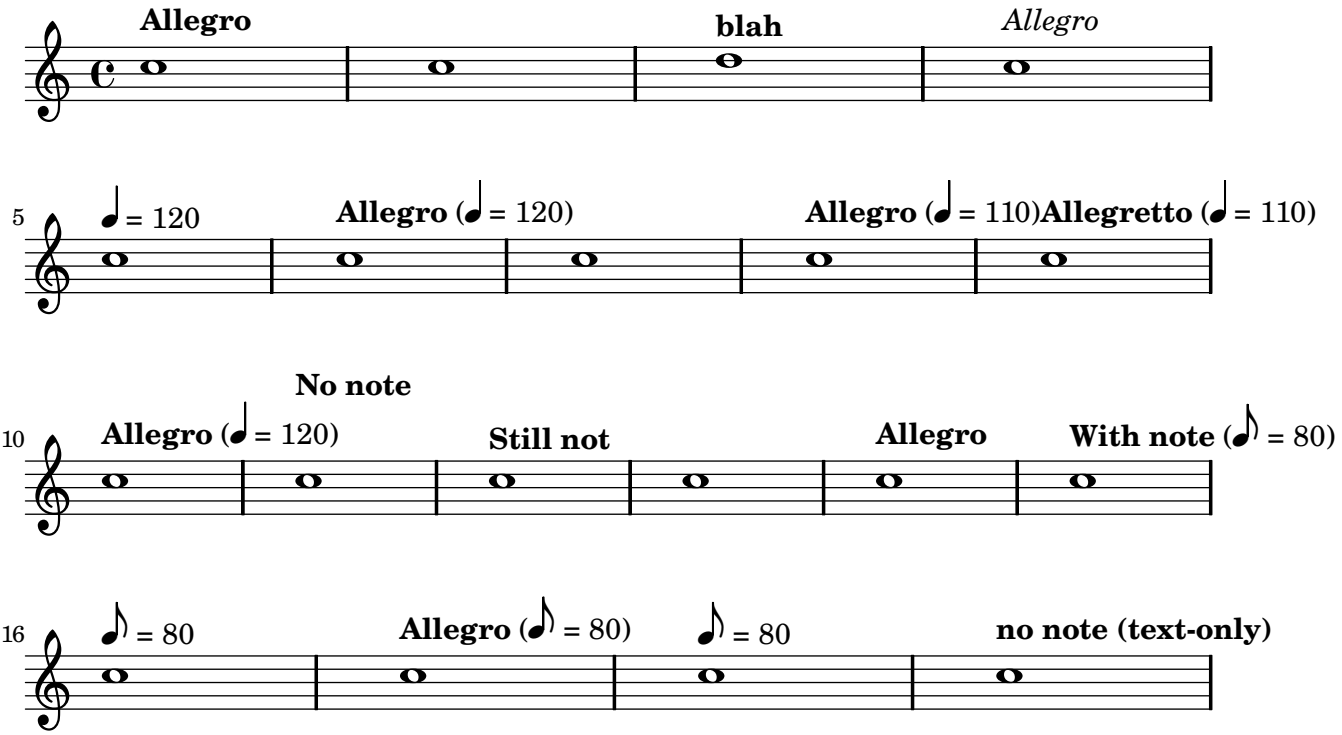
‘`metronome-parenthesized.ly`’

Using an empty text in the metronome marks, one can generate parenthesized tempo marks.

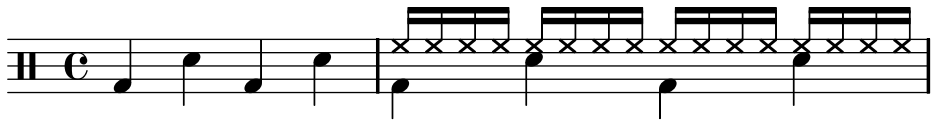


‘`metronome-text.ly`’

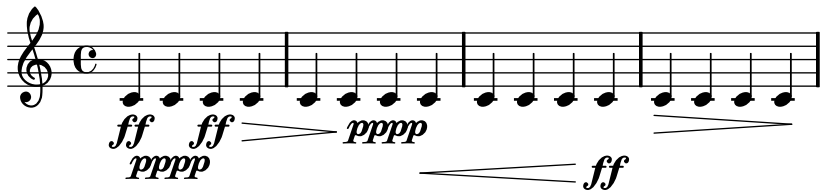
The tempo command supports text markup and/or duration=count. Using the Score.hideTempoNote, one can hide the duration=count in the tempo mark.



'`midi-drums.ly`' Midi can create drums.

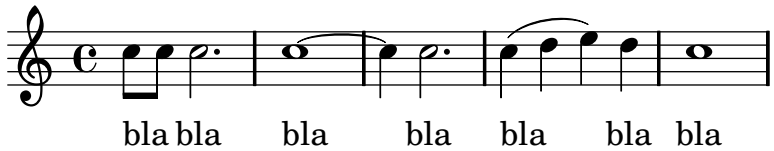


'`midi-dynamics.ly`' Midi also handles crescendo and decrescendo, either starting and ending from specified or unspecified sound level.



'`midi-grace.ly`' Grace notes don't intrroduce syncing problems: the last note off will appear at tick 768 (2 * 384).

'`midi-lyric-barcheck.ly`' Lyrics in MIDI are aligned to ties and beams: this examples causes no bar checks in MIDI.

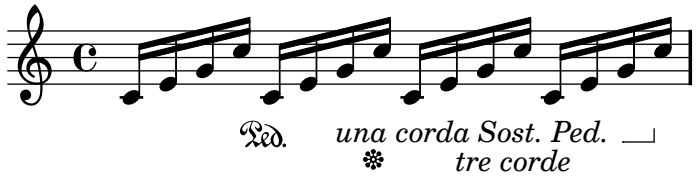


'`midi-microtone-off.ly`' Microtonal shifts should be corrected before the start of the next (possibly grace) note.

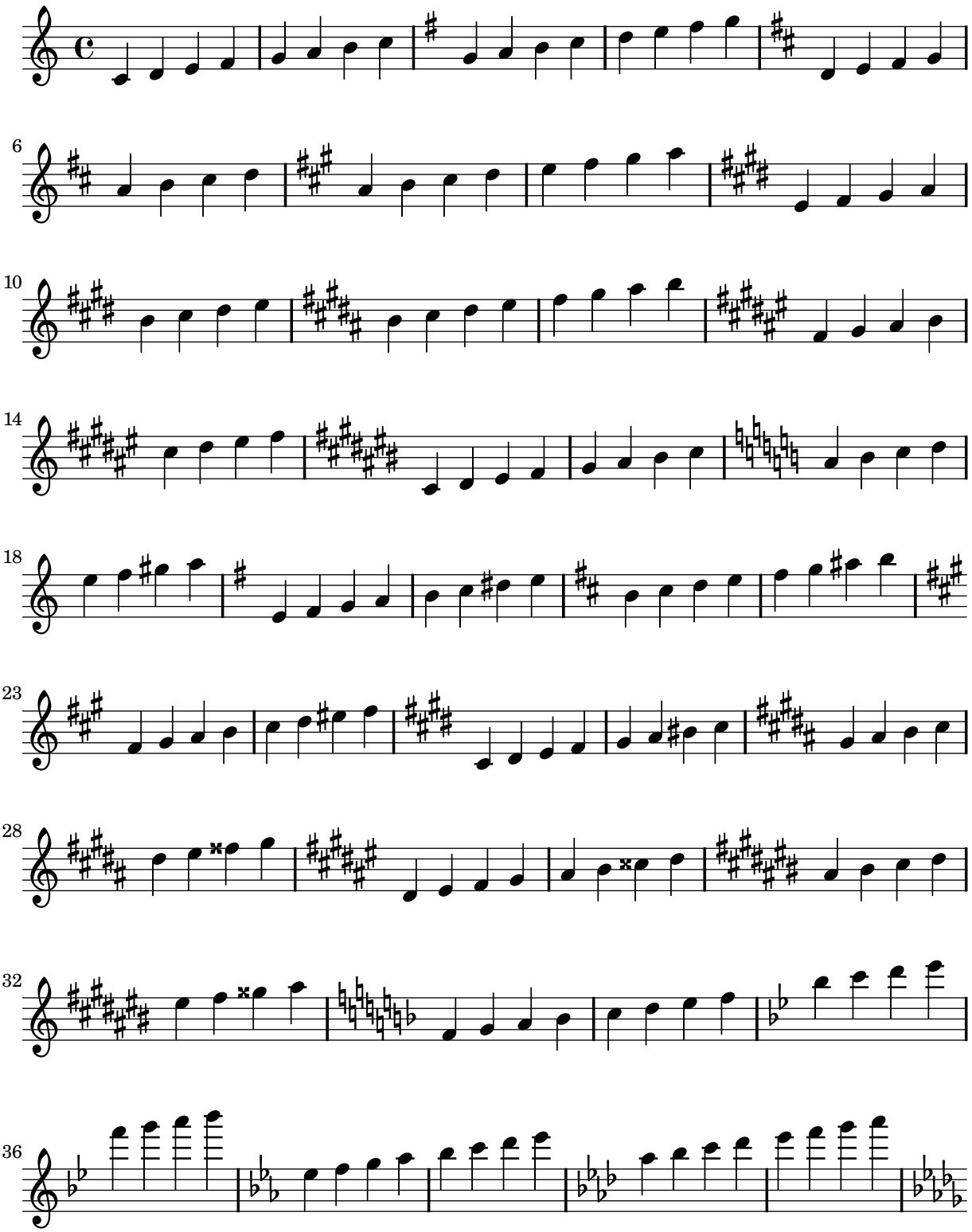
'`midi-microtone.ly`' The pitch wheel is used for microtones.

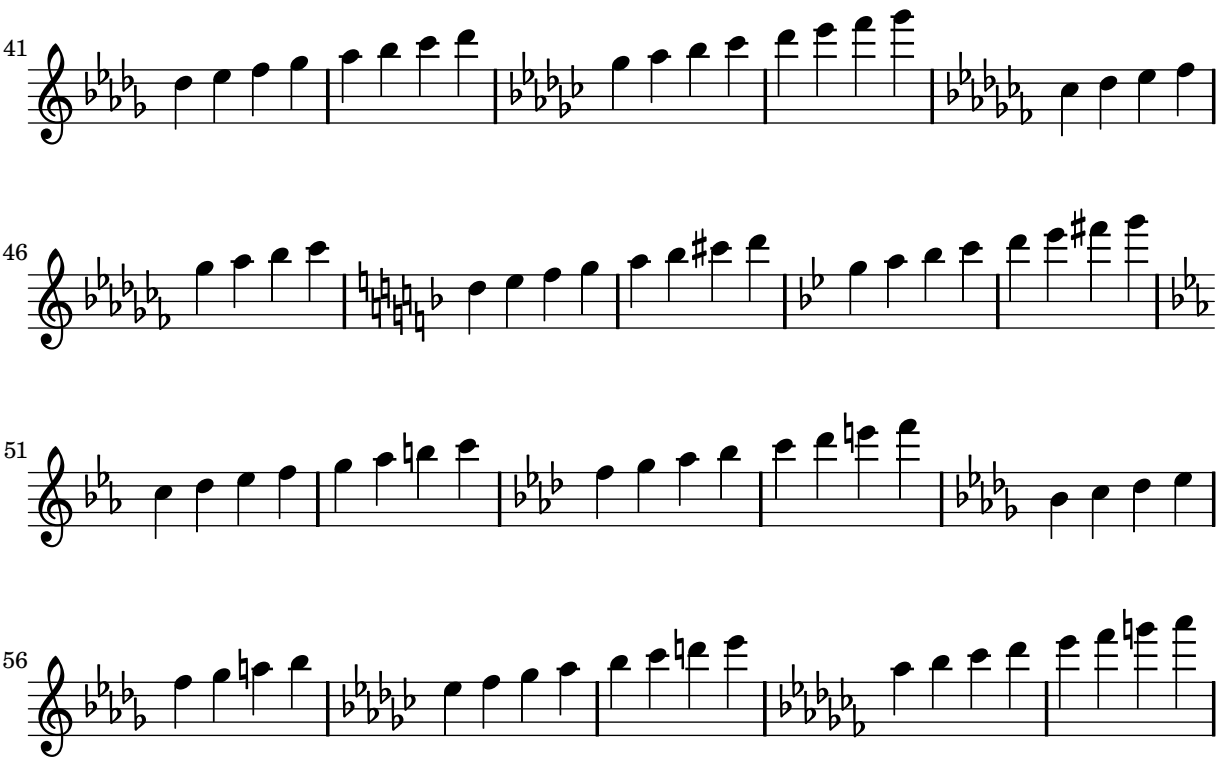
'`midi-partial.ly`' MIDI and partial measures work together.

'`midi-pedal.ly`' Pedals. Run `timidity -idvvv file.midi |grep Midi` to see midi events.

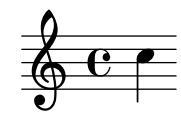


‘`midi-scales.ly`’ Converting LilyPond input to MIDI and then again back with `midi2ly.py` is a reversible procedure in some simple cases, which mean that the original `.ly` -file and the one converted back from the generated `.midi` -file do not differ. Here are produced some scales.





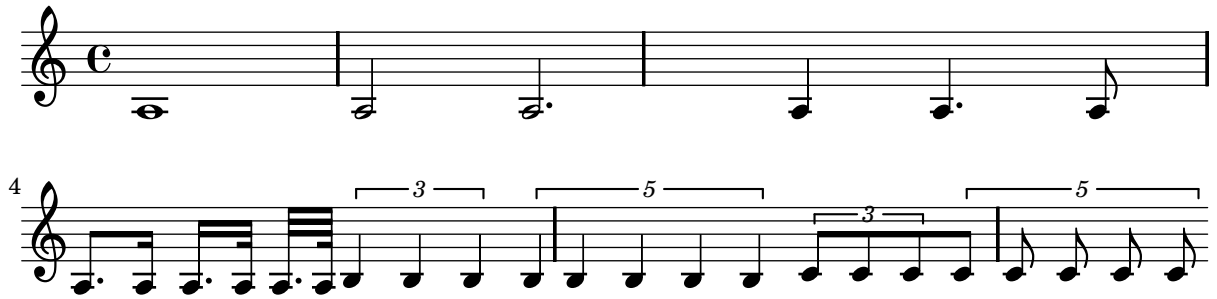
‘midi-transposition.ly’ should deliver f’ in MIDI



‘midi-tuplets.ly’

Midi2ly tuplet test.

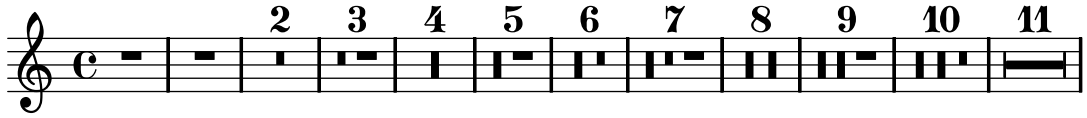
```
python scripts/midi2ly.py --duration-quant=32 \
    --allow-tuplet=4*2/3 \
    --allow-tuplet=8*2/3 \
    --allow-tuplet=4*3/5 \
    --allow-tuplet=8*3/5 \
    tu.midi
```



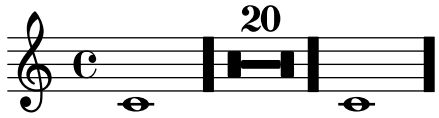
‘midi-volume-equaliser.ly’ The full orchestra plays a note, where groups stop one after another. Use this to tune equalizer settings.

‘mm-rests2.ly’

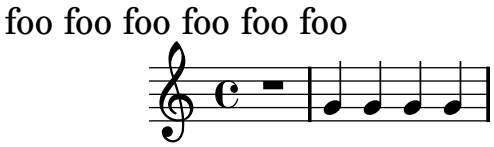
If Score.skipBars is set, the signs for four, two, and one measure rest are combined to produce the graphical representation of rests for up to 10 bars. The number of bars will be written above the sign.



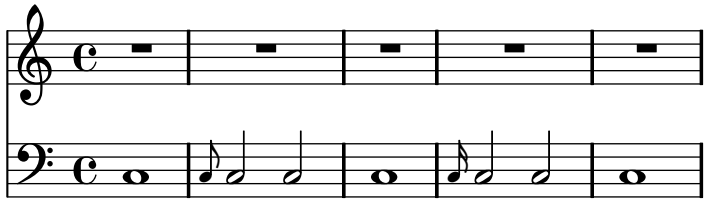
‘multi-measure-rest-center.ly’ The multimeasure rest is centered exactly between bar lines.



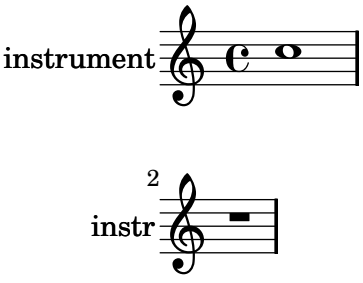
‘multi-measure-rest-center2.ly’ The existence of a text mark does not affect the placement of a multimeasure rest.



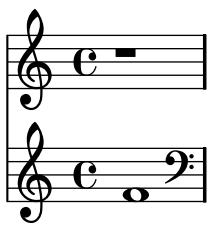
‘multi-measure-rest-grace.ly’ Multi-measure rests are centered also in the case of grace notes.



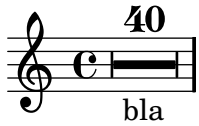
‘multi-measure-rest-instr-name.ly’ There are both long and short instrument names. Engraving instrument names should not be confused by the multimeasure rests.



‘multi-measure-rest-multi-staff-center.ly’ The centering of multi-measure rests is independent on prefatory matter in other staves.



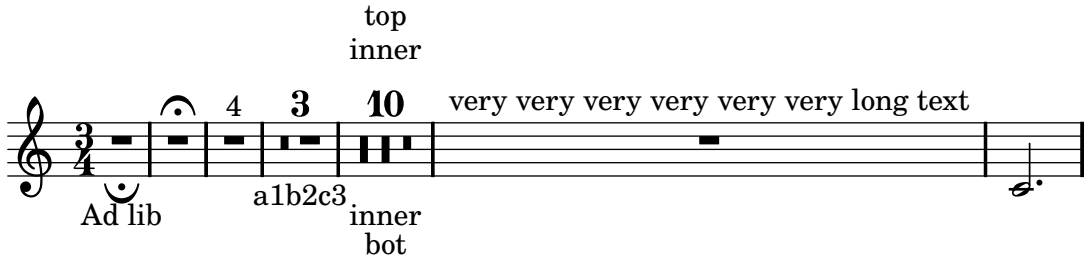
‘multi-measure-rest-spacing.ly’ By setting texts starting with a multi-measure rest, an extra spacing column is created. This should not cause problems.



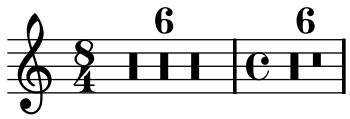
‘multi-measure-rest-text.ly’

Texts may be added to the multi-measure rests.

By setting the appropriate spacing-procedure, we can make measures stretch to accomodate wide texts.



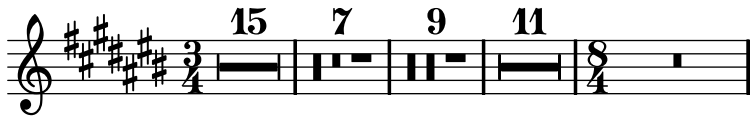
‘multi-measure-rest-usebreve.ly’ For longer measure lengths, the breve rest is used.



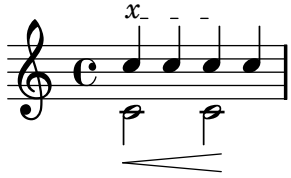
‘multi-measure-rest.ly’

Multi-measure rests do not collide with barlines and clefs. They are not expanded when you set Score.skipBars. Although the multi-measure-rest is a Spanner, minimum distances are set to keep it colliding from barlines.

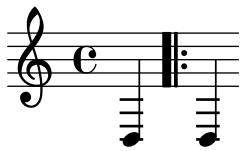
Rests over measures during longer than 2 wholes use breve rests. When more than 10 or more measures (tunable through expand-limit) are used then a different symbol is used.



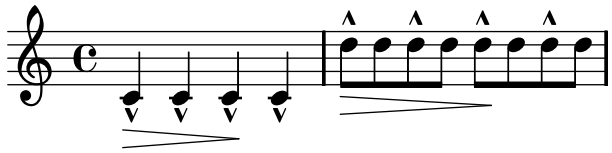
‘music-function-end-spanners.ly’ the endSpanners music function inserts end span events at the end of a note.



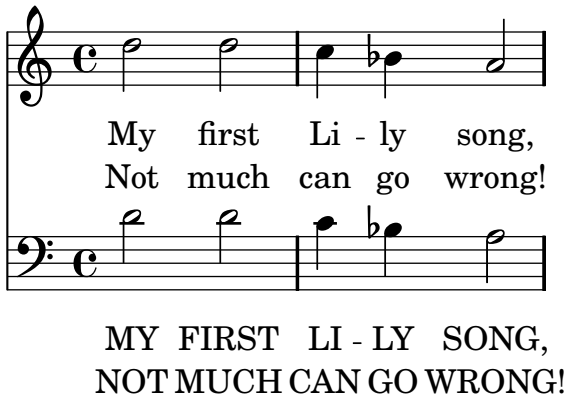
‘music-function.ly’ Music functions are generic music transformation functions, which can be used to extend music syntax seamlessly. Here we demonstrate a \myBar function, which works similar to \bar, but is implemented completely in Scheme.



‘music-map.ly’ With music-map, you can apply functions operating on a single piece of music to an entire music expression. In this example, the the function notes-to-skip changes a note to a skip. When applied to an entire music expression in the 1st measure, the scripts and dynamics are left over. These are put onto the 2nd measure.



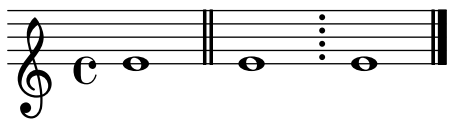
‘newaddlyrics.ly’ newlyrics, multiple stanzas, multiple lyric voices.



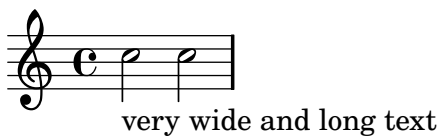
‘no-staff.ly’ The printing of the staff lines may be suppressed by removing the corresponding engraver.

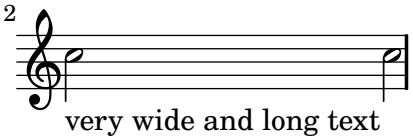


‘non-centered-bar-lines.ly’ Bar lines are positioned correctly when using custom staves which are not centered around position 0.

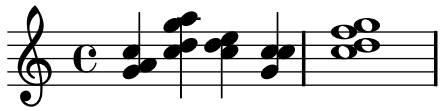


‘non-empty-text.ly’ By default, text is set with empty horizontal dimensions. The boolean property no-spacing-rods in TextScript is used to control the horizontal size of text.



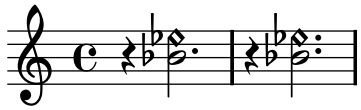


‘`note-head-chord.ly`’ Note heads are flipped on the stem to prevent collisions. It also works for whole heads that have invisible stems.

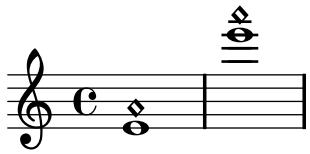


‘`note-head-harmonic-dotted.ly`’

Dots on harmonic note heads can be shown by setting the property `harmonicDots`.

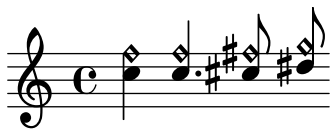


‘`note-head-harmonic-whole.ly`’ A harmonic note head must be centered if the base note is a whole note.

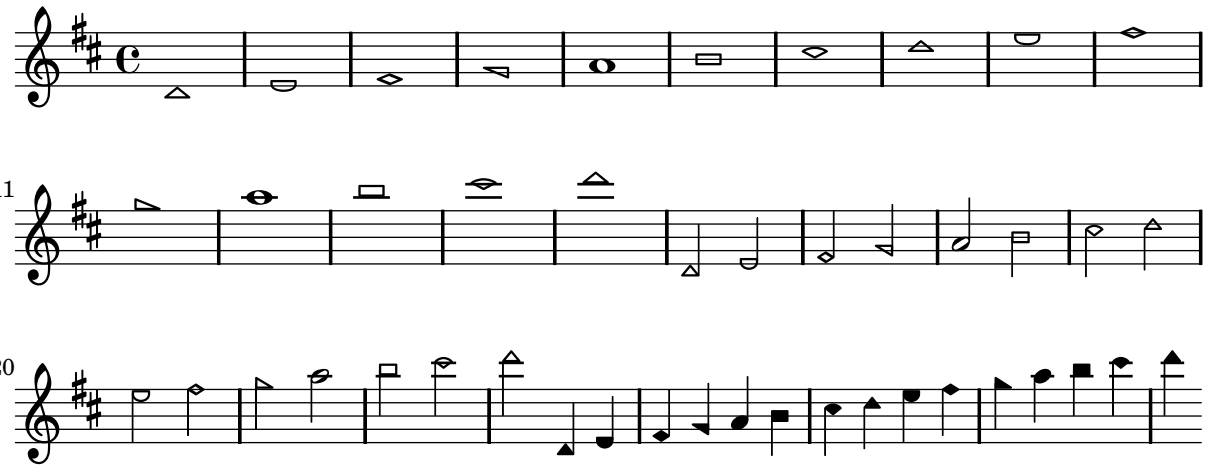


‘`note-head-harmonic.ly`’ The handling of stems for harmonic notes must be completely identical to normal note heads.

Harmonic heads do not get dots. If `harmonicAccidentals` is unset, they also don’t get accidentals.



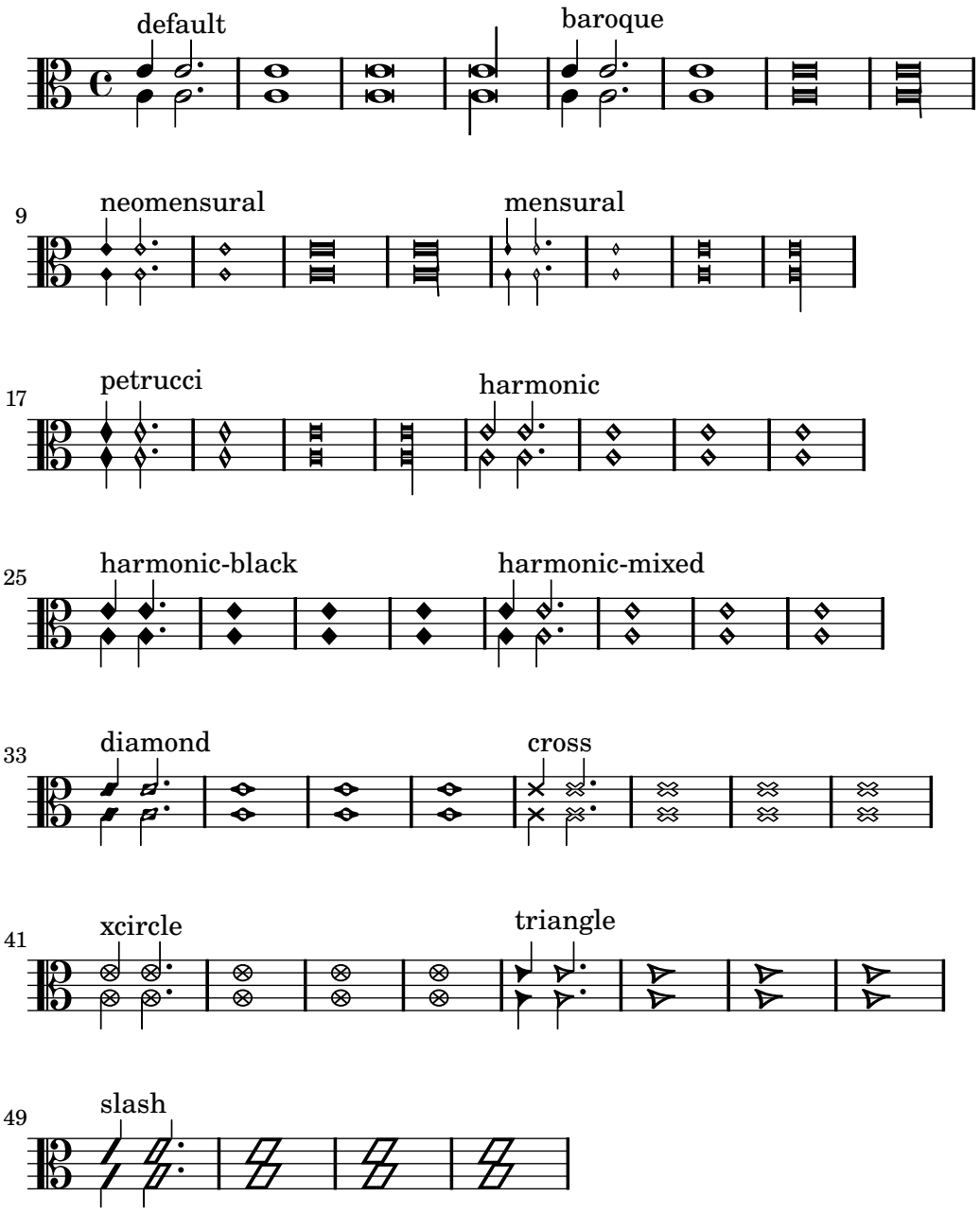
‘`note-head-solfa.ly`’ With `shapeNoteStyles`, the style of the note head is adjusted according to the step of the scale, as measured relative to the `tonic` property.



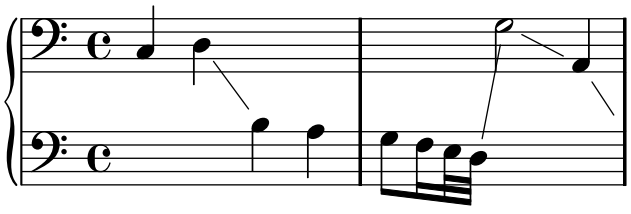
‘`note-head-style.ly`’

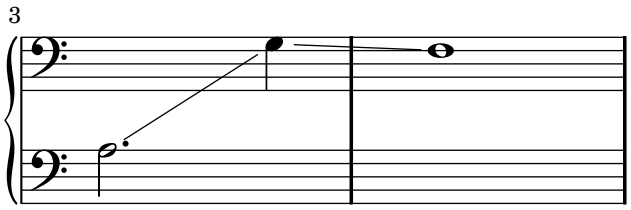
Note head shapes may be set from several choices. The stem endings should be adjusted according to the note head. If you want different note head styles on one stem, you must create a special context.

Harmonic notes have a different shape and different dimensions.

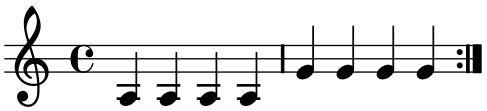


‘`note-line.ly`’ Note head lines (e.g. glissando) run between centers of the note heads.

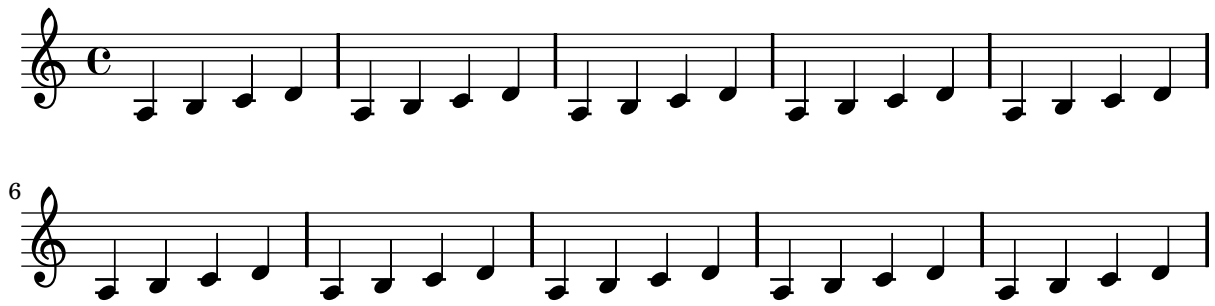




‘`number-staff-lines.ly`’ The number of stafflines of a staff can be set. Ledger lines both on note heads and rests, as well as barlines, are adjusted accordingly.

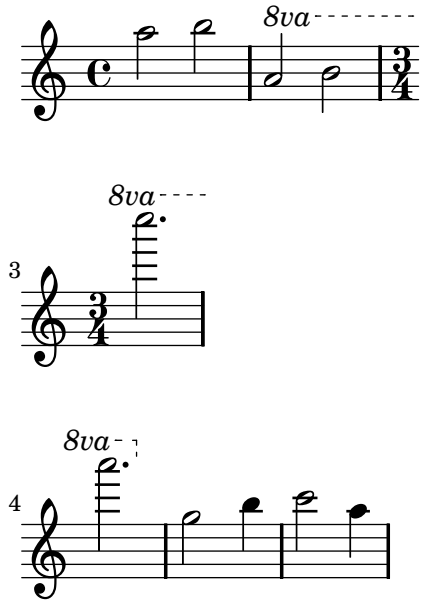


‘`optimal-page-breaking-hstretch.ly`’ The optimal page breaker will stretch the systems horizontally so that the vertical spacing will be more acceptable. The page-spacing-weight parameter controls the relative importance of vertical/horizontal spacing. Because ragged-last-bottom is on, only the first page should be horizontally stretched.

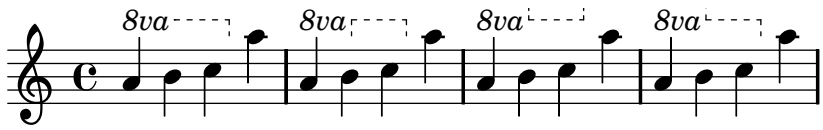


‘`option-help.ly`’ Print the option help text, for comparison against previous releases.

‘`ottava-broken.ly`’ At line breaks, ottava brackets have no vertical line and their horizontal line does not stick out. The dashed line runs until the end of the line (regardless of prefatory matter).

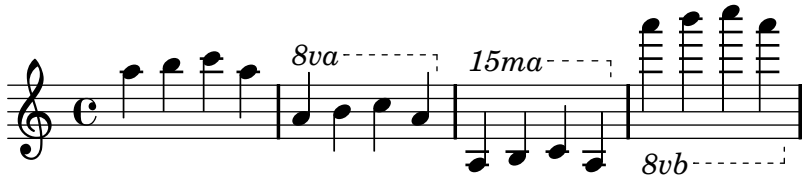


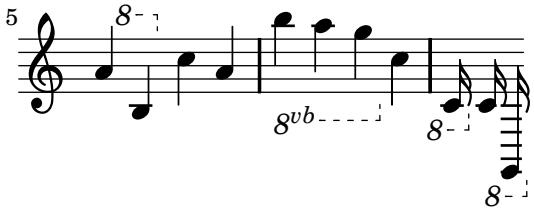
‘`ottava-edge.ly`’ Both edge heights of an ottava bracket can be specified.



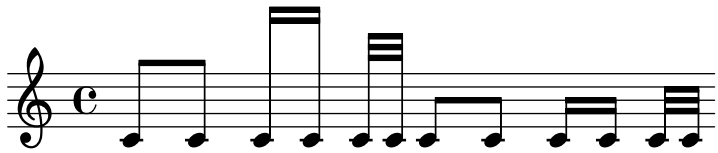
‘`ottava.ly`’ Ottava brackets are supported, through the use of the music function `\ottava`.

The spanner should go below a staff for 8va bassa, and the ottavation markup can be tuned with `Staff.ottavation`.

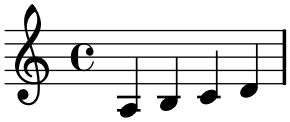




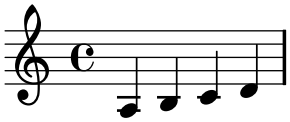
‘`override-nest.ly`’ Sublist of grob property lists may be also tuned. In the next example, the `beamed-lengths` property of the `Stem` grob is tweaked.

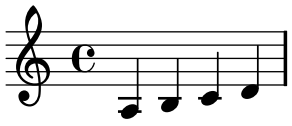


‘`page-break-between-scores.ly`’ Page breaks work when they are placed at the end of a score, or between scores.



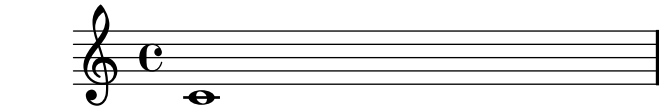
2

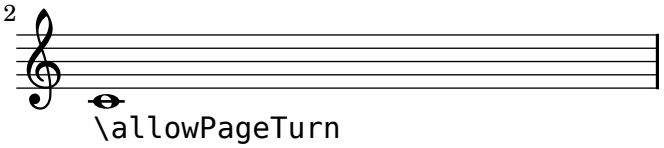


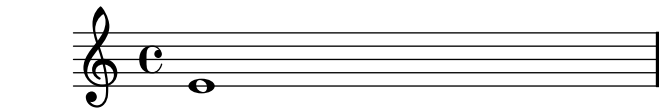


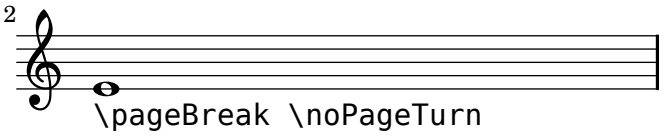
Music engraving by LilyPond 2.12.2—www.lilypond.org

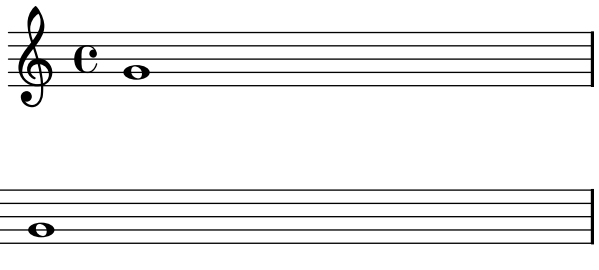
‘`page-break-turn-toplevel.ly`’ Page breaking and page turning commands (`\pageBreak`, `\noPageBreak`, etc), can be used at top level.



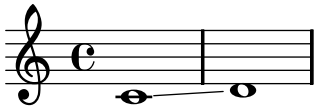




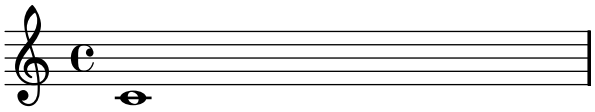




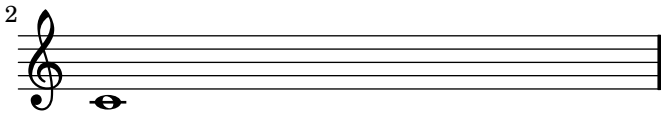
‘page-break-warn-forbidden.ly’ If a page break is forced where it is forbidden, a warning is printed.



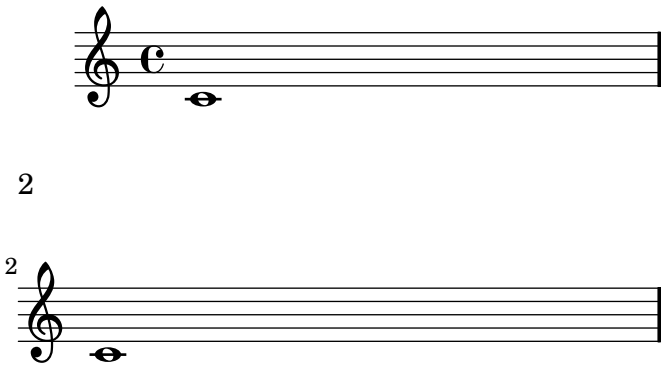
‘page-breaking-page-count1.ly’ The number of pages in a score can be forced by setting page-count in the (book-level) paper block.



2



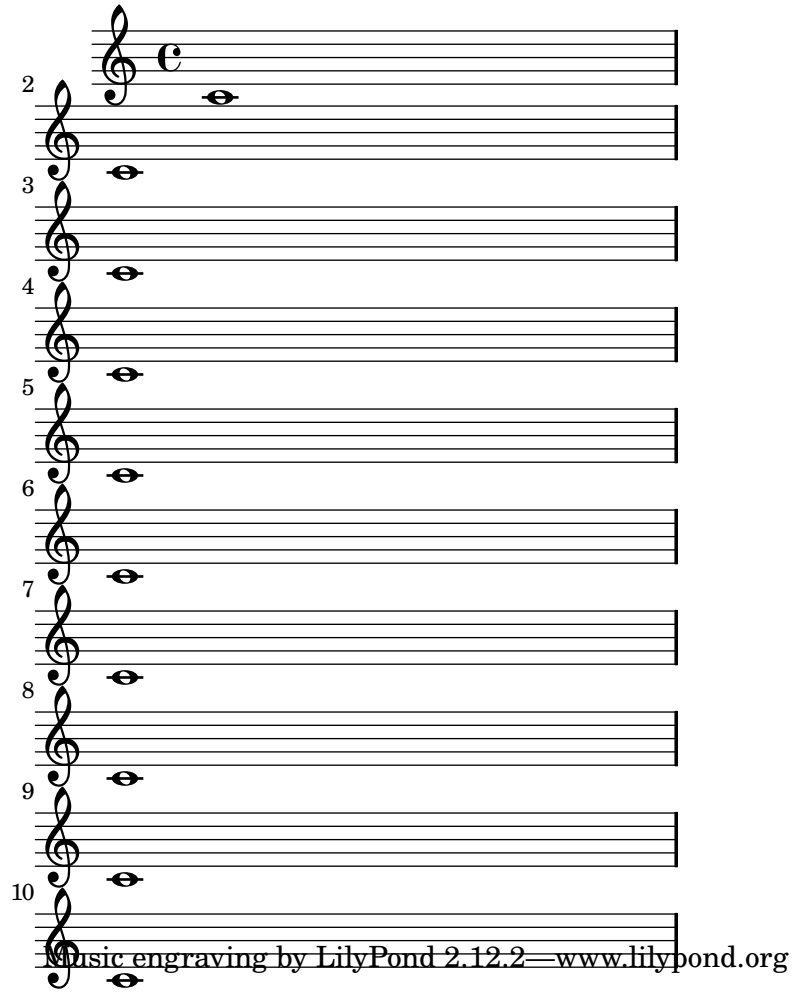
‘page-breaking-page-count2.ly’ The number of pages in a score can be forced by setting page-count in the (book-level) paper block. If there are too few systems for the number of pages, we append blank pages.



2

3

‘page-breaking-page-count3.ly’ The number of pages in a score can be forced by setting page-count in the (book-level) paper block. Even if there are too many systems for that number of pages, we will squeeze them in.



‘`page-breaks.ly`’ Stress optimal page breaking. This should look nice and even on 4 a6 pages.

Title

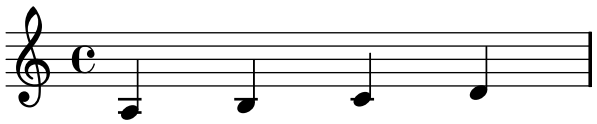
(and (the) subtitle)

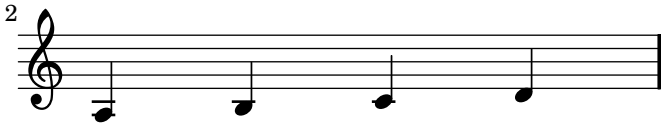
Sub sub title

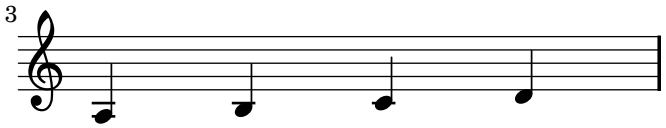
Poet **Instrument** Composer

Meter (huh?) Arranger

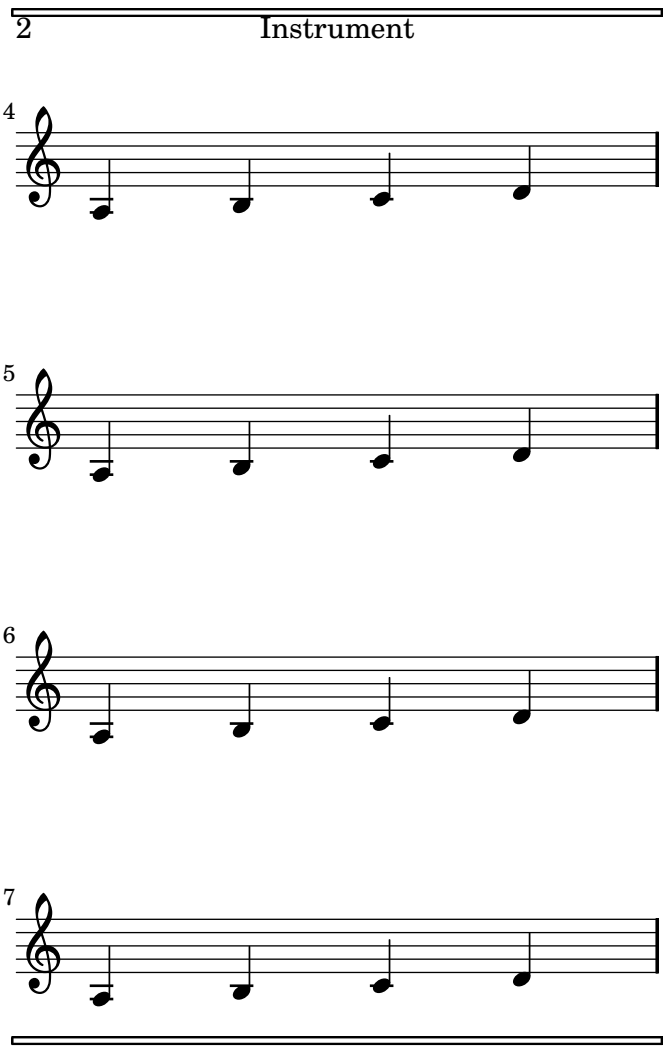
Piece opus 0

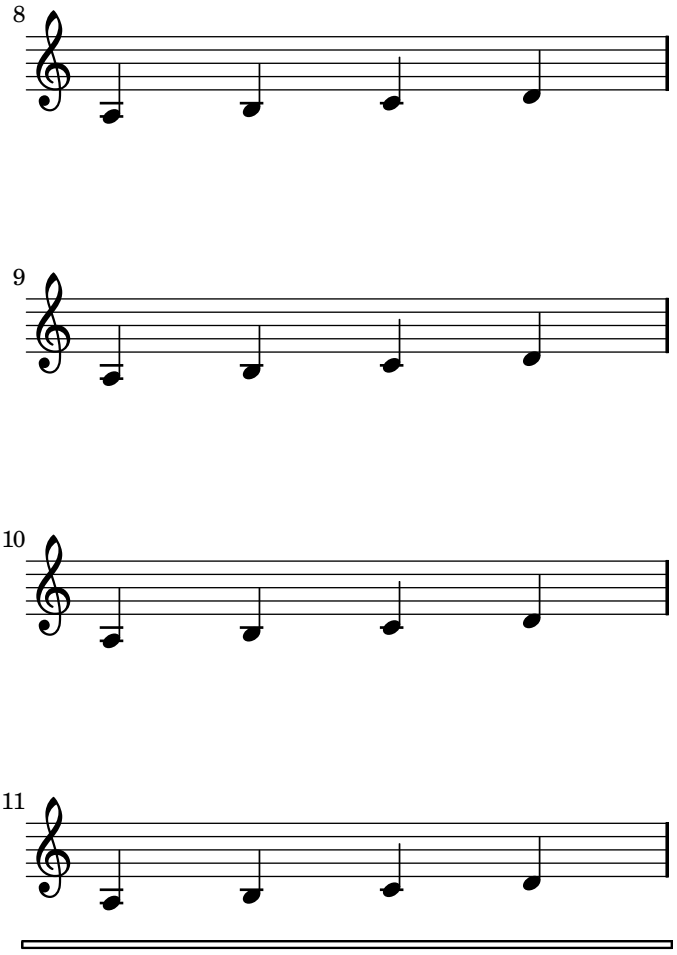


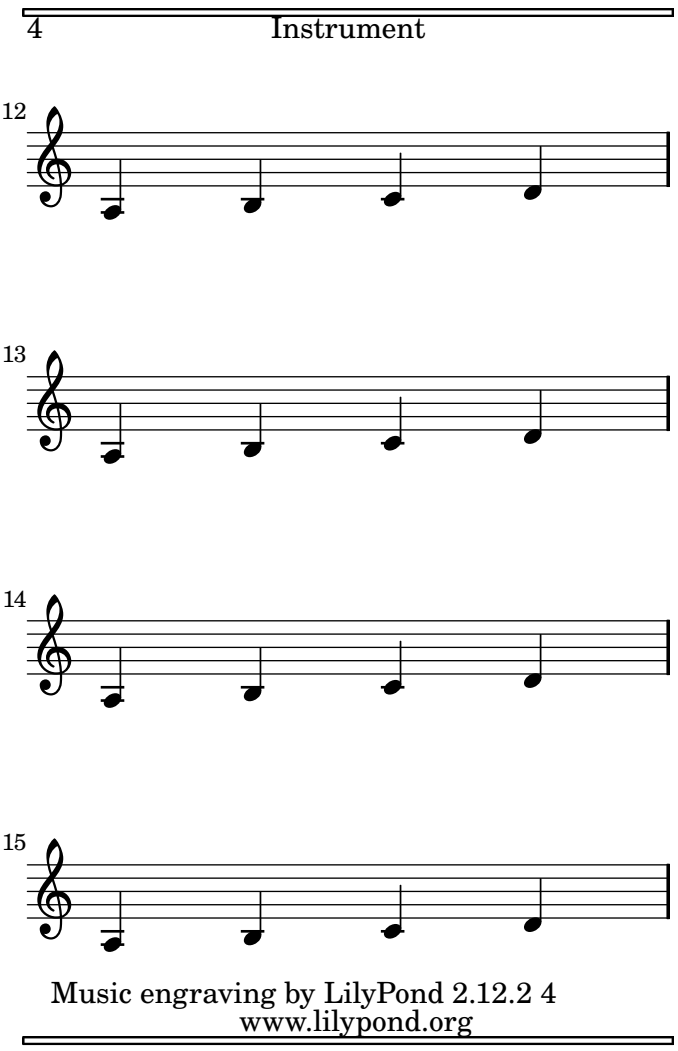




Copyright by /me


2
Instrument
4
5
6
7


8
9
10
11



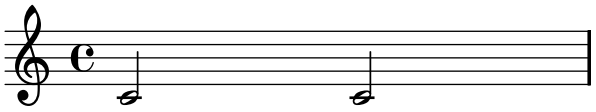
‘page-label.ly’ Page labels may be placed inside music or at top-level, and refered to in markups.

Title Page

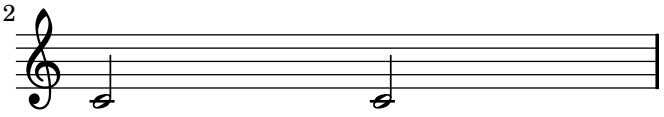
Table of contents

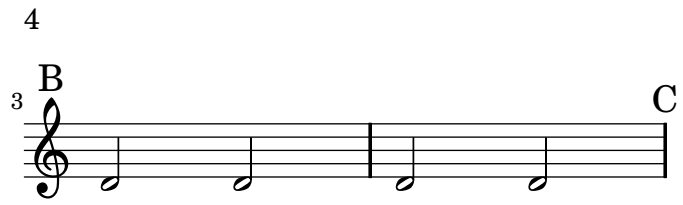
Table of contents	2
First Score	3
Mark A	3
Mark B	4
Mark C	4
Unknown label	?

First score



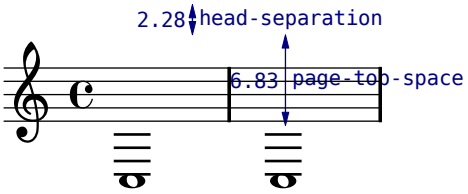
A (page 3)



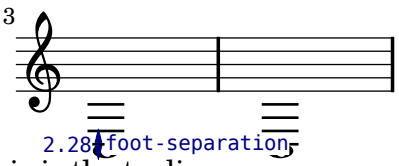


Music engraving by LilyPond 2.12.2—www.lilypond.org

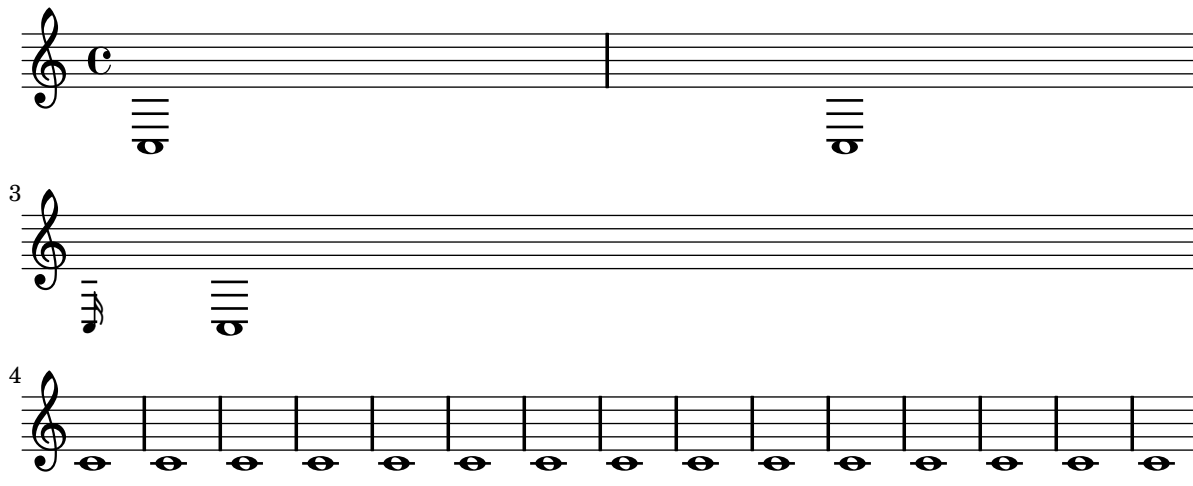
‘page-layout-manual-position.ly’ By setting Y-offset and X-offset for the line-break-system-details of NonMusicalPaperColumn, systems may be placed absolutely on the printable area of the page.



84.22 paper-height

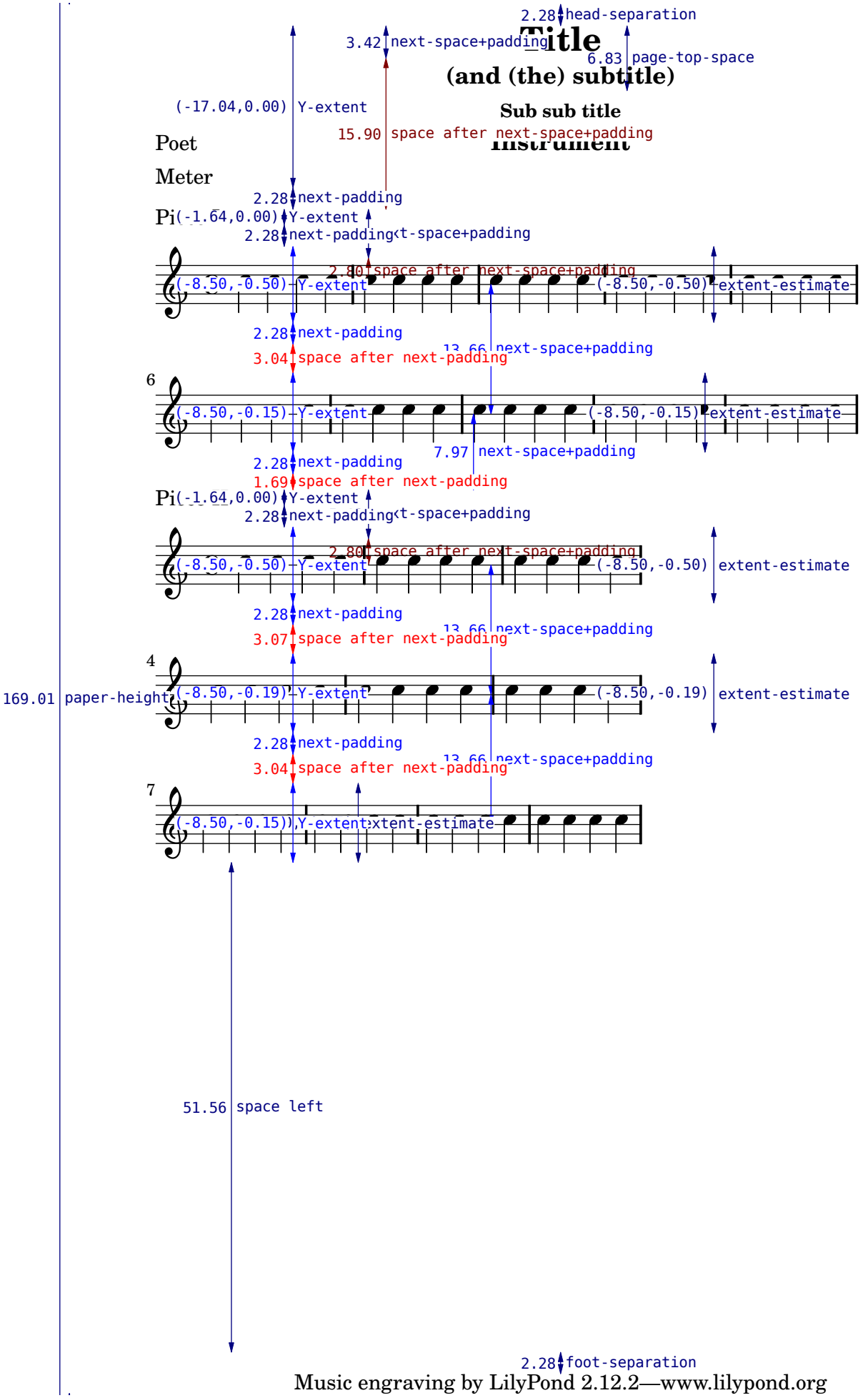


this is the tagline



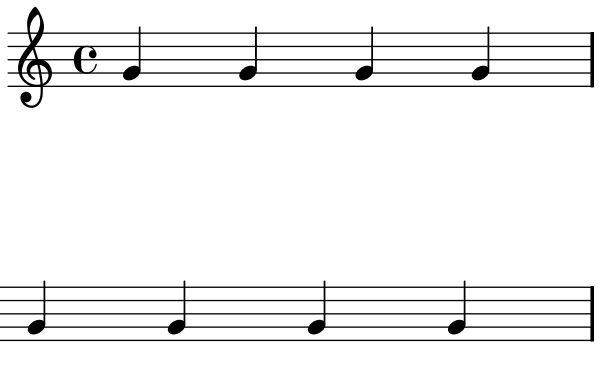
‘`page-layout.ly`’ This shows how different settings on \paper modify the general page layout. Basically \paper will set the values for the whole paper while \layout for each \score block.

This file is best viewed outside the collated files document.


2.28 head-separation
3.42 next-space+padding
Title
6.83 page-top-space
(and (the) subtitle)
(-17.04,0.00) Y-extent
Sub sub title
15.90 space after next-space+padding
Poet
Meter
Pi
Compo
Arran
2.28 next-padding
(-1.64,0.00) Y-extent
2.28 next-padding
t-space+padding
2.80 space after next-space+padding
(-8.50,-0.50) Y-extent
(-8.50,-0.50) extent-estimate
2.28 next-padding
13.66 next-space+padding
3.04 space after next-padding
6
(-8.50,-0.15) Y-extent
(-8.50,-0.15) extent-estimate
7.97 next-space+padding
2.28 next-padding
1.69 space after next-padding
Pi
(-1.64,0.00) Y-extent
2.28 next-padding
t-space+padding
2.80 space after next-space+padding
(-8.50,-0.50) Y-extent
(-8.50,-0.50) extent-estimate
2.28 next-padding
13.66 next-space+padding
3.07 space after next-padding
4
169.01 paper-height
(-8.50,-0.19) Y-extent
(-8.50,-0.19) extent-estimate
2.28 next-padding
13.66 next-space+padding
3.04 space after next-padding
7
(-8.50,-0.15) Y-extent
xtent-estimate
51.56 space left
2.28 foot-separation

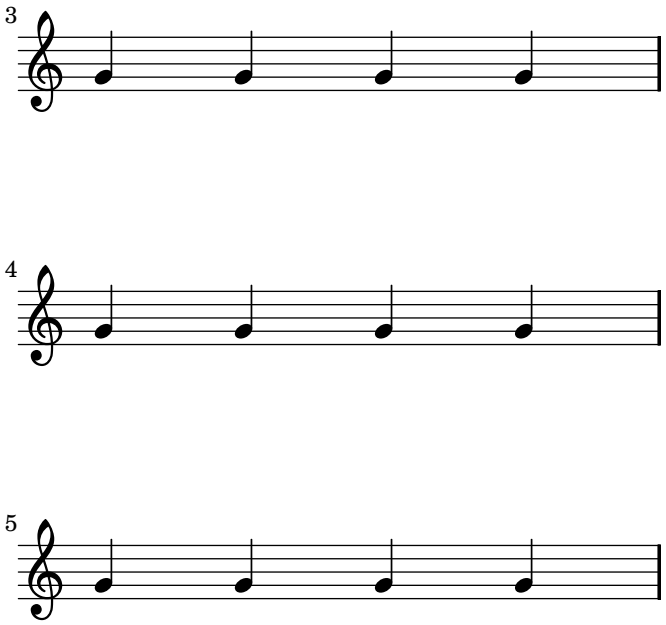
‘page-limited-space.ly’ The space between systems can be limited when there is too much space left on the page by setting page-limit-inter-system-space.

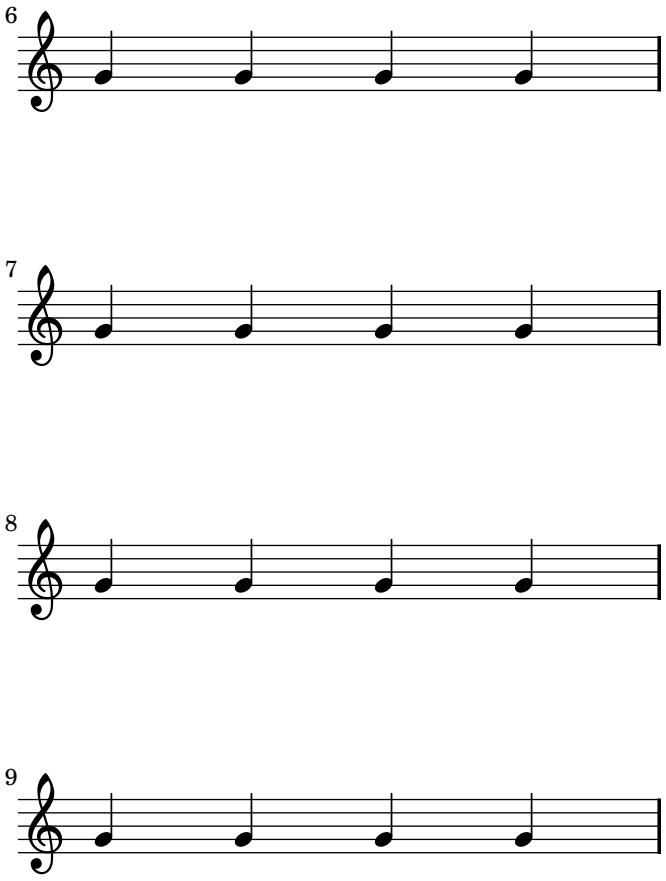
page top 1



2

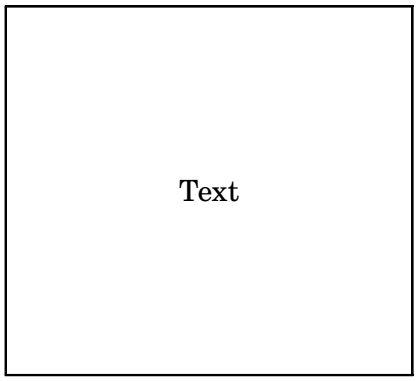
page bottom

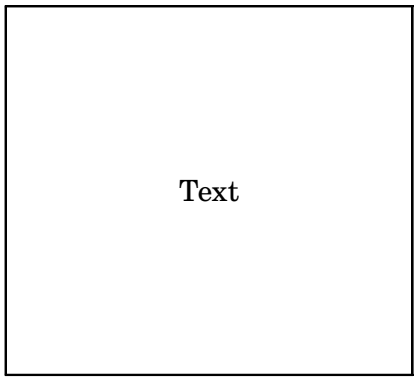

3
4
5



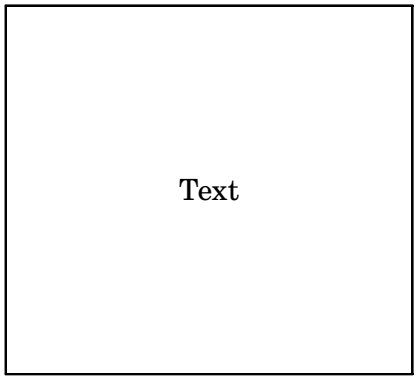
page bottom

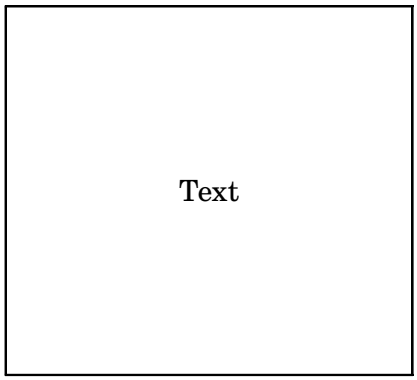
‘`page-minimal-page-breaking-last-page.ly`’ Minimal page breaker: special case when the last system is moved to an other page when there is not enough space because of the tagline.

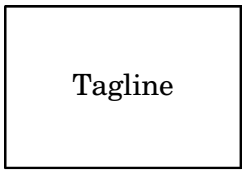




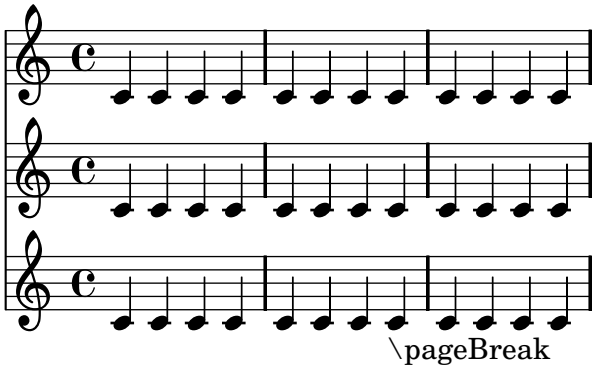
2



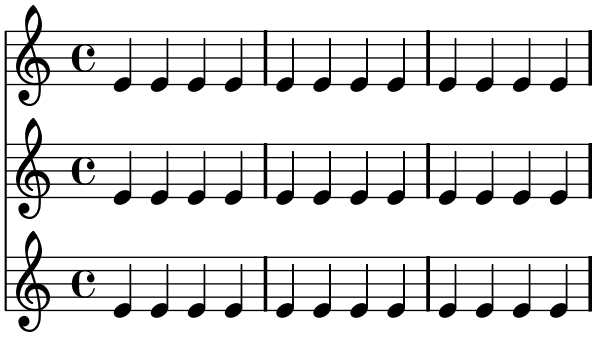




‘`page-minimal-page-breaking.ly`’ The minimal page breaker stacks as many lines on pages, only accounting for manual page break commands.



2



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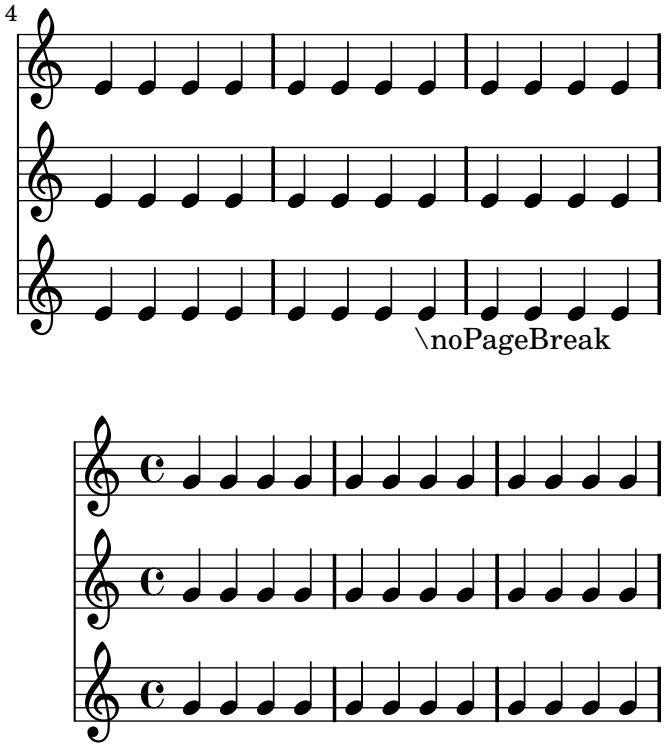


Music engraving by LilyPond 2.12.2—www.lilypond.org

‘`page-spacing.ly`’ By setting properties in NonMusicalPaperColumn, vertical spacing of page layout can be adjusted.

For technical reasons, `overrideProperty` has to be used for setting properties on individual object. `\override` may still be used for global overrides.

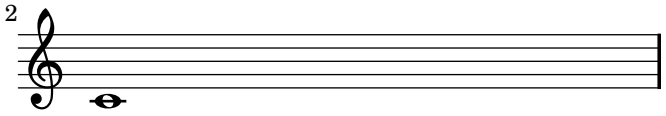
By setting `annotate-spacing`, we can see the effect of each property.


4.14 head-separation
12.42 page-top-space
followed by default spacing
(-19.68,-0.50) Y-extent
(-15.68,-4.50) staff-refpoint-extent
,-0.50) extent-estimate
5.18 next-space+padding
4.14 next-padding
1.33 space after next-padding
8.67 space after next-space+padding
2
(-17.00,-0.12) Y-extent
(-13.00,-4.50) staff-refpoint-extent
,-0.12) extent-estimate
5.18 next-space+padding
4.14 next-padding
8.67 space after next-space+padding
3
Big bounding box (property Y-extent)
(-30.00,10.00) Y-extent
(-15.74,-4.50) staff-refpoint-extent
,-0.06) extent-estimate
5.18 next-space+padding
8.67 space after next-space+padding
4
Refpoints further apart (property refpoint-X-extent).
Stretchable space fills between refpoints
4.14 next-padding
(-23.83,-0.12) Y-extent
(-19.83,-4.50) staff-refpoint-extent
,-0.12) extent-estimate
5.18 next-space+padding
4.14 next-padding
1.33 space after next-padding
8.67 space after next-space+padding
5
Followed by padding, ie unstretchable space. (property next-padding)
(-19.74,-0.12) Y-extent
(-15.74,-4.50) staff-refpoint-extent
,-0.12) extent-estimate
11.04 next-space+padding
10.00 next-padding
1.26 space after next-padding
8.67 space after next-space+padding
307.29 paper-height
6
Followed by stretchable space (property next-space)
(-19.74,-0.06) Y-extent
(-15.74,-4.50) staff-refpoint-extent
,-0.06) extent-estimate
4.14 next-padding
24.14 next-space+padding
52.29 space after next-padding
40.67 space after next-space+padding
7
(-17.00,-0.12) Y-extent
(-13.00,-4.50) staff-refpoint-extent
,-0.12) extent-estimate
5.18 next-space+padding
4.14 next-padding
1.26 space after next-padding
8.67 space after next-space+padding
8
25 staff space to the bottom of the page. (property bottom-space)
(-19.74,-0.06) Y-extent
(-15.74,-4.50) staff-refpoint-extent
extent-estimate
25.00 bo
25.00 space left

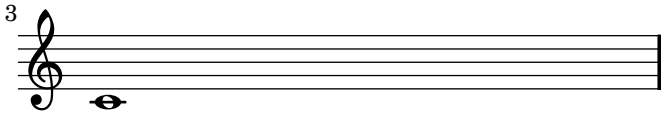
‘page-top-space.ly’ By setting page-top-space, the Y position of the first system can be forced to be uniform.



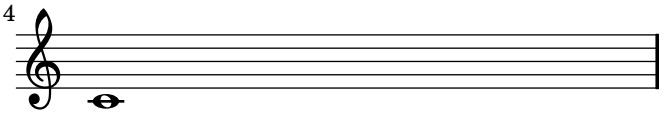
2



3

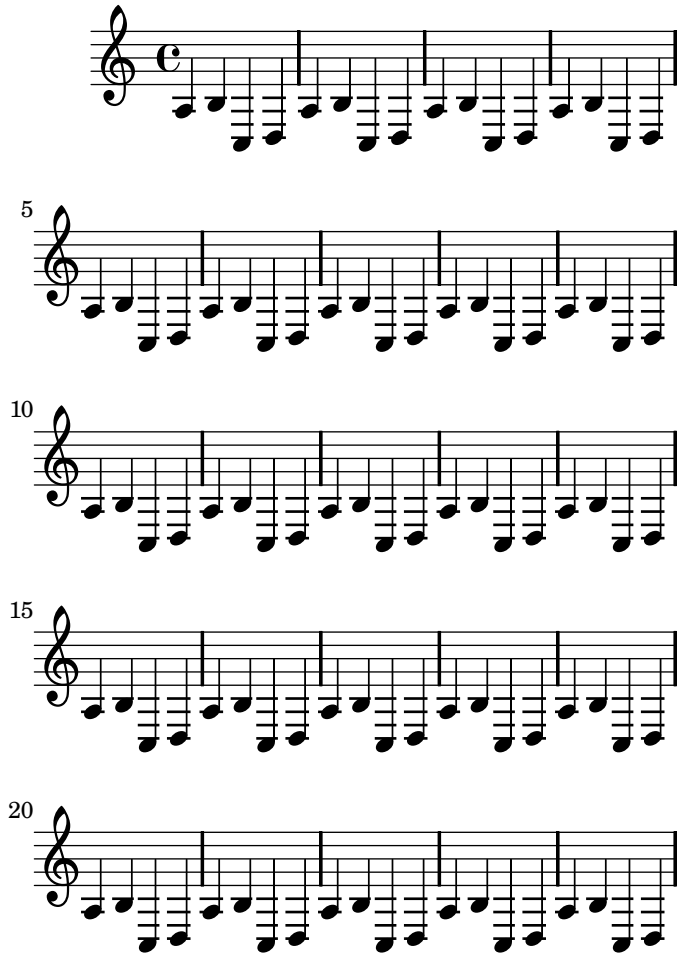


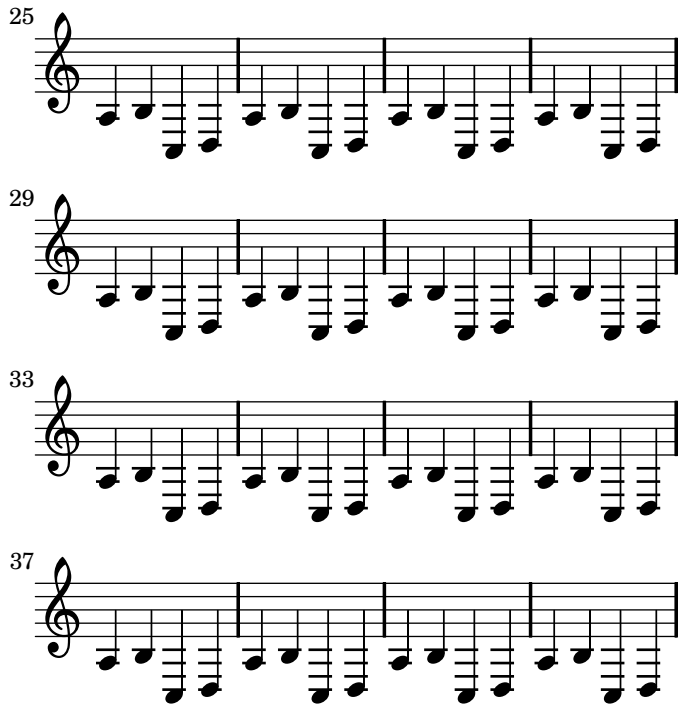
bla



Music engraving by LilyPond 2.12.2—www.lilypond.org

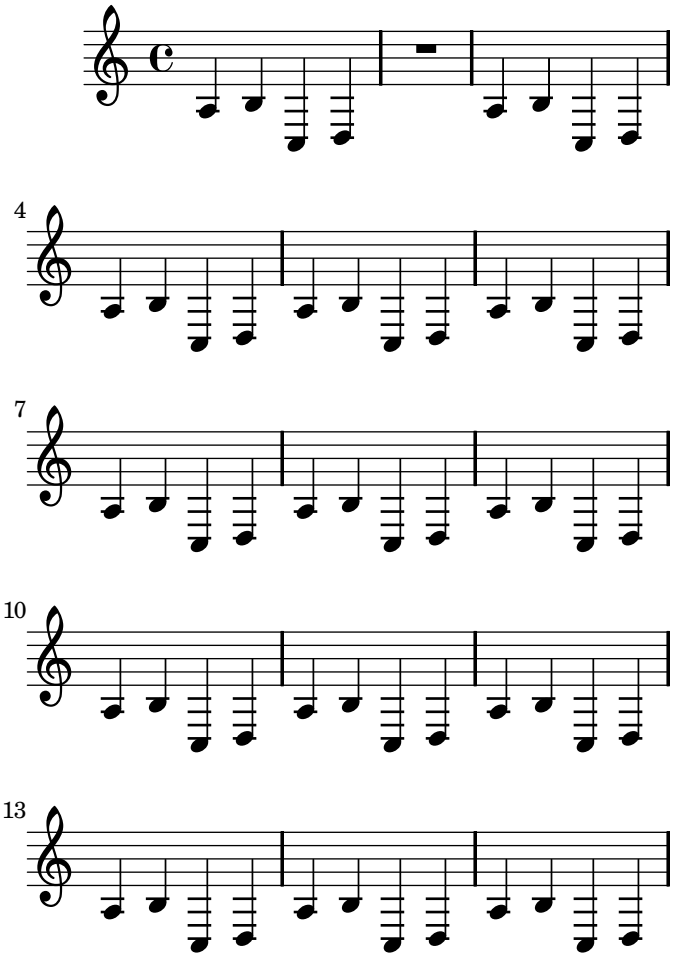
‘`page-turn-page-breaking-auto-first-page.ly`’ By default, we start with page 1, which is on the right hand side of a double page. In this example, auto-first-page-number is set to ##t and the music won’t fit on a single page, so we should automatically set the first page number to 2 in order to avoid a bad page turn.

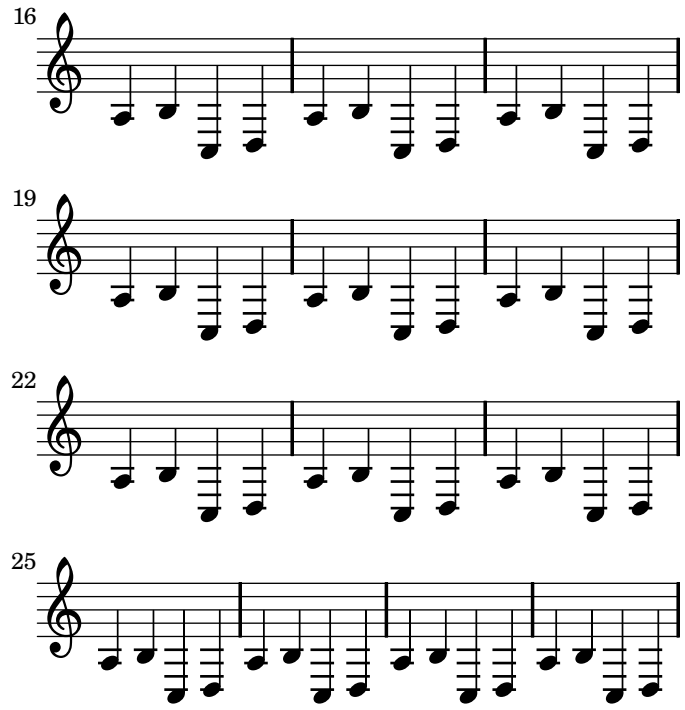

5
10
15
20



Music engraving by LilyPond 2.12.2—www.lilypond.org

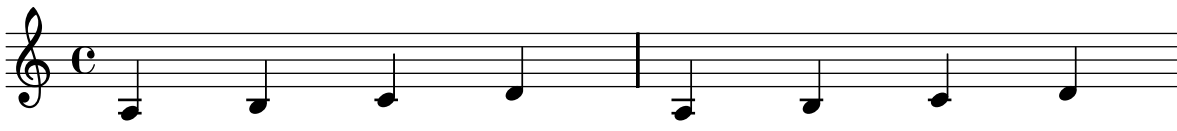
‘`page-turn-page-breaking-auto-first-page2.ly`’ By default, we start with page 1, which is on the right hand side of a double page. In this example, auto-first-page-number is set to ##t. ALthough the music will fit on a single page, it would require stretching the first page badly, so we should automatically set the first page number to 2 in order to avoid a bad page turn.

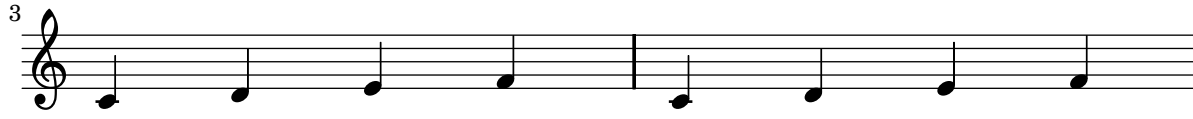

4
7
10
13

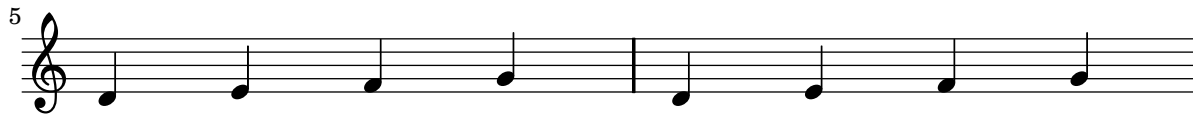


Music engraving by LilyPond 2.12.2—www.lilypond.org

‘`page-turn-page-breaking-badturns.ly`’ If there are no good places to have a page turn, the optimal-breaker will just have to recover gracefully. This should appear on 3 pages.

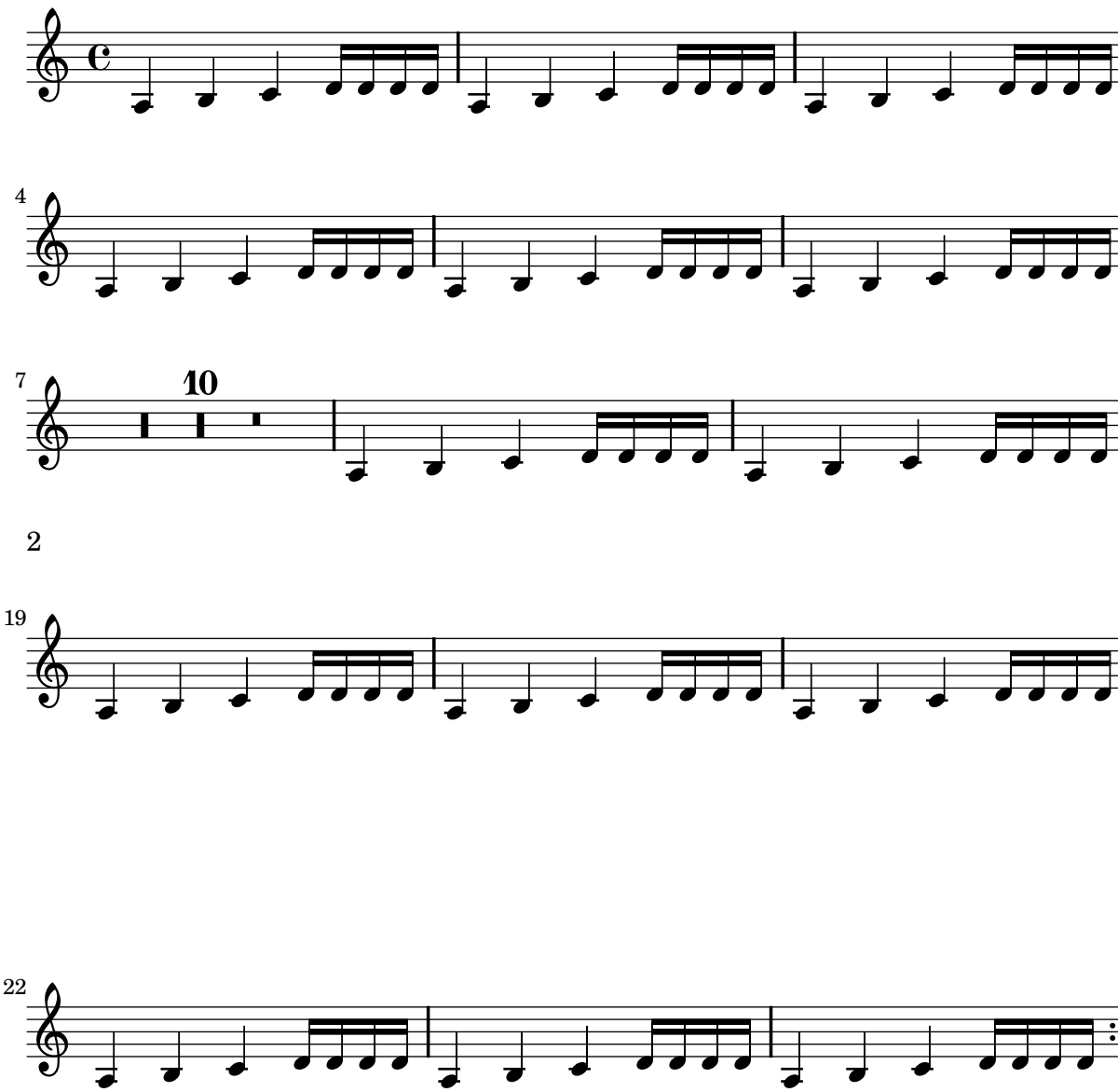


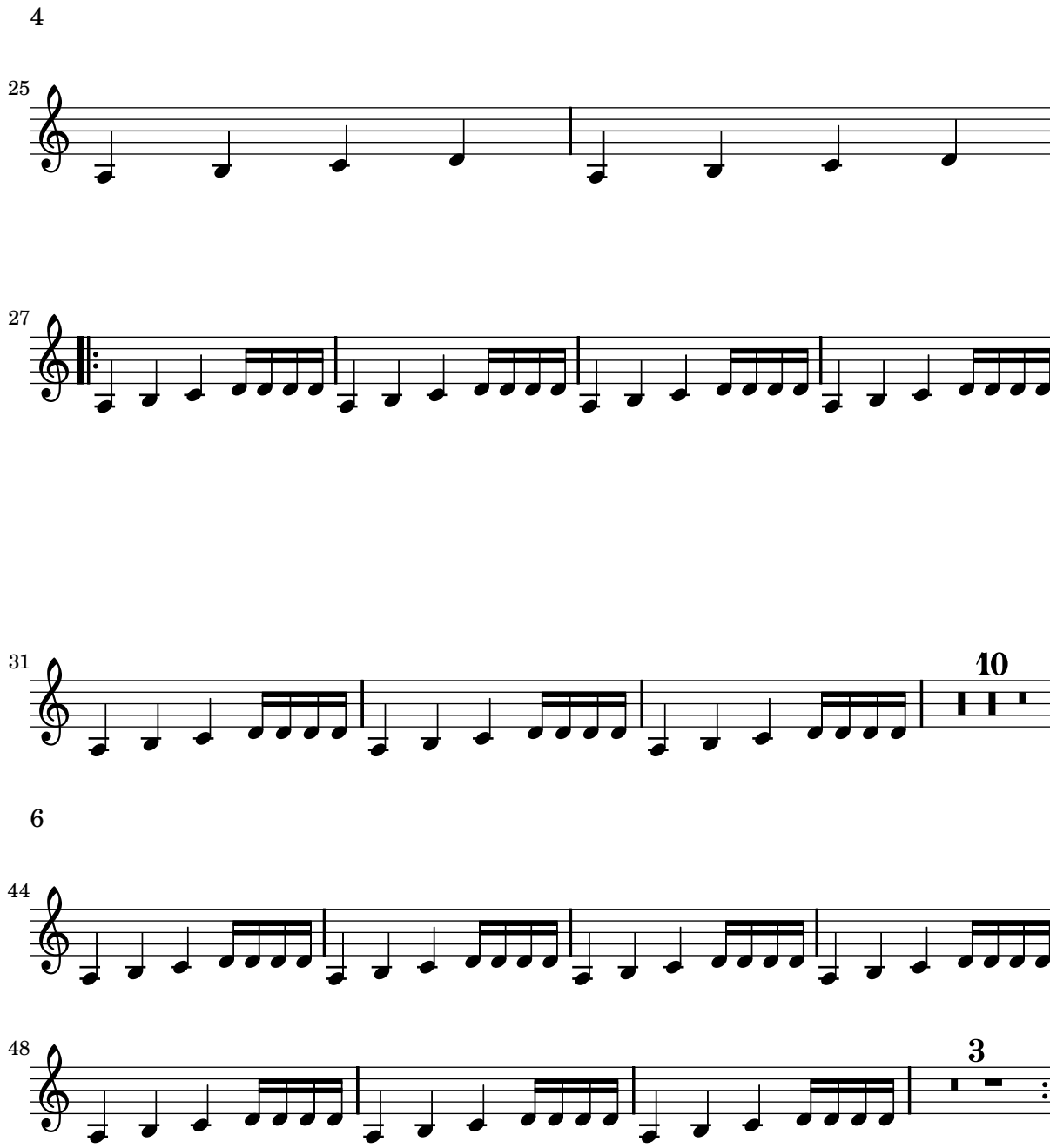




Music engraving by LilyPond 2.12.2—www.lilypond.org

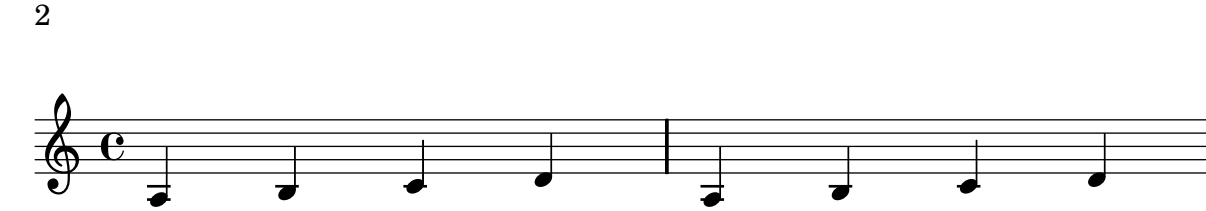
‘`page-turn-page-breaking-repeats.ly`’ The page-turn engraver will not count potential page turns if they occur in the middle of a repeat unless there is a long gap at the beginning or at the end of the repeat.

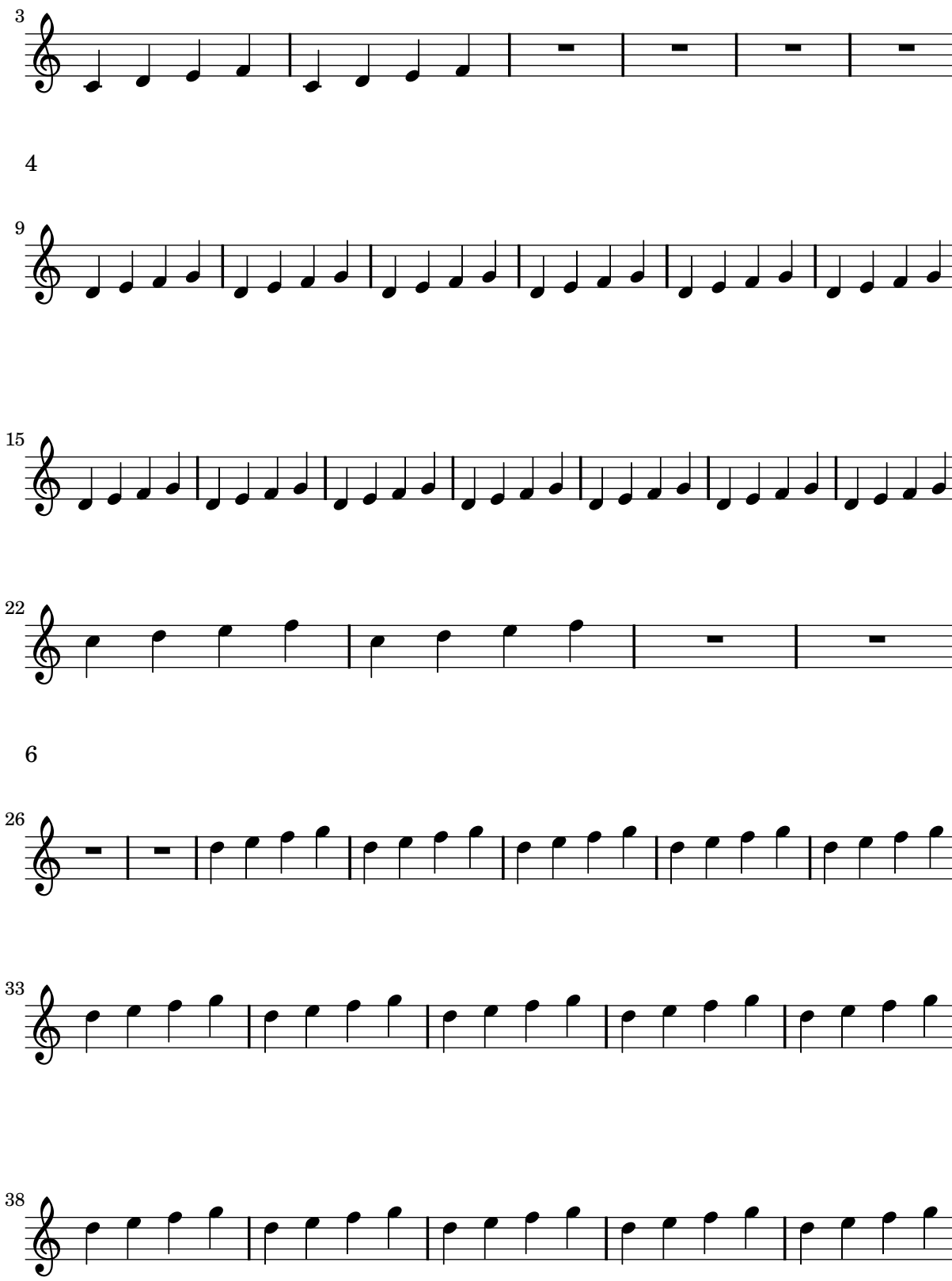




Music engraving by LilyPond 2.12.2—www.lilypond.org

‘`page-turn-page-breaking.ly`’ The page-turn breaker will put a page turn after a rest unless there is a ’special’ barline within the rest, in which case the turn will go after the special barline.

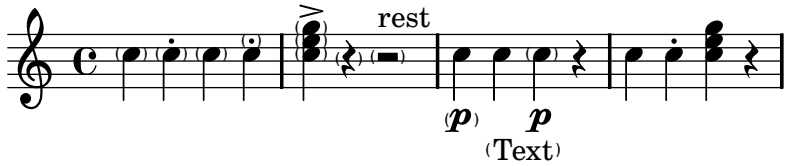




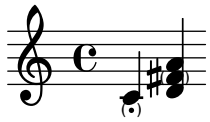
Music engraving by LilyPond 2.12.2—www.lilypond.org

‘`parenthesize-singlenotes-chords-rests.ly`’ The parenthesize function should also work on single notes (not inside chords), rests and on whole chords (each note of the chord is parenthesized). Also, parenthesizing articulations, dynamics and text markup is possible. On all other music expressions, parenthesize does not have an effect.

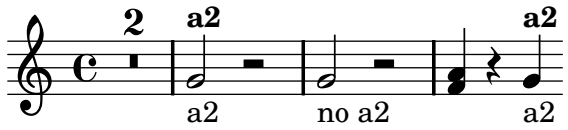
Measure 1: Three parenthesized notes (staccato not parenthesized), one note with staccato in parentheses; Measure 2: Chord and two rests in parentheses (accent and markup not); Measure 3: note (no parentheses) with \p in parentheses, with text in parentheses, and note in parentheses with p not in parentheses, rest (no parentheses); Measure 4: shows that \parenthesize does not apply to other expressions like SequentialMusic



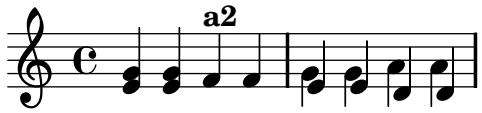
‘`parenthesize.ly`’ The parenthesize function is a special tweak that encloses objects in parentheses. The associated grob is `Score.ParenthesesItem`.



‘`part-combine-a2.ly`’ The a2 string is printed only on notes (i.e. not on rests), and only after chords, solo or polyphony.

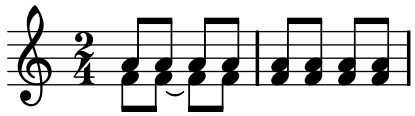


‘`part-combine-cross.ly`’ The part combiner stays apart for crossing voices.

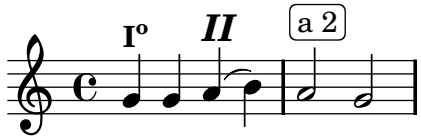


‘`part-combine-global.ly`’ The analysis of the part combiner is non-local: in the following example, the decision for using separate voices in the 1st measure is made on the 2nd note, but influences the 1st note.

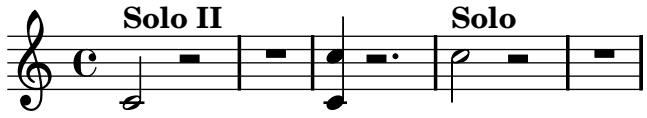
In the 2nd measure, the pattern without the tie, leads to combined voices.



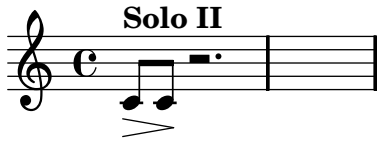
‘`part-combine-markup.ly`’ Part combine texts accept markup.



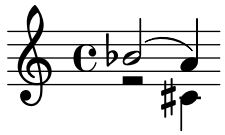
‘part-combine-mmrest-after-solo.ly’ Multimeasure rests are printed after solos, both for solo1 and for solo2.



‘part-combine-solo-end.ly’ SOLO is printed even if the solo voice ends before the other one. Unfortunately, the multi-rest of the 1st voice (which is 2 bars longer than the 2nd voice) does not get printed.



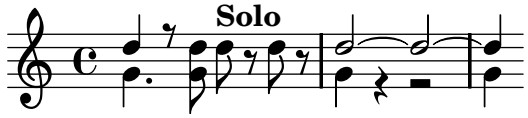
‘part-combine-solo-global.ly’ In this example, solo1 should not be printed over the 1st note, because of the slur which is present from the one-voice to the two-voice situation.



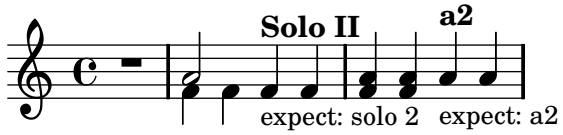
‘part-combine-solo.ly’ A solo string can only be printed when a note starts. Hence, in this example, there is no Solo-2 although the 2nd voice has a dotted quarter, while the first voice has a rest.

A Solo indication is only printed once; (shared) rests do not require reprinting a solo indication.

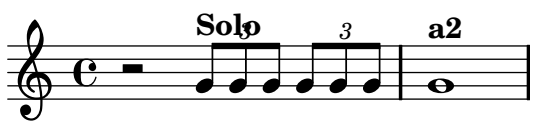
Solo 1/2 can not be used when a spanner is active, so there is no solo over any of the tied notes.



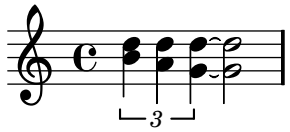
‘part-combine-text.ly’ The part combiner detects a2, solo1 and solo2, and prints texts accordingly.



‘part-combine-tuplet-end.ly’ End tuplets events are sent to the starting context, so even after a switch, a tuplet ends correctly.

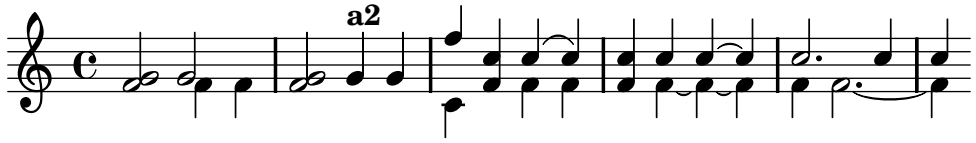


‘part-combine-tuplet-single.ly’ Tuplets in combined parts only print one bracket.



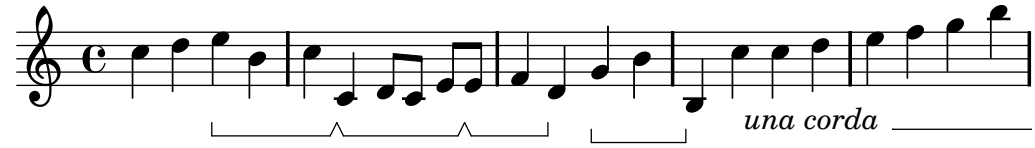
‘`part-combine.ly`’ The new part combiner stays apart from:

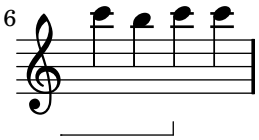
- different durations,
- different articulations (taking into account only slur/beam/tie), and
- wide pitch ranges.



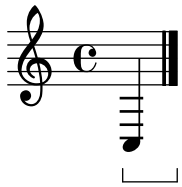
‘`pedal-bracket.ly`’ The brackets of a piano pedal should start and end at the left side of the note. If a note is shared between two brackets, these ends are flared.

At a line-break, there are no vertical endings.

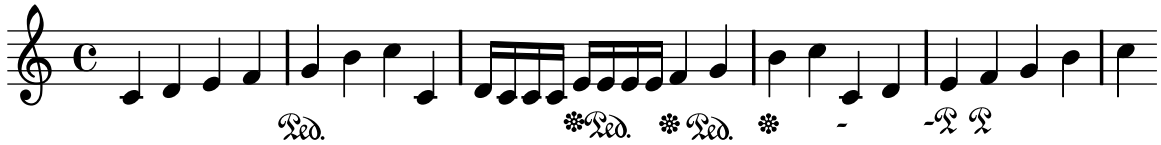




‘`pedal-end.ly`’ Unterminated piano pedal brackets run to the end of the piece.

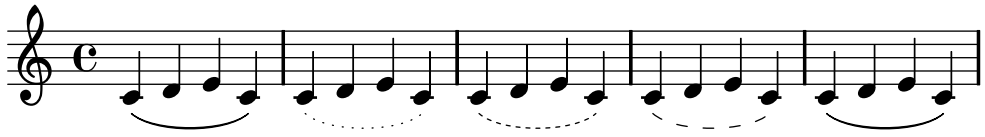


‘`pedal-ped.ly`’ The standard piano pedals style comes with Ped symbols. The pedal string can be also tuned, for example, to a shorter tilde/P variant at the end of the melody.

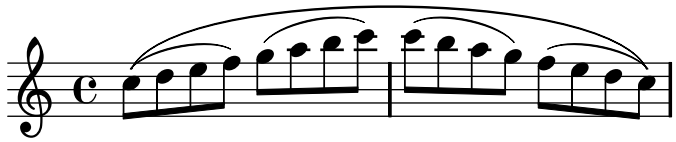


‘`phrasing-slur-dash.ly`’

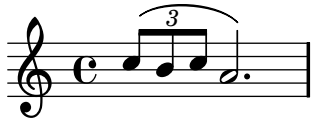
The appearance of phrasing slurs may be changed from solid to dotted or dashed.



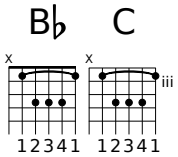
‘`phrasing-slur-slur-avoid.ly`’ `PhrasingSlur`s go over normal slurs.



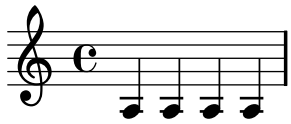
‘phrasing-slur-tuplet.ly’ Phrasing slurs do not collide with tuplet numbers.

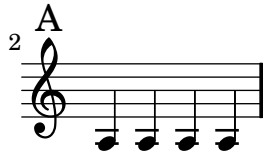


‘predefined-fretboards.ly’

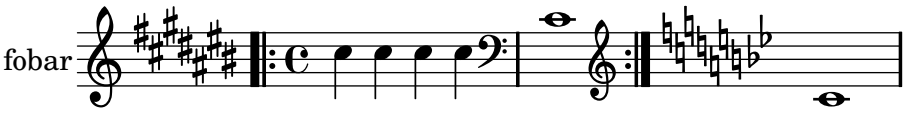


‘prefatory-empty-spacing.ly’ The A is atop an invisible barline. The barline, although invisible, is also translated because it is the last one of the break alignment.





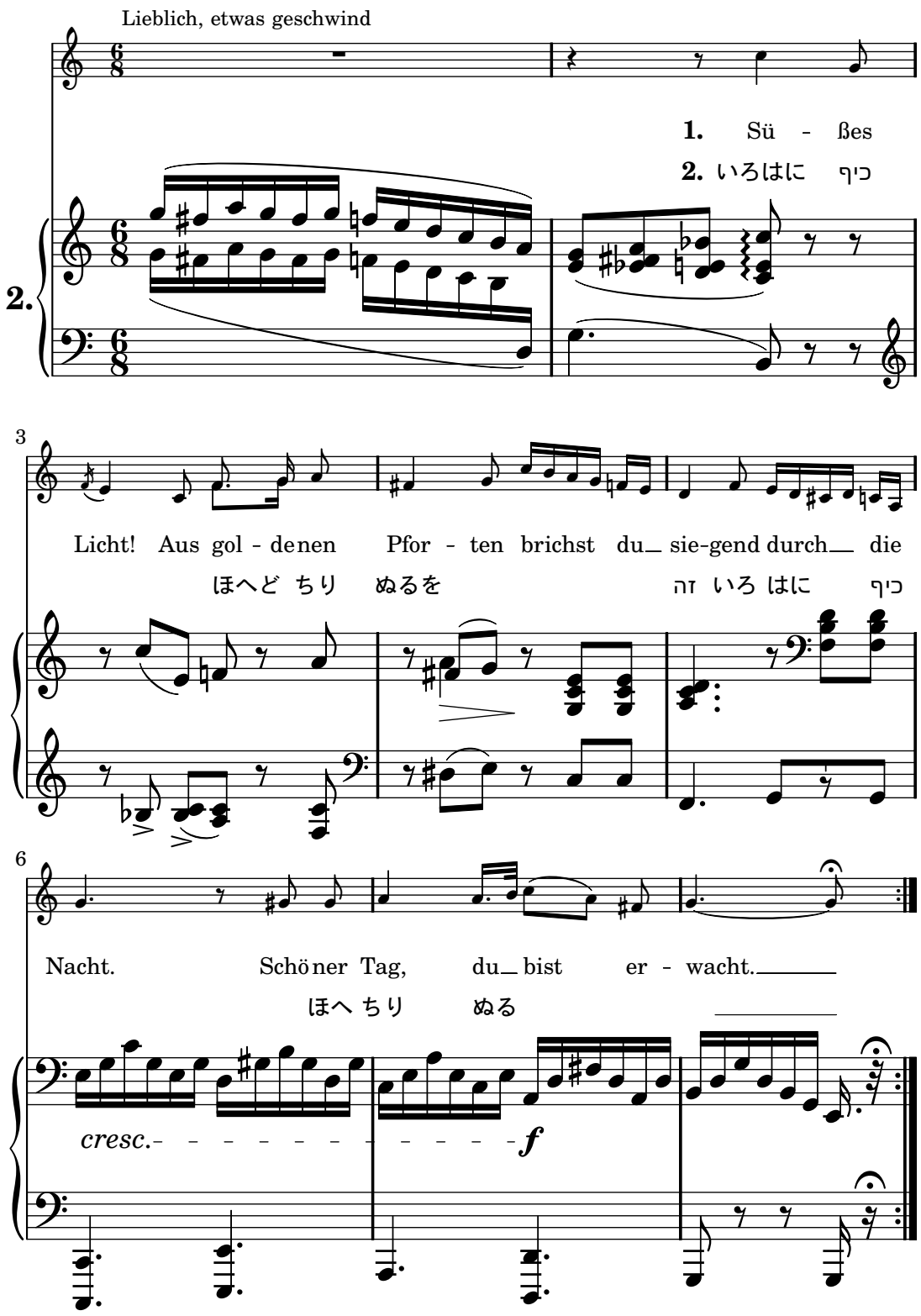
‘prefatory-spacing-matter.ly’ Distances between prefatory items (e.g. clef, bar, etc.) are determined by engraving standards. These distances depend on which items are combined. Mid-line, the order for clef and bar-line is different from the start of line.



‘profile-property-access.ly’

heavily mutilated Edition Peters Morgenlied by Schubert

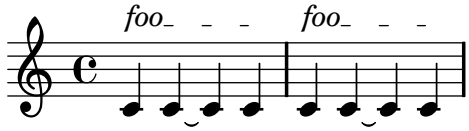
LilyPond demo



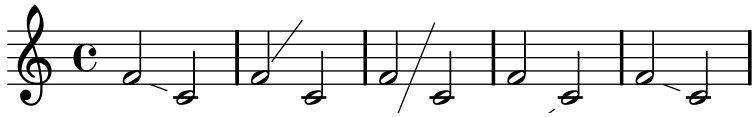
‘property-grace-polyphony.ly’ Property overrides and reverts from \grace do not interfere with the overrides and reverts from polyphony.



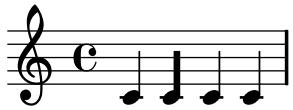
‘property-nested-override.ly’ Nested properties may be overridden using Scheme list syntax. This test performs two property overrides: the first measure uses standard \override syntax; the second uses a list.



‘property-nested-revert.ly’ nested properties may also be reverted. This uses Scheme list syntax.

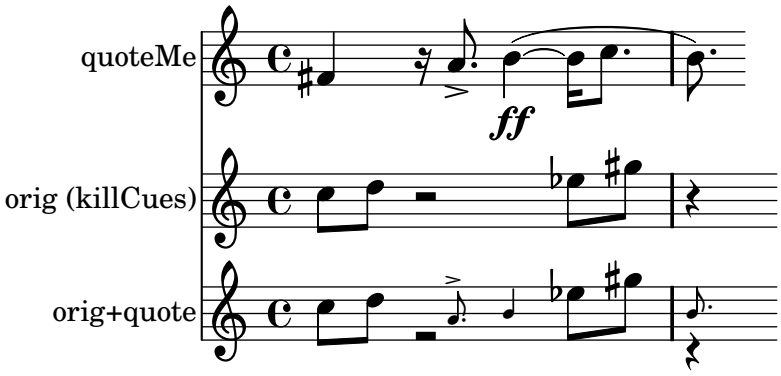


‘property-once.ly’ Once properties take effect during a single time step only.

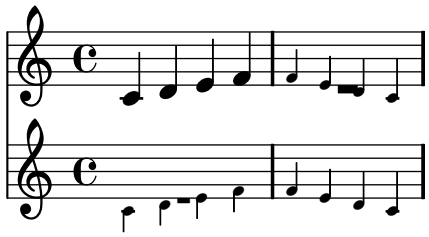


‘quote-cue-during.ly’ The cueDuring form of quotation will set stem directions on both quoted and main voice, and deliver the quoted voice in the cue Voice. The music function \killCues can remove all cue notes.

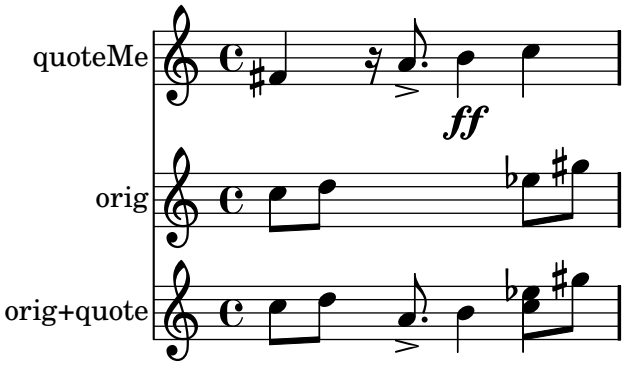
Spanners run to the end of a cue section, and are not started on the last note.



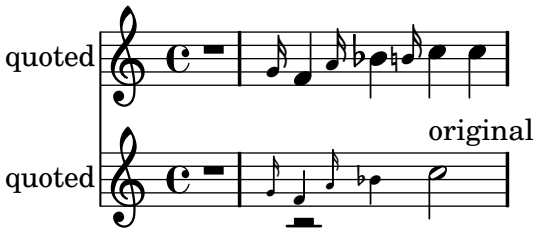
‘quote-cyclic.ly’ Two quoted voices may refer to each other. In this example, there are notes with each full-bar rest.



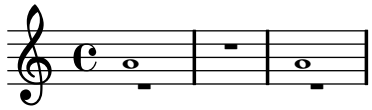
‘quote-during.ly’ With `\cueDuring` and `\quoteDuring`, fragments of previously entered music may be quoted. `quotedEventTypes` will determines what things are quoted. In this example, a 16th rest is not quoted, since `rest-event` is not in `quotedEventTypes`.



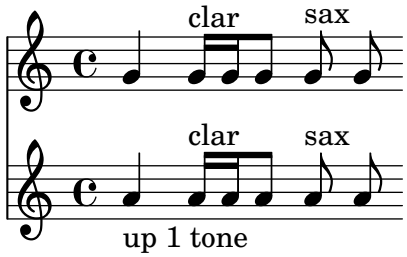
‘quote-grace.ly’ Quotes may contain grace notes. The grace note leading up to an unquoted note is not quoted.



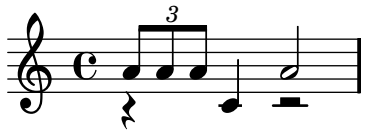
‘quote-tie.ly’ Voices from different cues must not be tied together. In this example, the first note has a tie. This note should not be tied to the 2nd note.



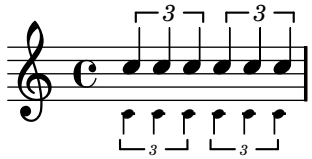
‘quote-transposition.ly’ Quotations take into account the transposition of both source and target. In this example, all instruments play sounding central C, the target is a instrument in F. The target part may be `\transpose`d. In this case, all the pitches (including the quoted ones) will transposed as well.



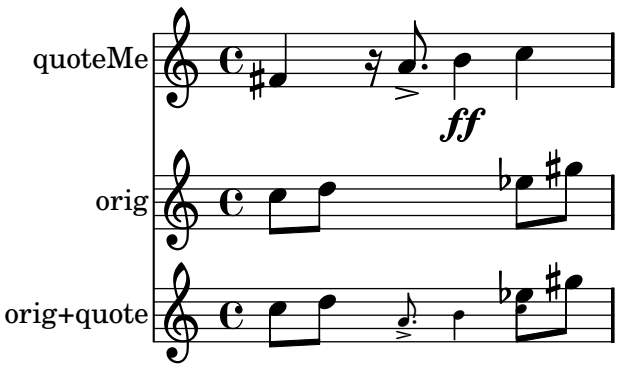
‘quote-tuplet-end.ly’ Tuplet bracket ends properly when quoting.



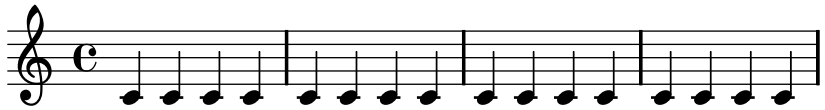
‘`quote-tuplet.ly`’ In cue notes, Tuplet stops are handled before new tuplets start.



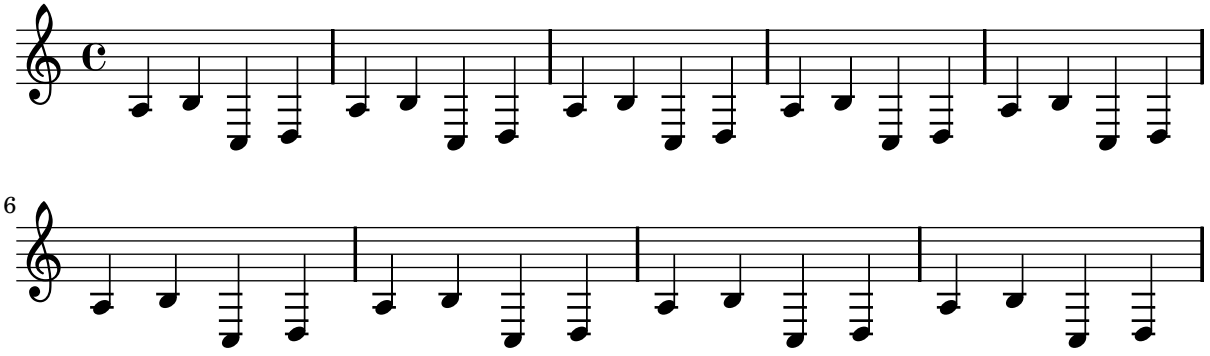
‘`quote.ly`’ With `\quote`, fragments of previously entered music may be quoted. `quotedEventTypes` will determines what things are quoted. In this example, a 16th rest is not quoted, since `rest-event` is not in `quotedEventTypes`.



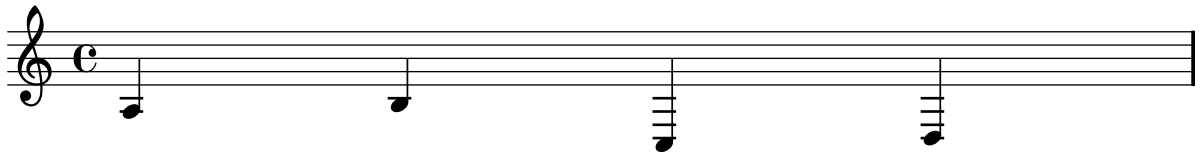
‘`ragged-bottom-one-page.ly`’ For a one-page score, ragged-bottom should have the same effect as ragged-last-bottom.



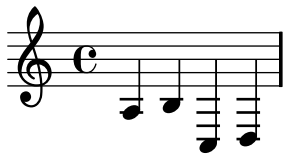
‘`ragged-right-compressed.ly`’ When a score takes up only a single line and it is compressed, it is not printed as ragged.



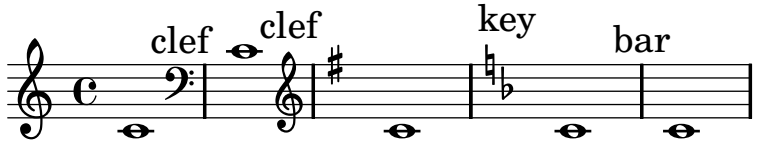
‘`ragged-right-disabled.ly`’ When ragged-right is specifically disabled, a score with only one line will not be printed as ragged.



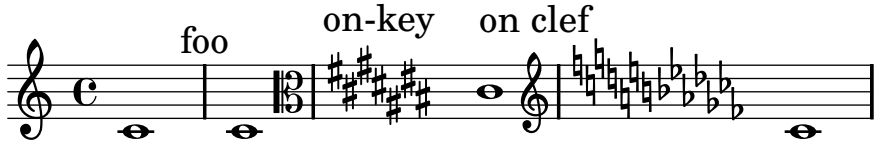
‘ragged-right-one-line.ly’ When a score takes up only a single line and it is stretched, it is printed as ragged by default.



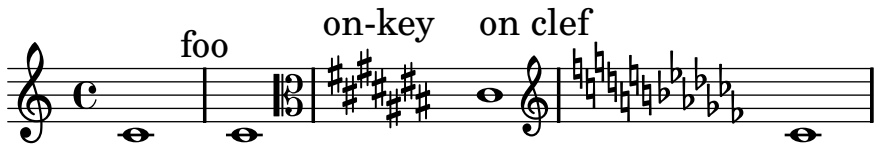
‘rehearsal-mark-align-priority.ly’ When the break-align-symbols property is given as a list, the alignment depends on which symbols are visible.



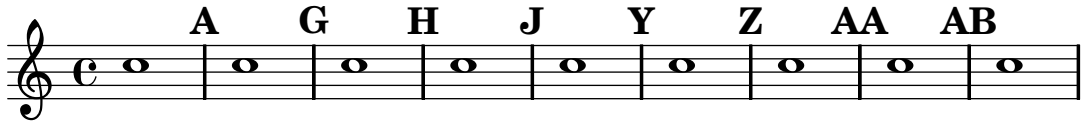
‘rehearsal-mark-align-staff-context.ly’ RehearsalMarks still align correctly if Mark_engraver is moved to another context.



‘rehearsal-mark-align.ly’ The rehearsal mark is put on top a breakable symbol, according to the value of `break-align-symbols` value of the `RehearsalMark`. The same holds for `BarNumber` grobs.

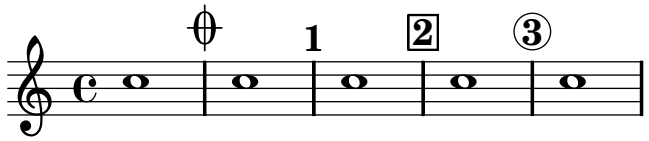


‘rehearsal-mark-letter.ly’ Rehearsal marks in letter style: the I is skipped, and after Z, double letters are used. The mark may be set with `\mark NUMBER`, or with `Score.rehearsalMark`.

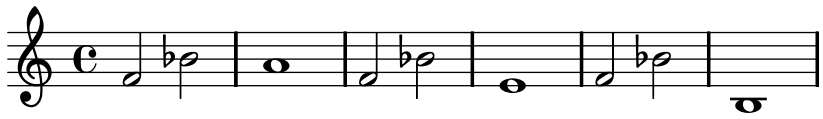


‘rehearsal-mark-number.ly’

Marks can be printed as numbers. By setting `markFormatter` we may choose a different style of mark printing. Also, marks can be specified manually, with a markup argument.

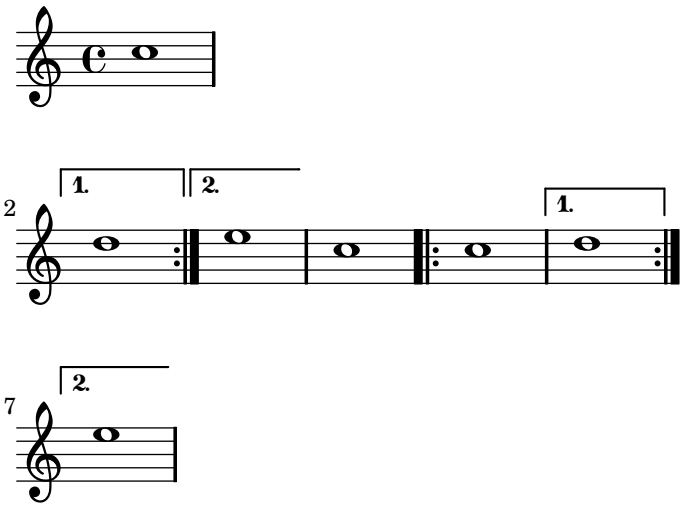


‘relative-repeat.ly’ Relative mode for repeats uses order of entry.



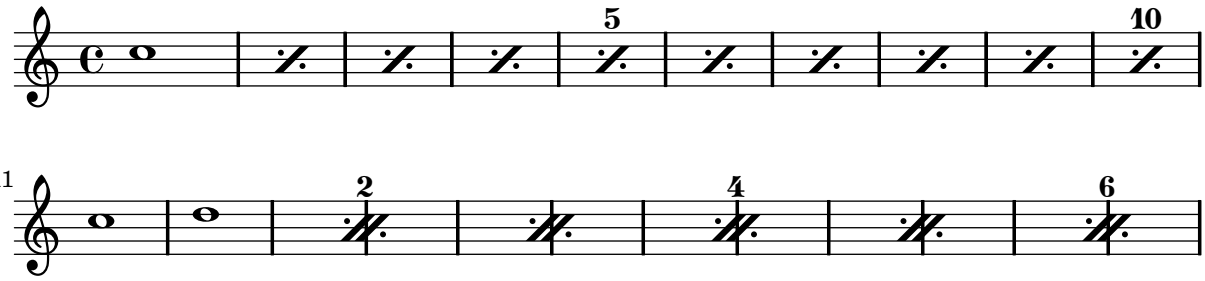
‘repeat-line-break.ly’

Across linebreaks, the left edge of a first and second alternative bracket should be equal.

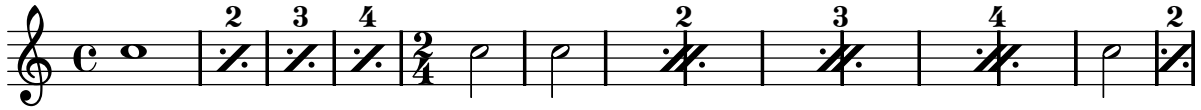


‘repeat-percent-count-visibility.ly’

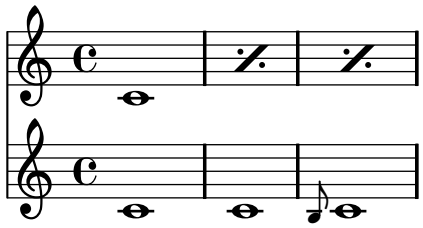
Percent repeat counters can be shown at regular intervals by setting `repeatCountVisibility`.



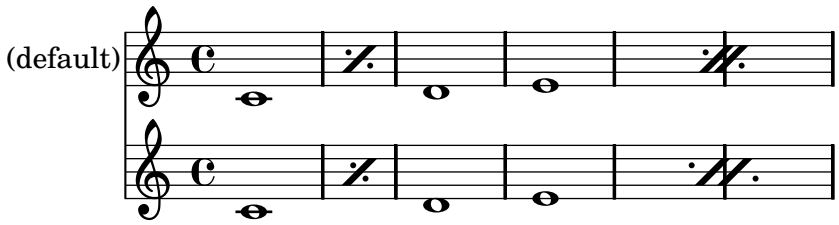
‘repeat-percent-count.ly’ Percent repeats get incremental numbers when `countPercentRepeats` is set, to indicate the repeat counts, but only if there are more than two repeats.



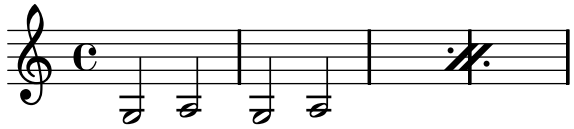
‘repeat-percent-grace.ly’ Percent repeats are also centered when there is a grace note in a parallel staff.



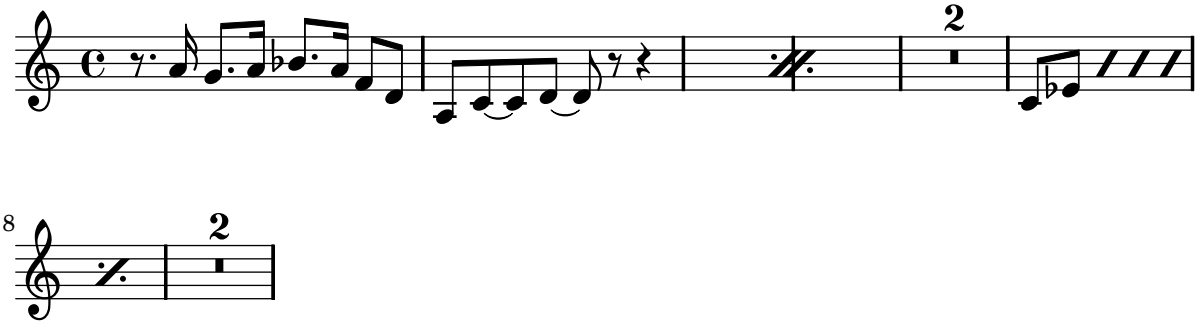
‘`repeat-percent-kerning.ly`’ The positioning of dots and slashes in percent repeat glyphs can be altered using `dot-negative-kern` and `slash-negative-kern`.



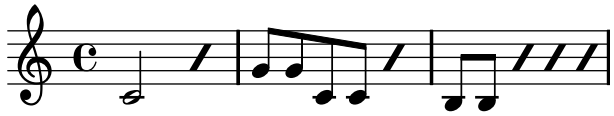
‘`repeat-percent-skipbars.ly`’ Percent repeats are not skipped, even when `skipBars` is set.



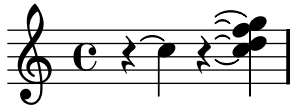
‘`repeat-percent.ly`’ Measure repeats may be nested with beat repeats.



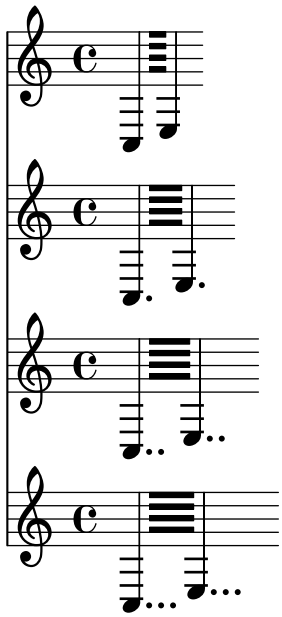
‘`repeat-slash.ly`’ Within a bar, beat repeats denote that a music snippet should be played again.



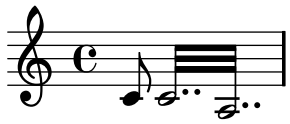
‘`repeat-tie.ly`’ Repeat ties are only connected on the right side to a note head.



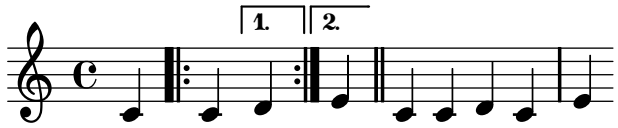
‘`repeat-tremolo-beams.ly`’ Each of the staves here should have four tremolo beams.



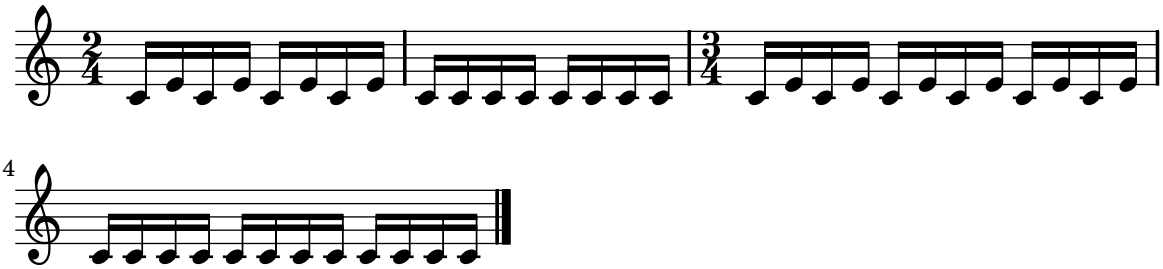
‘`repeat-tremolo-dots.ly`’ Dots are added to tremolo notes if the durations involved require them.



‘`repeat-unfold-all.ly`’ Volta repeats may be unfolded through the music function `\unfoldRepeats`.

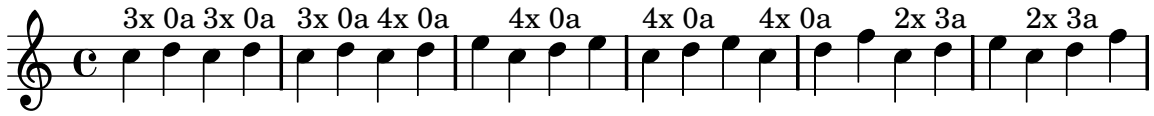


‘`repeat-unfold-tremolo.ly`’ Unfolding tremolo repeats. All fragments fill one measure with 16th notes exactly.

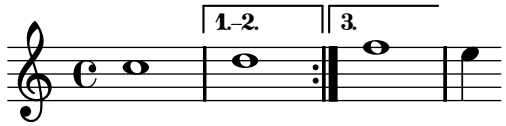


‘`repeat-unfold.ly`’ LilyPond has two modes for repeats: unfolded and semi-unfolded. Unfolded repeats are fully written out. Semi unfolded repeats have the body written and all alternatives sequentially. If the number of alternatives is larger than the repeat count, the excess alternatives are ignored. If the number of alternatives is smaller, the first alternative is multiplied to get to the number of repeats.

Unfolded behavior:

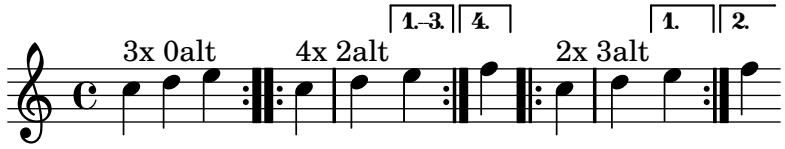


‘repeat-volta-skip-alternatives.ly’ When too few alternatives are present, the first alternative is repeated, by printing a range for the 1st repeat.

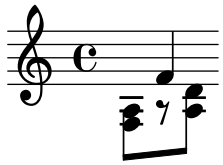


‘repeat-volta.ly’

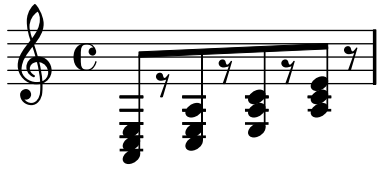
Volta (Semi folded) behavior. Voltas can start on non-barline moments. If they don’t barlines should still be shown.



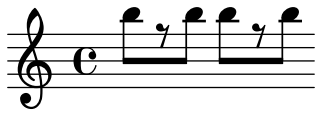
‘rest-collision-beam-note.ly’ Beam/rest collision resolution and normal rest/note collisions can be combined.



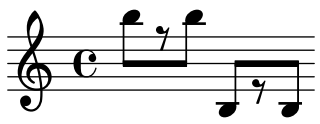
‘rest-collision-beam-quantized.ly’ Rests under beams are moved by whole staff spaces.



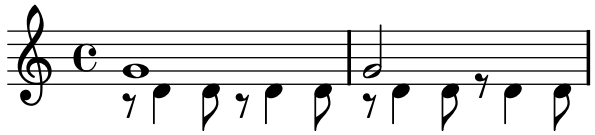
‘rest-collision-beam-restdir.ly’ Beam/rest collision takes offset due to `Rest #'direction` into account properly.



‘rest-collision-beam.ly’ Rests under beams are shifted upon collision.

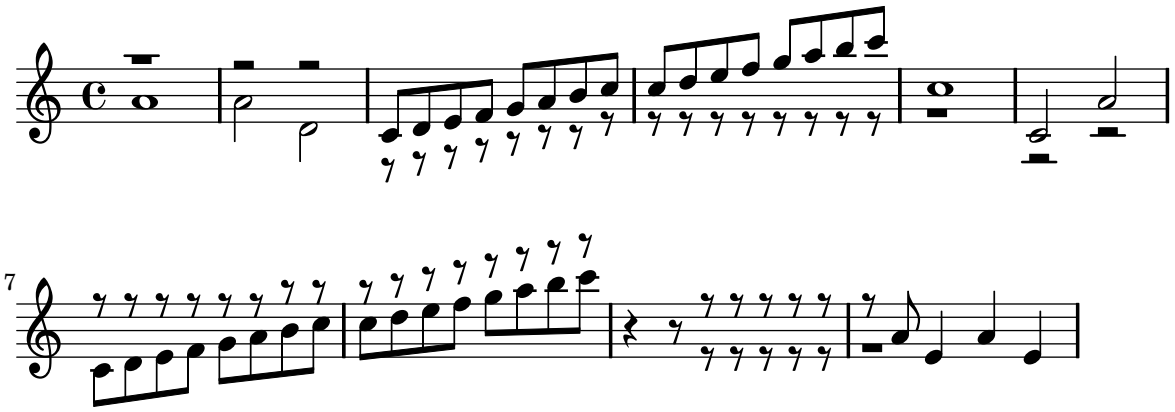


‘rest-collision-note-duration.ly’ Vertical rest positions in a multi-voice staff should obey the duration of notes; this is, they shouldn’t return to a default position too early.

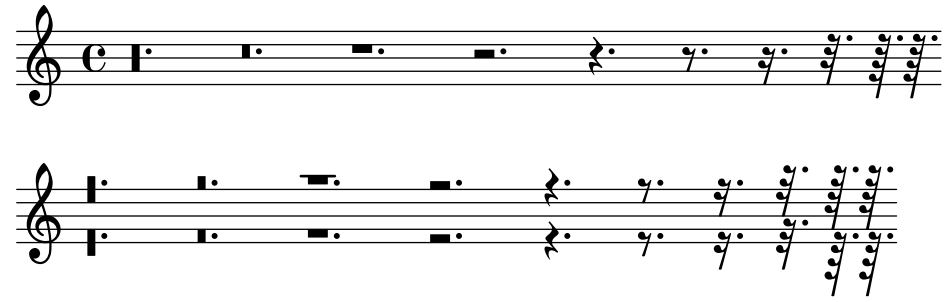


‘rest-collision.ly’

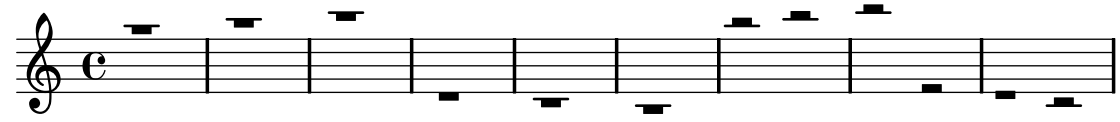
Rests should not collide with beams, stems and noteheads. Rests may be under beams. Rests should be move by integral number of spaces inside the staff, and by half spaces outside. Notice that the half and whole rests just outside the staff get ledger lines in different cases.



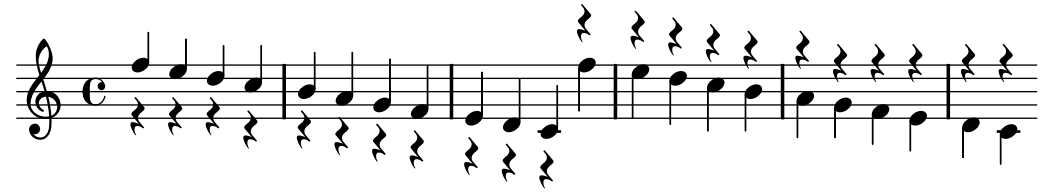
‘rest-dot-position.ly’ Dots of rests should follow the rest positions.



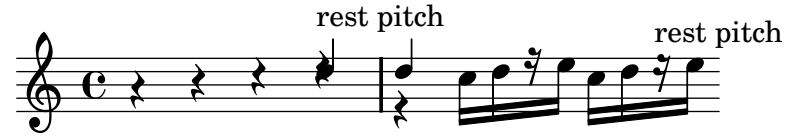
‘rest-ledger.ly’ Whole and half rests moving outside the staff should get ledger lines.



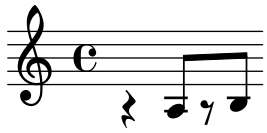
‘rest-note-collision.ly’ In rest-note collisions, the rest moves in discrete steps, and inside the staff, it moves in whole staff spaces.



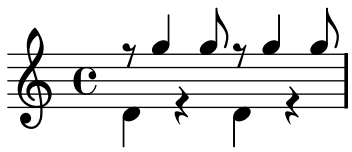
‘rest-pitch.ly’ Rests can have pitches–these will be affected by transposition and relativization. If a rest has a pitch, rest/rest and beam/rest collision resolving will leave it alone.



‘rest-pitched-beam.ly’ Pitched rests under beams.

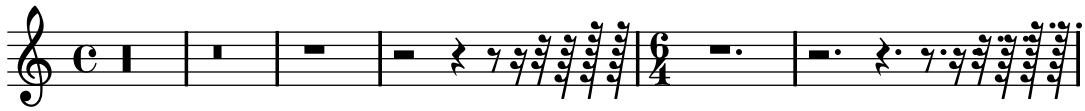


‘rest-polyphonic.ly’ In polyphonic situations, rests are moved down even if there is no opposite note or rest. The amount is two staff-spaces.



‘rest.ly’

There is a big variety of rests. Note that the dot of 8th, 16th and 32nd rests rest should be next to the top of the rest. All rests except the whole rest are centered on the middle staff line.



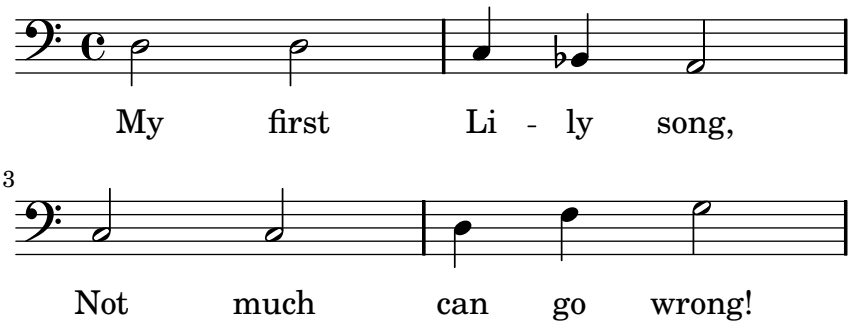
‘rhythmic-staff.ly’ In rhythmic staves stems should go up, and bar lines have the size for a 5 line staff. The whole rest hangs from the rhythmic staff.



‘safe.ly’ This should not survive lilypond –safe-mode

‘score-text.ly’ Markup texts are rendered above or below a score.

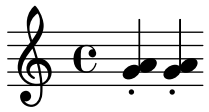
High up above



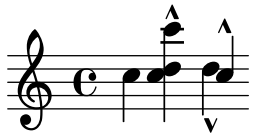
2. My next Li-ly verse
   Now it's getting worse!

3. My last Li-ly text
   See what will be next!

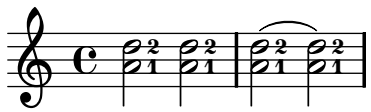
‘`script-center-seconds.ly`’ Scripts on chords with seconds remain centered on the extremal note head



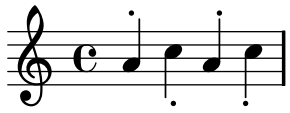
‘`script-collision.ly`’ Scripts are put on the utmost head, so they are positioned correctly when there are collisions.



‘`script-horizontal-slur.ly`’ Horizontal scripts don’t have `avoid-slur` set.

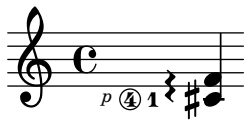


‘`script-shift.ly`’ The `toward-stem-shift` property controls the precise horizontal location of scripts that are placed above an upstem or below a downstem note (`0.0` means centered on the note head, `1.0` means centered on the stem).

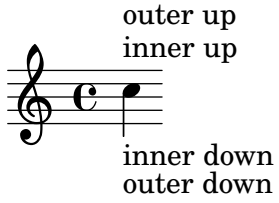


‘`script-stack-horizontal.ly`’ horizontal scripts are ordered, so they do not overlap. The order may be set with script-priority.

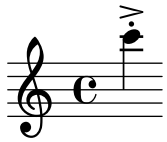
The scripts should not be folded under the time signature.



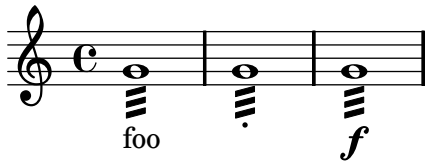
‘`script-stack-order.ly`’ Scripts can be stacked. The order is determined by a priority field, but when objects have the same priority, the input order determines the order. Objects specified first are closest to the note.



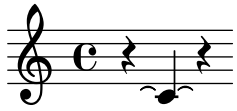
‘`script-stacked.ly`’ Scripts may be stacked.



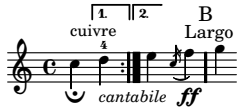
‘script-stem-tremolo.ly’ Scripts avoid stem tremolos even if there is no visible stem.



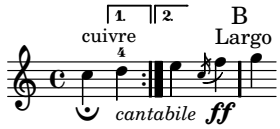
‘semi-tie-manual-direction.ly’ Semi tie directions may be forced from the input.



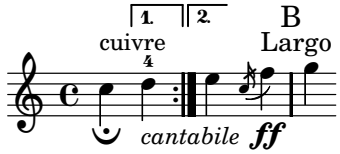
‘size11.ly’
Different text styles are used for various purposes.



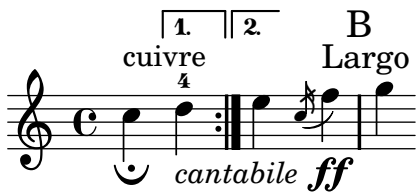
‘size13.ly’
Different text styles are used for various purposes.



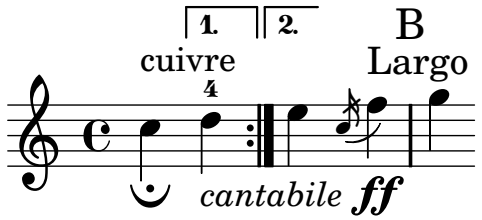
‘size16.ly’
Different text styles are used for various purposes.



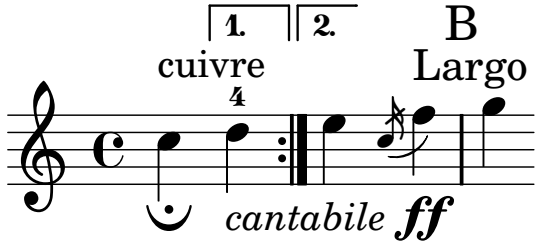
‘size20.ly’
Different text styles are used for various purposes.



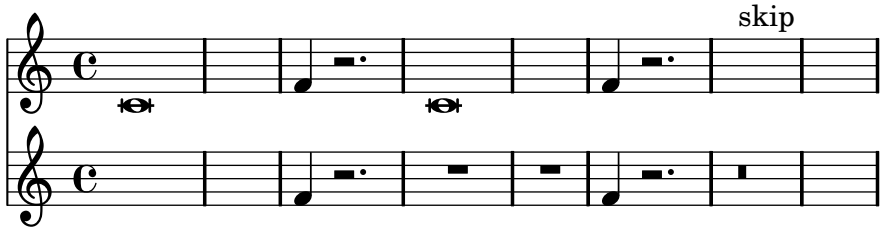
‘size23.ly’
Different text styles are used for various purposes.



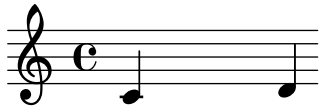
‘size26.ly’
Different text styles are used for various purposes.



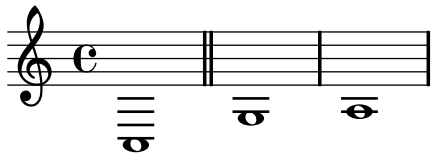
‘skip-of-length.ly’ skip-of-length and mmrest-of-length create skips and rests that last as long as their arguments.



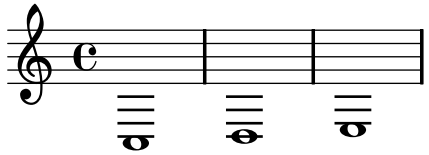
‘skiptypesetting-bar-check.ly’ skipTypesetting doesn’t affect bar checks.



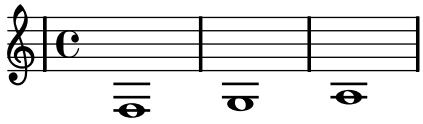
‘skiptypesetting-show-first-and-last.ly’ showFirstLength and showLastLength may be set at the same time; both the beginning and the end of the score will be printed.



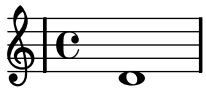
‘skiptypesetting-show-first.ly’ showFirstLength will only show the first bit of a score

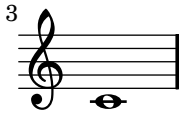


‘skiptypesetting-show-last.ly’ showLastLength will only show the last bit of a score

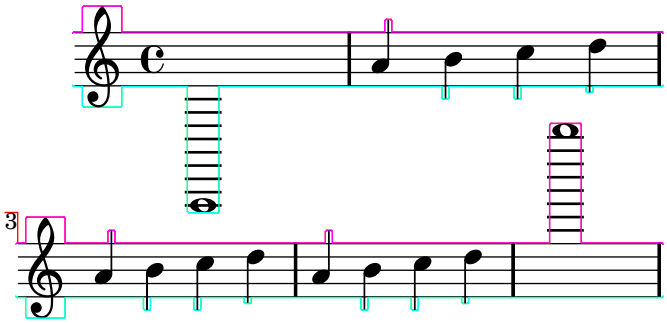


‘`skiptypesetting-tuplet.ly`’ Tuplet brackets are also skipped with `skipTypesetting`.

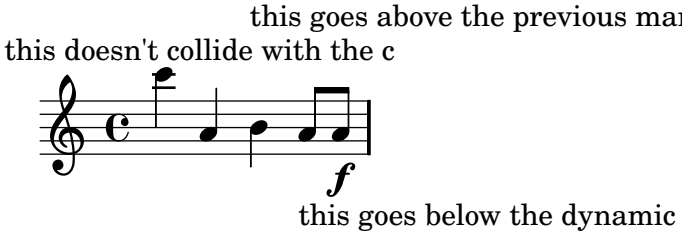




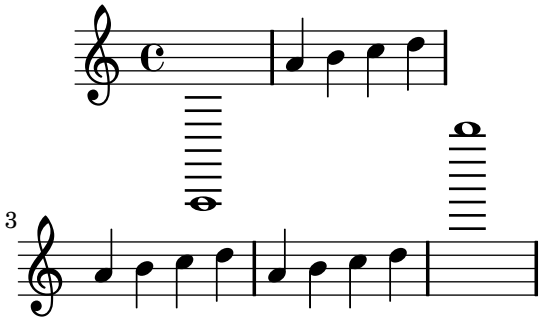
‘`skyline-debug.ly`’ `-ddebug-skyline` draws the outline of the skyline used.



‘`skyline-vertical-placement.ly`’ Grobs that have outside-staff-priority set are positioned using a skyline algorithm so that they don’t collide with other objects.



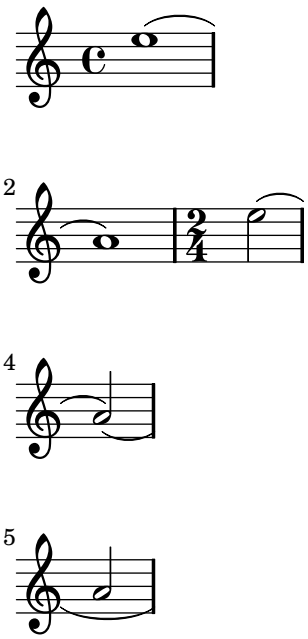
‘`skyline-vertical-spacing.ly`’ We use a skyline algorithm to determine the distance to the next system instead of relying only on bounding boxes. This keeps gaps between systems more uniform.

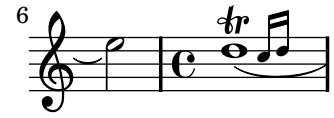


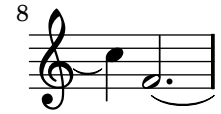
Music engraving by LilyPond 2.12.2—www.lilypond.org

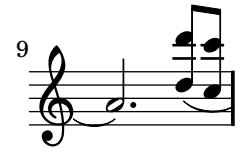
‘slur-broken-trend.ly’

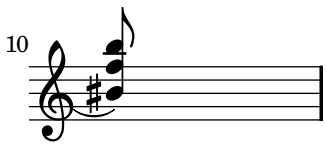
Across line breaks, slurs behave nicely. On the left, they extend to just after the preferatory matter, and on the right to the end of the staff. A slur should follow the same vertical direction it would have in unbroken state.

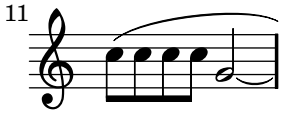




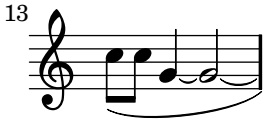


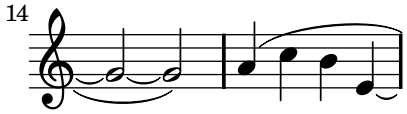


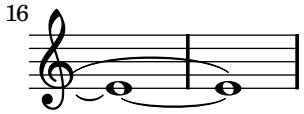




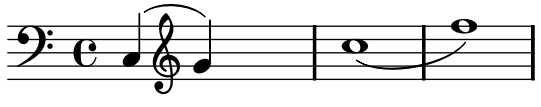




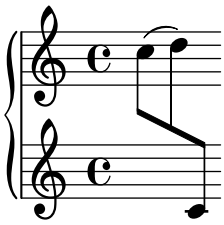




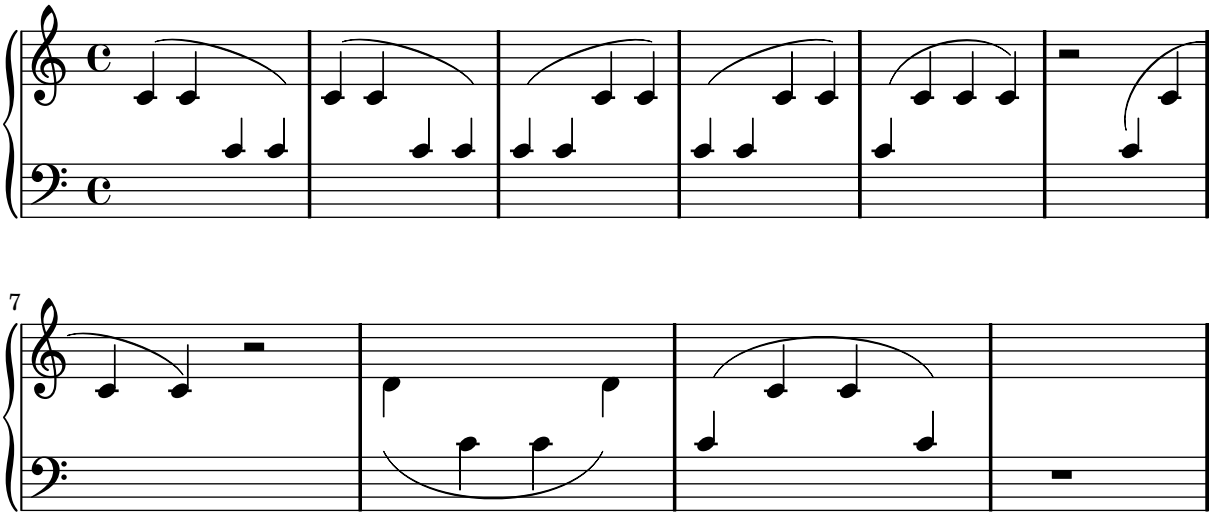
‘`slur-clef.ly`’ Slurs avoid clefs, but don’t avoid barlines.



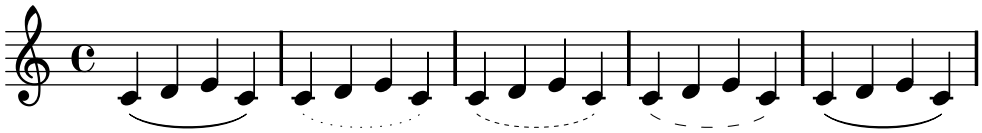
‘`slur-cross-staff-beam.ly`’ Slurs that depend on a cross-staff beam are not calculated until after line-breaking.



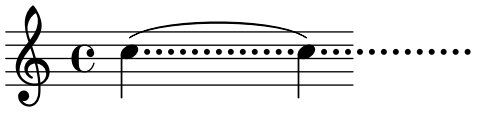
‘`slur-cross-staff.ly`’
Slurs behave decently when broken across a linebreak.



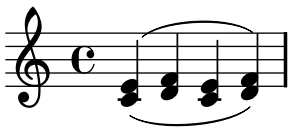
‘`slur-dash.ly`’ The appearance of slurs may be changed from solid to dotted or dashed.



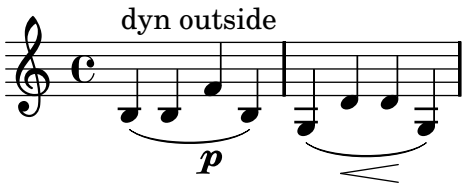
‘`slur-dots.ly`’ Slurs should not get confused by augmentation dots. With a lot of dots, the problems becomes more visible.



‘`slur-double.ly`’ Some composers use slurs both above and below chords. This can be typeset by setting `doubleSlurs`

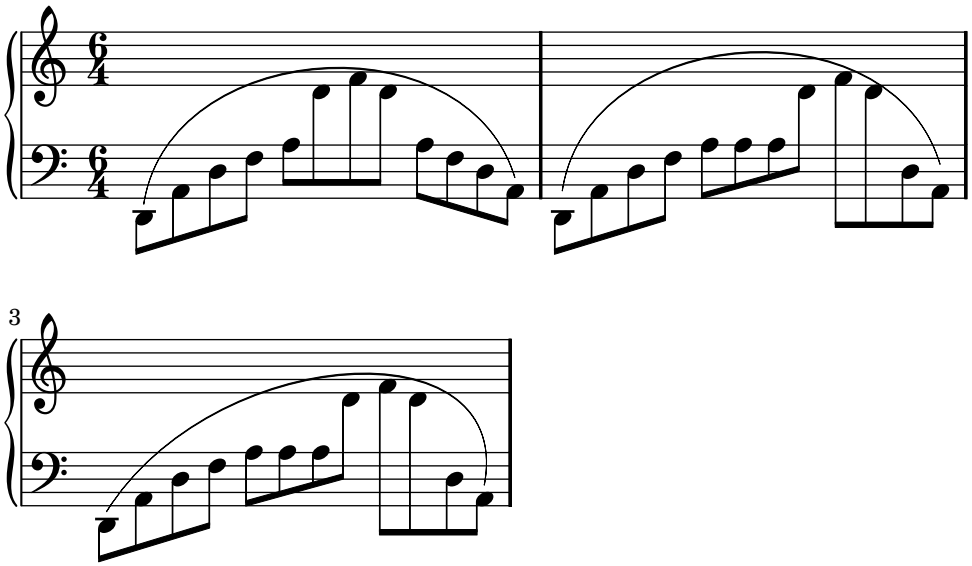


‘`slur-dynamics.ly`’ Dynamics avoid collision with slur.



‘slur-extreme.ly’

Extreme slurs are scaled to fit the pattern, but only symmetrically. Asymmetric slurs are created by setting eccentricity.

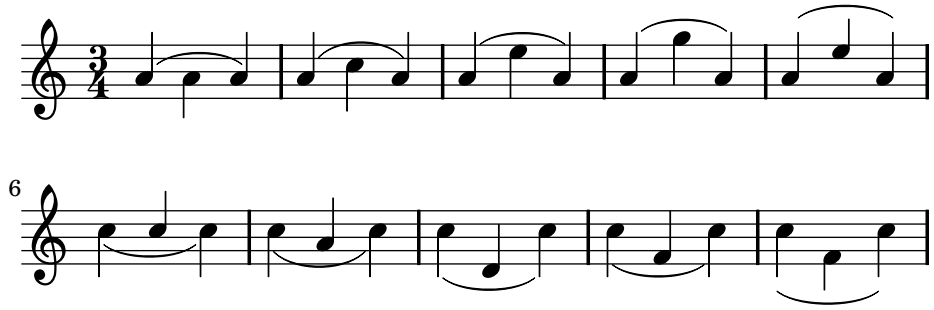


‘slur-manual.ly’ Setting positions overrides the automatic positioning of the slur. It selects the slur configuration closest to the given pair.

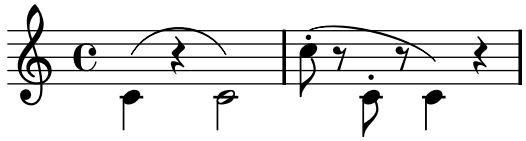


‘slur-nice.ly’

Slurs should look nice and symmetric. The curvature may increase only to avoid noteheads, and as little as possible. Slurs never run through noteheads or stems.



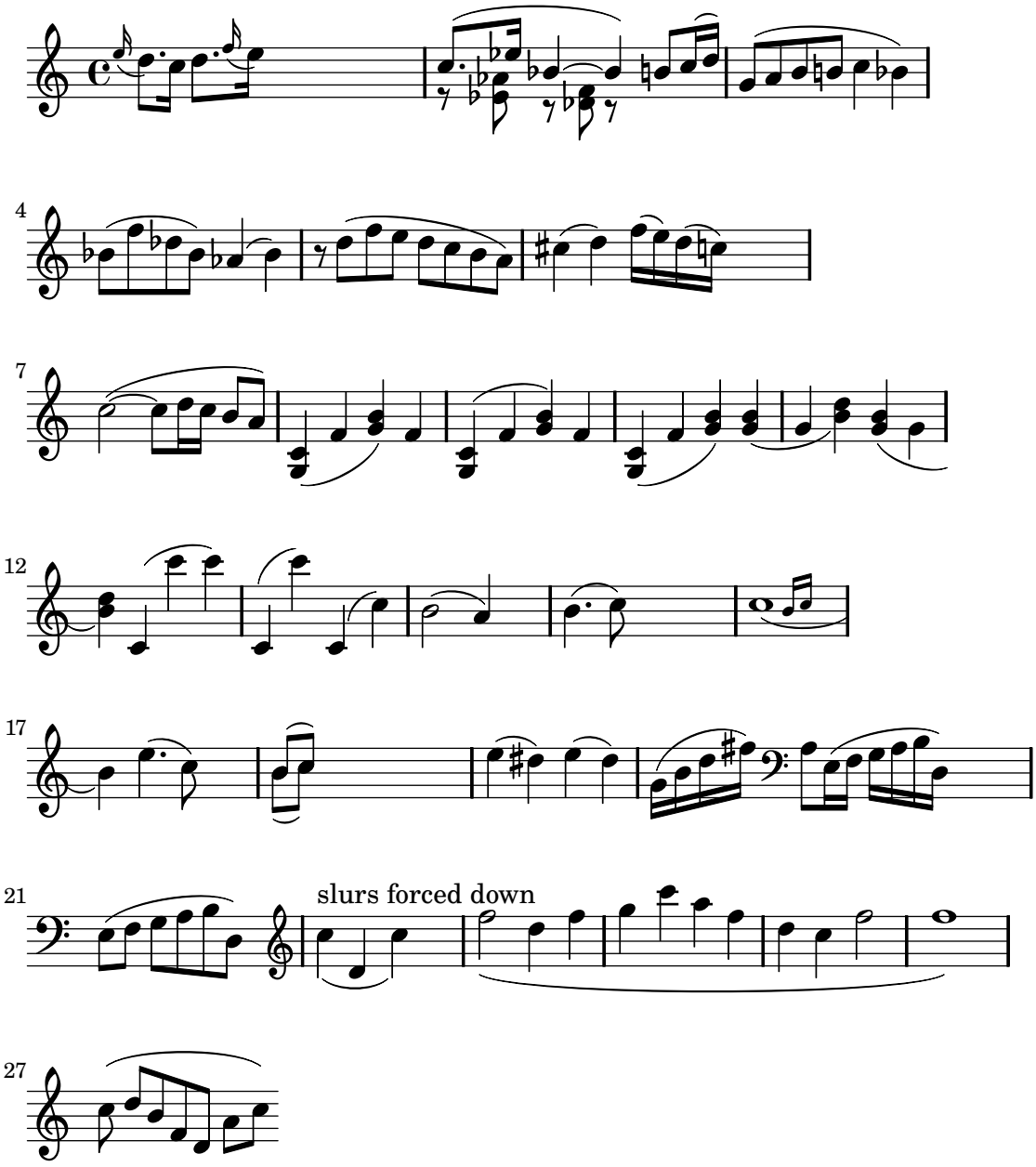
‘slur-rest.ly’ Slurs may be placed over rests. The slur will avoid colliding with the rests.



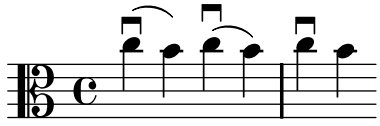
‘slur-scoring.ly’ Slur formatting is based on scoring. A large number of slurs are generated. Each esthetic aspect gets demerits, the best configuration (with least demerits) wins. This

must be tested in one big file, since changing one score parameter for one situation may affect several other situations.

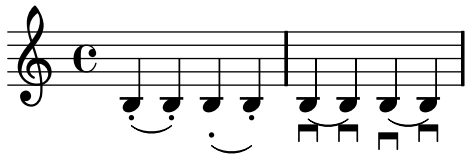
Tunable parameters are in '`scm/slur.scm`'.



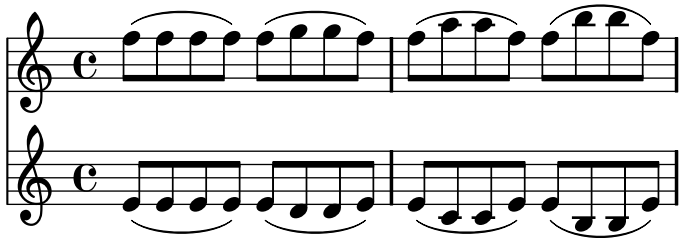
'`slur-script-inside.ly`' Slurs avoid scripts with `avoid-slur` set to `inside`, scripts avoid slurs with `avoid-slur` set to `around`. Slurs and scripts keep a distance of `slur-padding`.



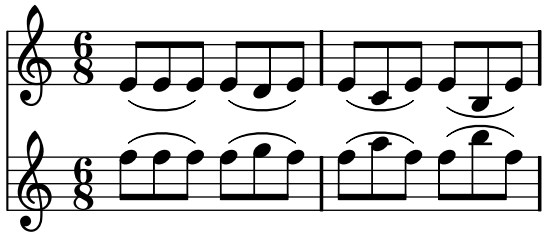
'`slur-script.ly`' A slur avoids collisions with scripts, which are placed either inside or outside the slur, depending on the script. The slur responds appropriately if a script is moved.



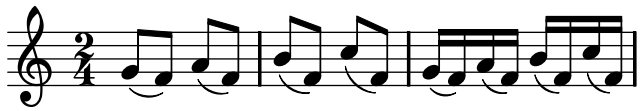
‘`slur-symmetry-1.ly`’ Symmetric figures should lead to symmetric slurs.



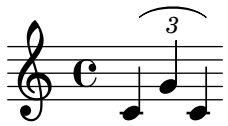
‘`slur-symmetry.ly`’ Symmetric figures should lead to symmetric slurs.



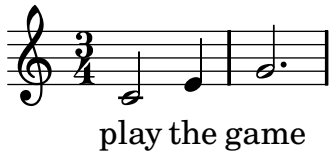
‘`slur-tilt.ly`’ The attachment point for strongly sloped slurs is shifted horizontally slightly. Without this correction, slurs will point into one note head, and point over another note head.



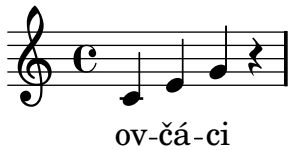
‘`slur-tuplet.ly`’ `TupletNumber` grobs are always inside slurs. This may not work if the slur starts after the tuplet.



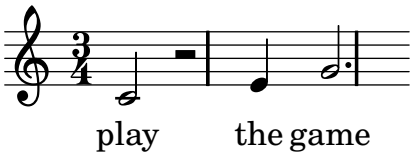
‘`song-associated-voice.ly`’



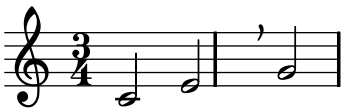
‘`song-basic-nonenglish.ly`’



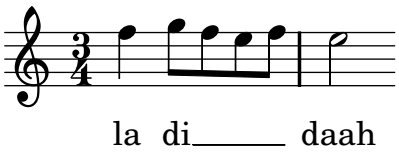
‘song-basic.ly’



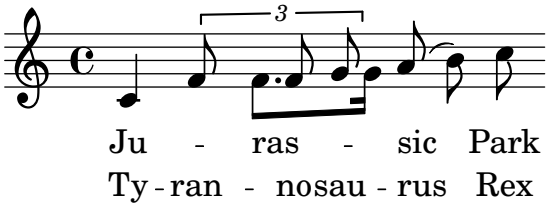
‘song-breathe.ly’



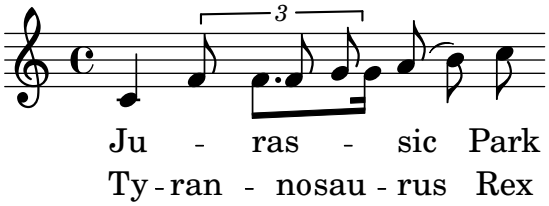
‘song-melisma.ly’



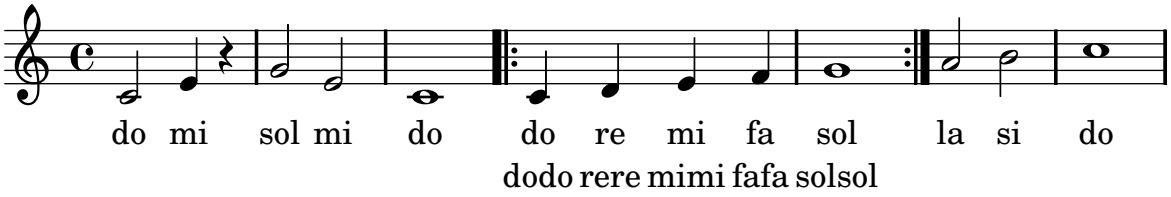
‘song-reordering.ly’



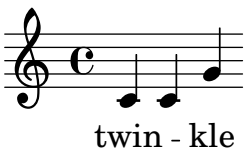
‘song-reordering2.ly’



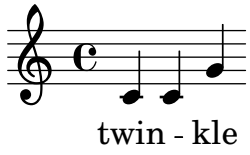
‘song-repetition.ly’



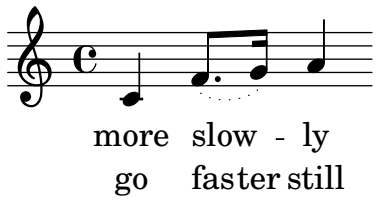
‘song-skip-noword.ly’



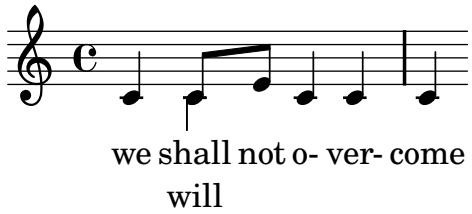
‘song-skip.ly’



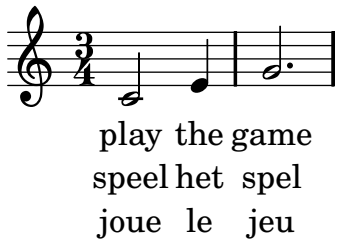
‘song-slurs.ly’



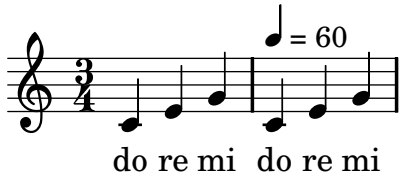
‘song-splitpart.ly’



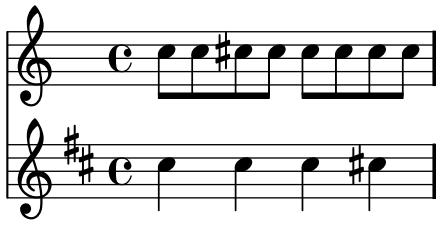
‘song-stanzas.ly’



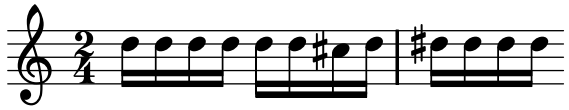
‘song-tempo.ly’



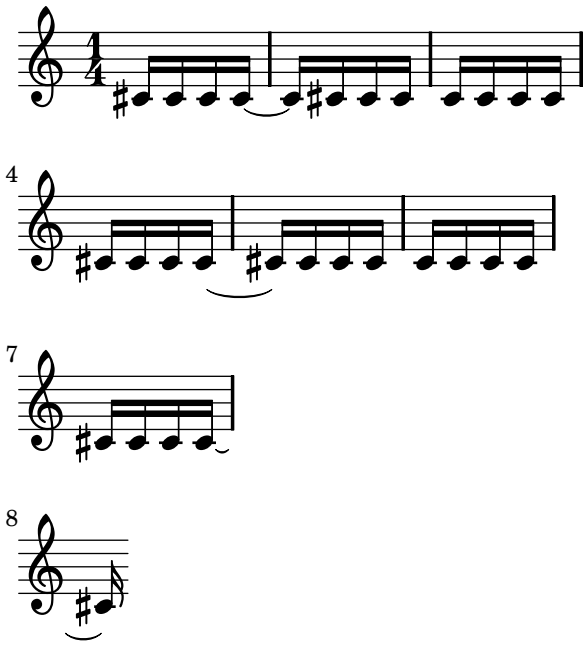
‘spacing-accidental-staffs.ly’ Accidentals in different staves do not affect the spacing of the eighth notes here.



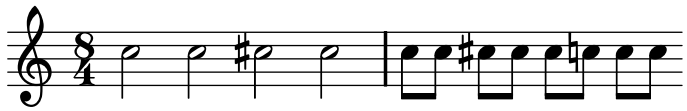
‘spacing-accidental-stretch.ly’ Accidentals do not influence the amount of stretchable space. The accidental does add a little non-stretchable space.



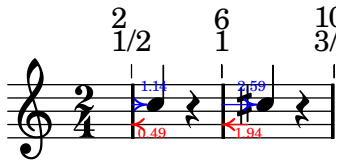
‘spacing-accidental-tie.ly’ Horizontal spacing works as expected on tied notes with accidentals. No space is reserved for accidentals that end up not being printed, but accidentals that are printed don’t collide with anything.



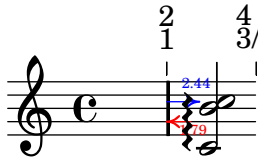
‘spacing-accidental.ly’ Accidentals sticking out to the left of a note will take a little more space, but only if the spacing is tight.



‘spacing-bar-accidental.ly’ An accidental following a bar gets space so the left edge of the acc is at 0.3 - 0.6 staff space of the bar line

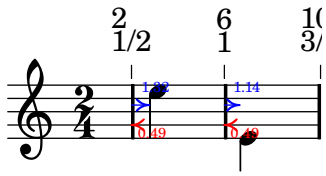


‘spacing-bar-arpeggio.ly’ An arpeggio following a bar gets space

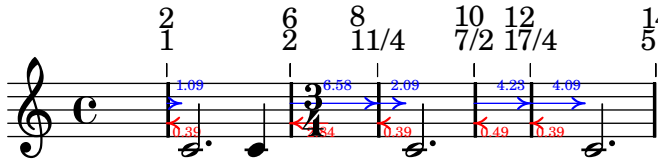


‘`spacing-bar-stem.ly`’ Downstem notes following a barline are printed with some extra space. This is an optical correction similar to juxtaposed stems.

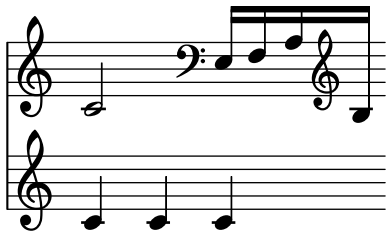
The bar upstem should be approx 1.1 staff space, the bar downstem 1.3 to 1.5 staff space.



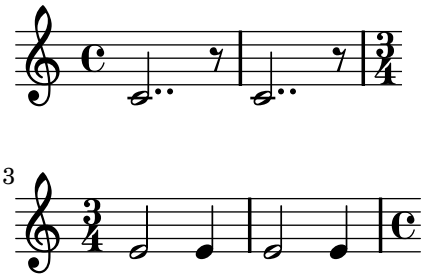
‘`spacing-bar-whole-measure.ly`’ Notes that fill a whole measure are preceded by extra space.



‘`spacing-clef-first-note.ly`’ Clef changes at the start of a line get much more space than clef changes halfway the line.

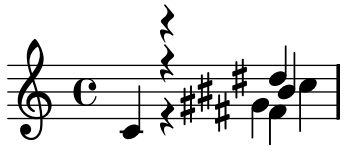


‘`spacing-end-of-line.ly`’ Broken engraving of a bar at the end of a line does not upset the space following rests and notes.

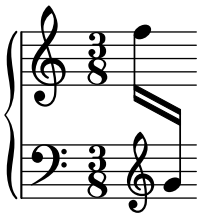


‘`spacing-ended-voice.ly`’

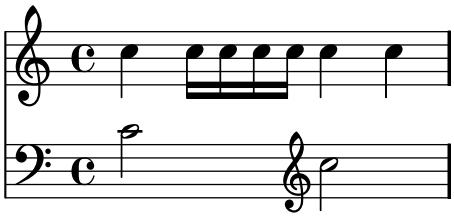
A voicelet (a very short voice to get polyphonic chords correct) should not confuse the spacing engine.



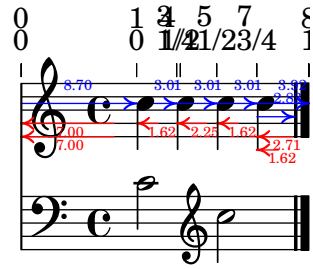
‘`spacing-folded-clef-cross-staff.ly`’ Clefs are also folded under cross staff constructs.



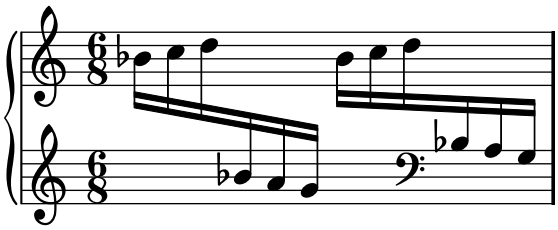
‘`spacing-folded-clef.ly`’ A clef can be folded below notes in a different staff, if this does not disrupt the flow of the notes.



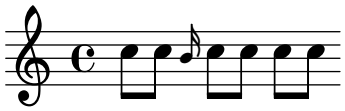
‘`spacing-folded-clef2.ly`’ A clef can be folded below notes in a different staff, if there is space enough. With `Paper_column` stencil callbacks we can show where columns are in the score.



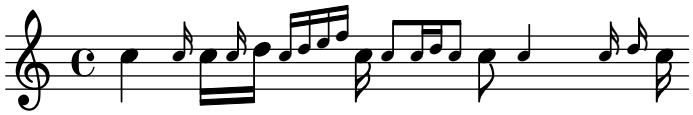
‘`spacing-folded-clef3.ly`’ Voices that go back and forth between staves do not confuse the spacing engine.



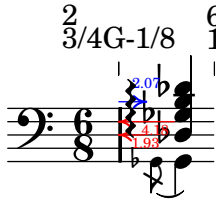
‘`spacing-grace-duration.ly`’ Spacing uses the duration of the notes, but disregards grace notes for this. In this example, the 8ths around the grace are spaced exactly as the other 8th notes.



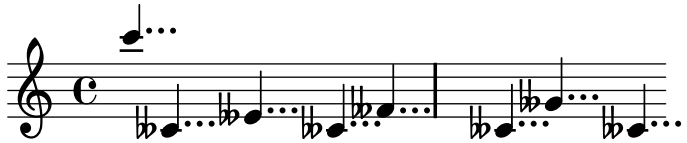
‘`spacing-grace.ly`’ Grace note runs have their own spacing variables in `Score.GraceSpacing`. So differing grace note lengths inside a run are spaced accordingly.



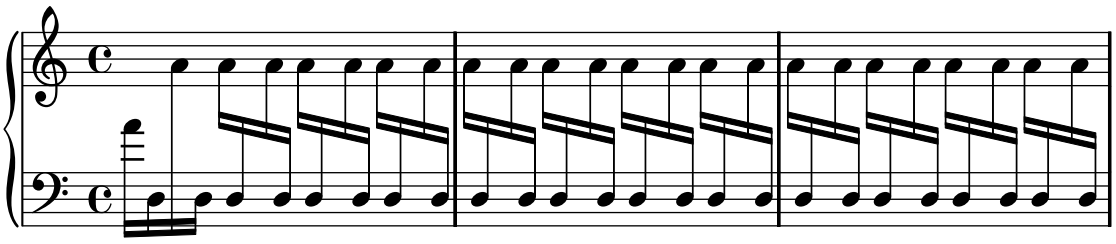
‘`spacing-horizontal-skyline-grace.ly`’ Skyline horizontal spacing may fold non-adjacent columns together, but they still do not collide. In this case, the arpeggio and the barline do not collide.



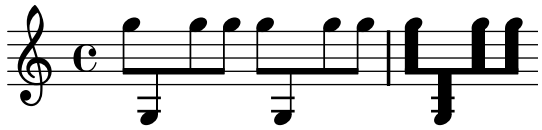
‘`spacing-horizontal-skyline.ly`’ accidentals may be folded under preceding notes.



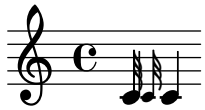
‘`spacing-knee-compressed.ly`’ Spacing corrections for kneed beams still work when compression is involved.



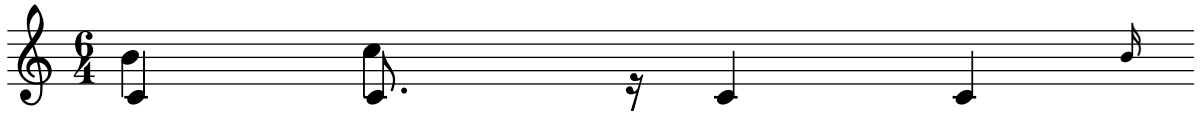
‘`spacing-knee.ly`’ For knees, the spacing correction is such that the stems are put at regular distances. This effect takes into account the width of the note heads and the thickness of the stem.

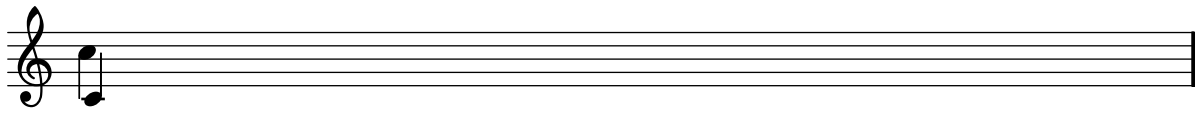


‘`spacing-loose-grace-error.ly`’ Even in case of incorrect contexts (eg. shortlived contexts) that break linking of columns through spacing wishes, `strict-note-spacing` defaults to a robust solution.

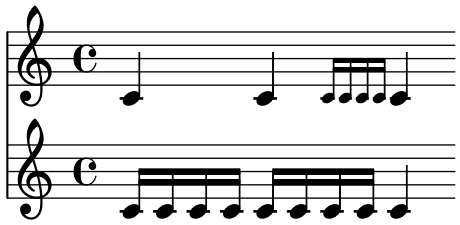


‘`spacing-loose-grace-linebreak.ly`’ If a floating grace spacing section attaches to a note across a line break, it gets attached to the end of line.



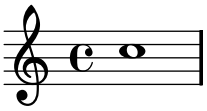


‘spacing-loose-grace.ly’ With strict-grace-spacing, grace notes don’t influence spacing.

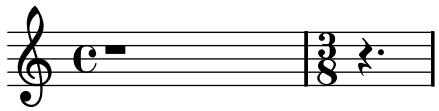


‘spacing-mark-width.ly’ Width of marks does not affect spacing.

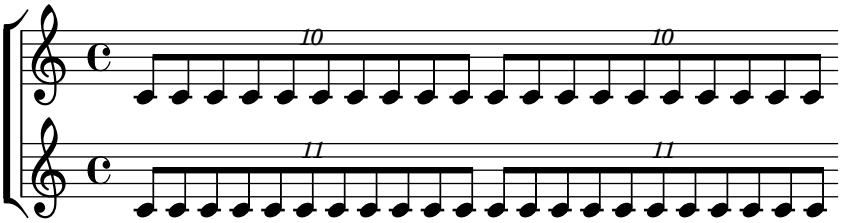
xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx



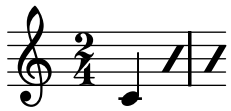
‘spacing-measure-length.ly’ Horizontal spacing is bounded by the current measure length. This means that the 3/8 setting does not affect the whole rest spacing.



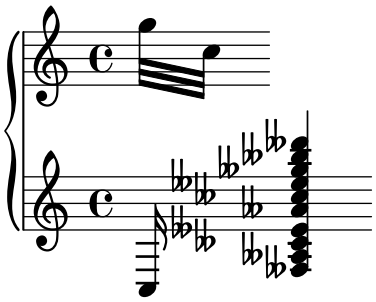
‘spacing-multi-tuplet.ly’ Concurrent tuplets should be equidistant on all staves. Such equidistant spacing is at odds with elegant engraver spacing; hence it must be switched on explicitly with the uniform-stretching property of SpacingSpanner.



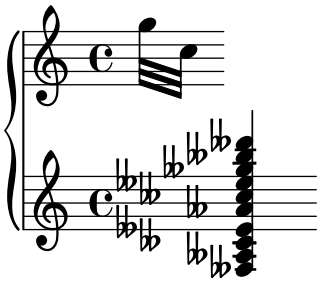
‘spacing-no-note.ly’ In the absence of NoteSpacings, wide objects still get extra space. In this case, the slash before the barline gets a little more space.



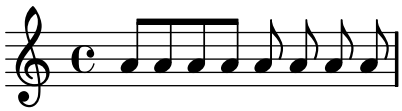
‘spacing-non-adjacent-columns1.ly’ The spacing engine avoids collisions between non-adjacent columns.



‘spacing-non-adjacent-columns2.ly’ The spacing engine avoids collisions between non-adjacent columns.



‘spacing-note-flags.ly’ The flags of 8th notes take some space, but not too much: the space following a flag is less than the space following a beamed 8th head.

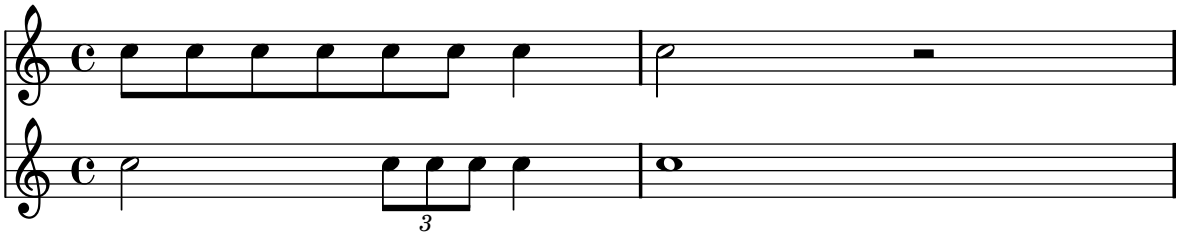


‘spacing-packed.ly’

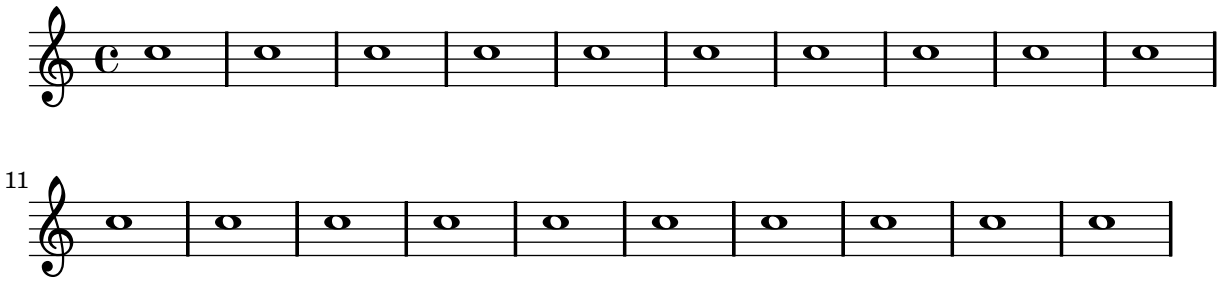
In packed mode, pack notes as tight as possible. This makes sense mostly in combination with ragged-right mode: the notes are then printed at minimum distance. This is mostly useful for ancient notation, but may also be useful for some flavours of contemporary music. If not in ragged-right mode, lily will pack as many bars of music as possible into a line, but the line will then be stretched to fill the whole linewidth.



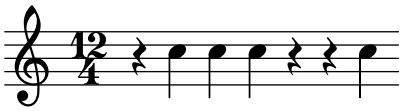
‘spacing-proportional.ly’ Proportional notation can be created by setting proportionalNotationDuration. Notes will be spaced proportional to the distance for the given duration.



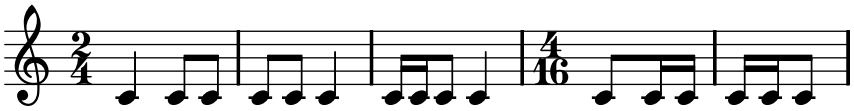
‘spacing-ragged-last.ly’ If ragged-last is set, the systems are broken similar to paragraph formatting in text: the last line is unjustified.



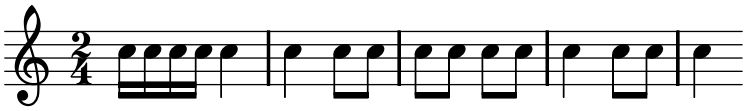
‘`spacing-rest.ly`’ Rests get a little less space, since they are narrower. However, the quarter rest in feta font is relatively wide, causing this effect to be very small.



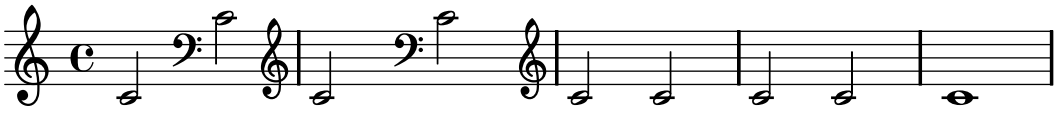
‘`spacing-section.ly`’ New sections for spacing can be started with `ewSpacingSection`. In this example, a section is started at the 4/16, and a 16th in the second section takes as much space as a 8th in first section.



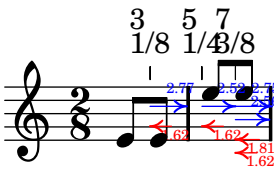
‘`spacing-short-notes.ly`’ Notes that are shorter than the common shortest note get a space (i.e. without the space needed for the note) proportional to their duration. So, the 16th notes get 1/2 of the space of an eigth note. The total distance for a 16th (which includes note head) is 3/4 of the eighth note.



‘`spacing-space-to-barline.ly`’ When space-to-barline is false, we measure the space between the note and the start of the clef. When space-to-barline is true, we measure the space between the note and the start of the barline.

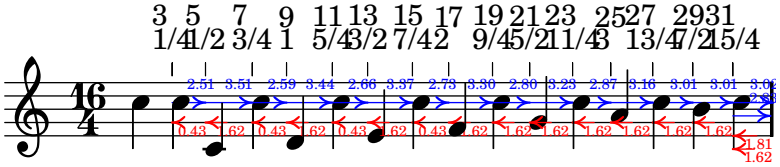


‘`spacing-stem-bar.ly`’ Upstem notes before a barline are printed with some extra space. This is an optical correction similar to juxtaposed stems.

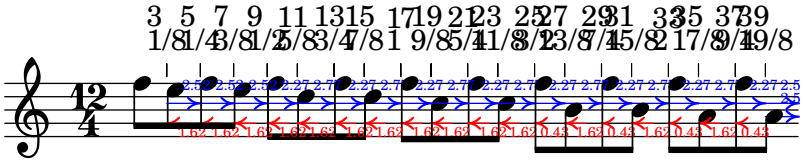


‘`spacing-stem-direction.ly`’

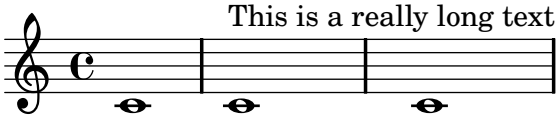
There are optical corrections to the spacing of stems. The overlap between two adjacent stems of different direction is used as a measure for how much to correct.



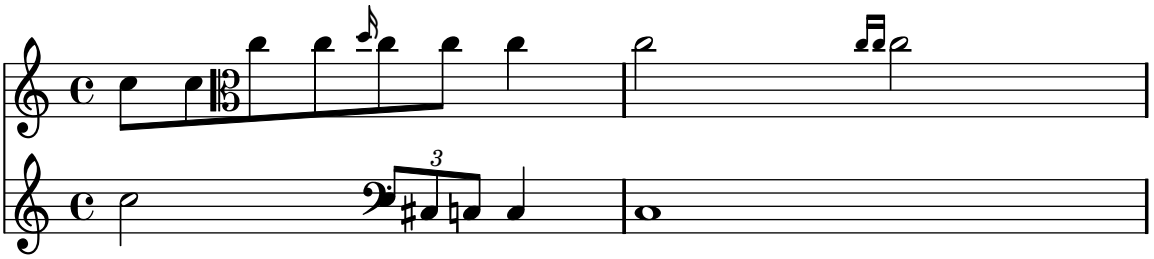
‘spacing-stem-same-direction.ly’ For juxtaposed chords with the same direction, a slight optical correction is used. It is constant, and works only if two chords have no common head-positions range.



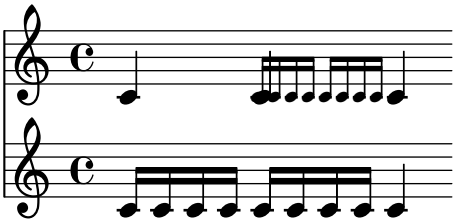
‘spacing-stick-out.ly’ If keep-inside-line is set for the relevant PaperColumn, LilyPond will space a line to prevent text sticking out of the right margin.



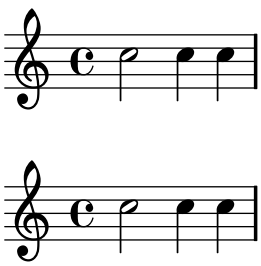
‘spacing-strict-notespacing.ly’ If strict-note-spacing is set, then spacing of notes is not influenced by bars and clefs half-way on the system. Rather, they are put just before the note that occurs at the same time. This may cause collisions.



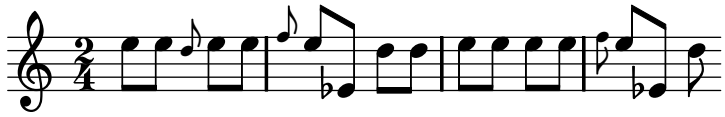
‘spacing-strict-spacing-grace.ly’ With strict-note-spacing spacing for grace notes (even multiple ones), is floating as well.



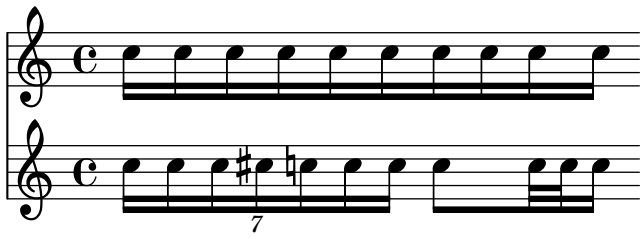
‘spacing-to-empty-barline.ly’ An empty barline does not confuse the spacing engine too much. The two scores should look approximately the same.



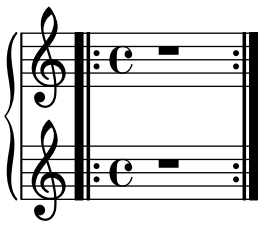
‘`spacing-to-grace.ly`’ Space from a normal note (or barline) to a grace note is smaller than to a normal note.

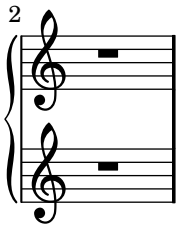


‘`spacing-uniform-stretching.ly`’ Notes are spaced exactly according to durations, if `uniform-stretching` is set. Accidentals are ignored, and no optical-stem spacing is performed.

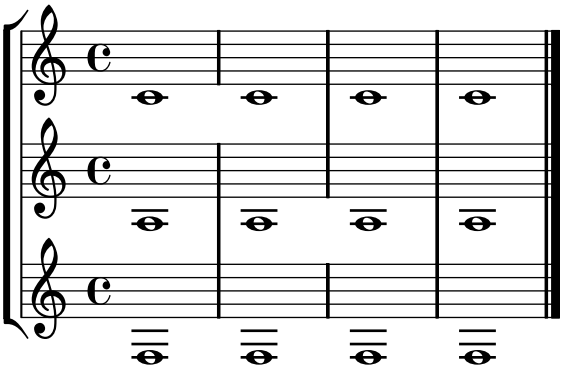


‘`span-bar-break.ly`’ At the beginning of a system, the `|:` repeat barline is drawn between the staves, but the `:|` is not.

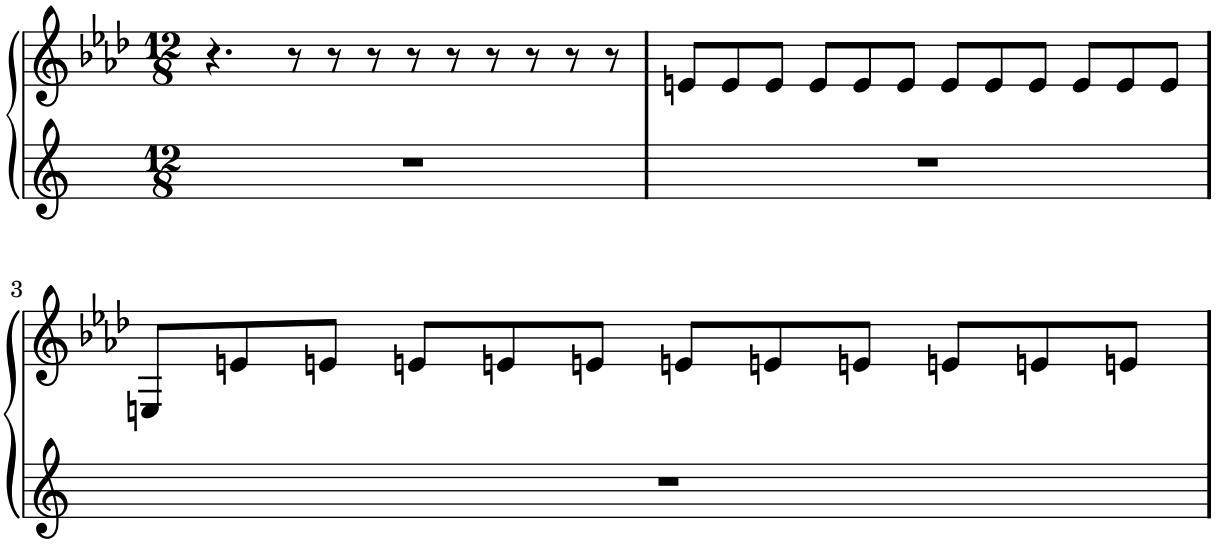




‘`span-bar-partial.ly`’ Span bars can be turned on/off on a staff-by-staff basis.

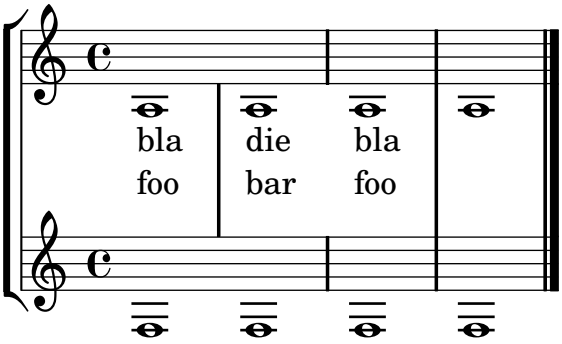


‘`span-bar-spacing.ly`’ SpanBars participate in the horizontal collision system; the accidentals should not collide with the bar lines.

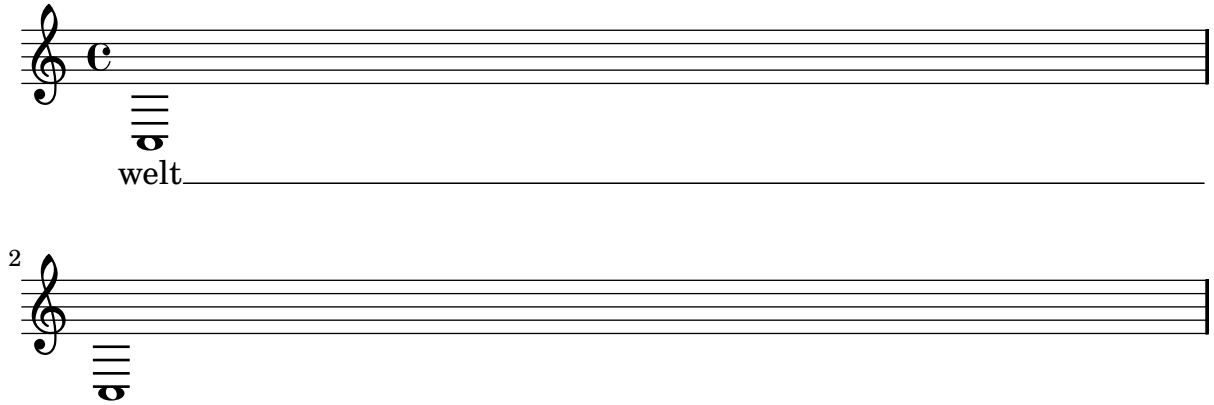


‘`span-bar.ly`’ Span bars are drawn only between staff bar lines. By setting bar lines to transparent, they are shown only between systems.

Setting `SpanBar` transparent removes the barlines between systems.

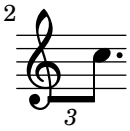


‘`spanner-break-beyond-parent.ly`’ Spanners parts that extend beyond their parents are killed in case of line breaks.

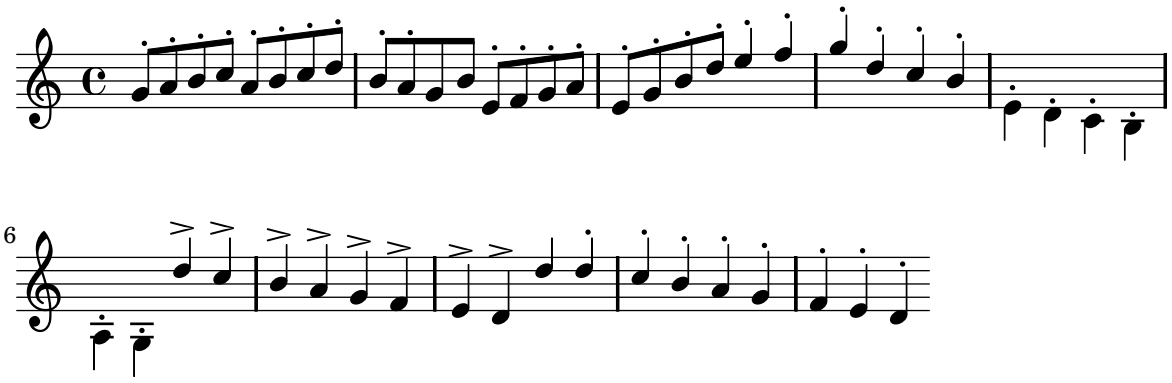


‘`spanner-break-overshoot.ly`’ The `break-overshoot` property sets the amount that a spanner (in this case: the beam) in case of a line break extends beyond the rightmost column and extends to the left beyond the prefatory matter.

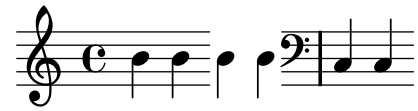




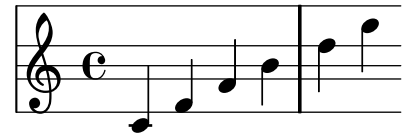
‘staccato-pos.ly’ Some scripts must have quantized postions. VErtical position descend monotonously for a descending scale. The staccato dot is close to the notehead. If the head is in a space, then the dot is in the space next to it.



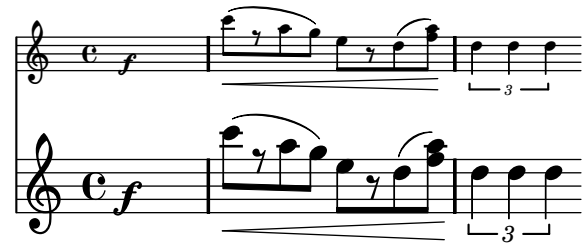
‘staff-halfway.ly’ Staves can be started and stopped at command.



‘staff-line-positions.ly’ The vertical positions of staff lines may be specified individually, by setting the line-positions property of the StaffSymbol.



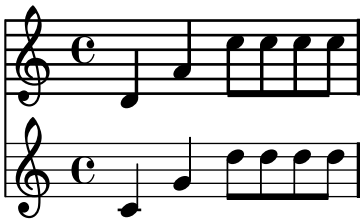
‘staff-mixed-size.ly’ Staves may be present in several sizes within a score. This is achieved with an internal scaling factor. If the scaling factor is forgotten in some places, objects generally become too thick or too large on smaller staves.



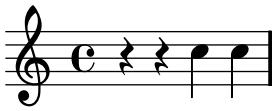
‘staff-online-symbol-absence.ly’ Symbols that need on-staffline info (like dots and ties) continue to work in absence of a staff-symbol.



‘staff-tweak.ly’ The staff is a grob (graphical object) which may be adjusted as well, for example, to have 6 thick lines and a slightly large staff-space. However, beams remain correctly quantized.



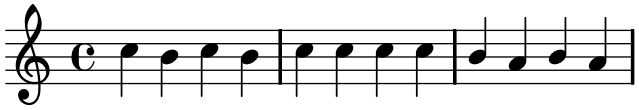
‘stanza-number.ly’ Stanza numbers are put left of their lyric. They are aligned in a column.



1. Foo

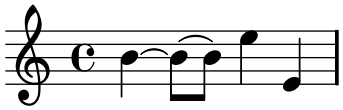
2. FFFooooo

‘stem-direction-context.ly’ Stem directions for notes on the middle staff line are determined by the directions of their neighbors.

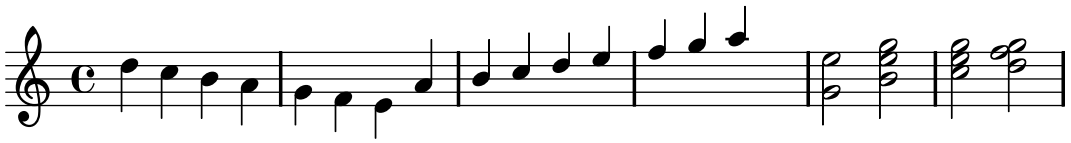


‘stem-direction.ly’

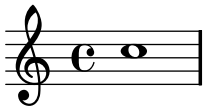
Stems, beams, ties and slurs should behave similarly, when placed on the middle staff line. Of course stem-direction is down for high notes, and up for low notes.



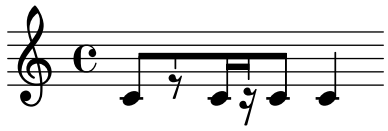
‘stem-shorten.ly’ If note head is ‘over’ the center line, the stem is shortened. This happens with forced stem directions, and with some chord configurations.



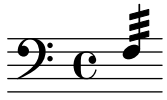
‘stem-stemlet-whole.ly’ Stemlets don’t cause stems on whole notes.



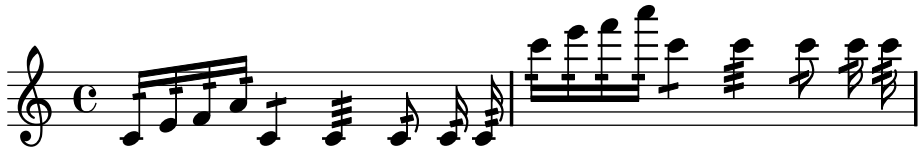
‘stem-stemlet.ly’ Stemlets are small stems under beams over rests. Their length can be set with stemlet-length.



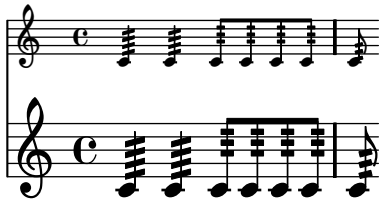
‘stem-tremolo-forced-dir.ly’



‘stem-tremolo-position.ly’ Tremolos are positioned a fixed distance from the end of the beam. Tremolo flags are shortened and made rectangular on beamed notes or on stem-up notes with a flag. Tremolo flags are tilted extra on stem-down notes with a flag.



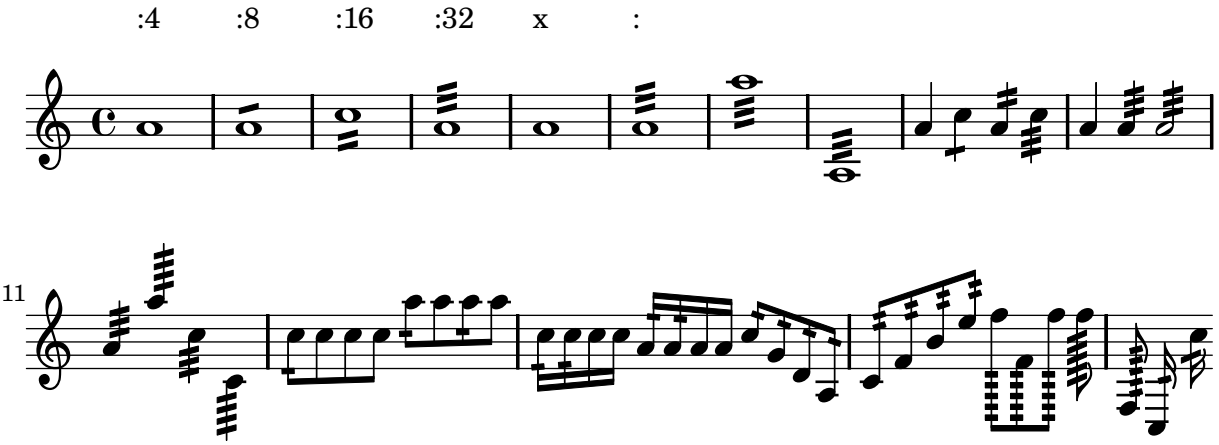
‘stem-tremolo-staff-space.ly’ stem tremolo vertical distance also obeys staff-space settings.



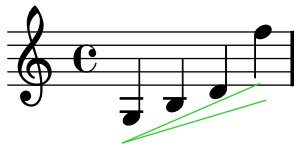
‘stem-tremolo.ly’

Stem tremolos or rolls are tremolo signs that look like beam segments crossing stems. If the stem is in a beam, the tremolo must be parallel to the beam. If the stem is invisible (e.g. on a whole note), the tremolo must be centered on the note. If the note has a flag (eg. an unbeamed 8th note), the tremolo should be shortened if the stem is up and tilted extra if the stem is down.

The tremolos should be positioned a fixed distance from the end of the stems unless there is no stem, in which case they should be positioned a fixed distance from the note head.

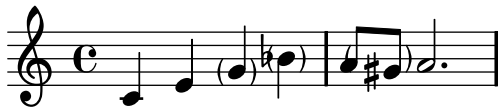


‘stencil-color-rotation.ly’ Combinations of rotation and color do work.

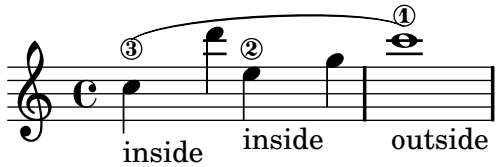


‘`stencil-hacking.ly`’ You can write stencil callbacks in Scheme, thus providing custom glyphs for notation elements. A simple example is adding parentheses to existing stencil callbacks.

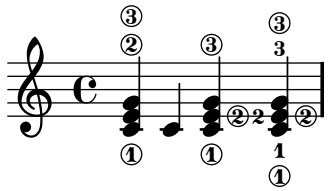
The parenthesized beam is less successful due to implementation of the Beam. The note head is also rather naive, since the extent of the parens are also not seen by accidentals.



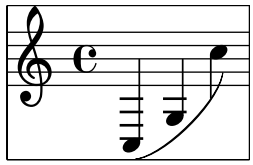
‘`string-number-around-slur.ly`’ String numbers should only be moved outside slurs when there is a collision.



‘`string-number.ly`’ String numbers can be added to chords. They use the same positioning mechanism as finger instructions.

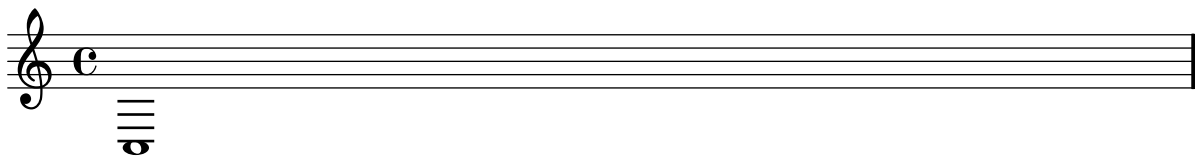


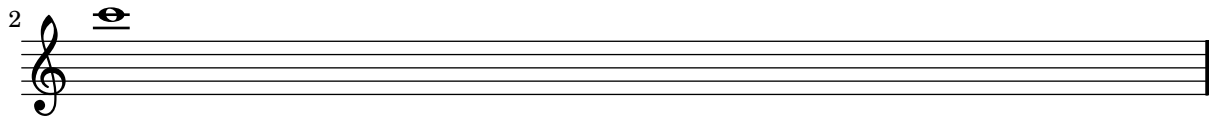
‘`system-extents.ly`’ The size of every system is correctly determined; this includes postscript constructs such as slurs.



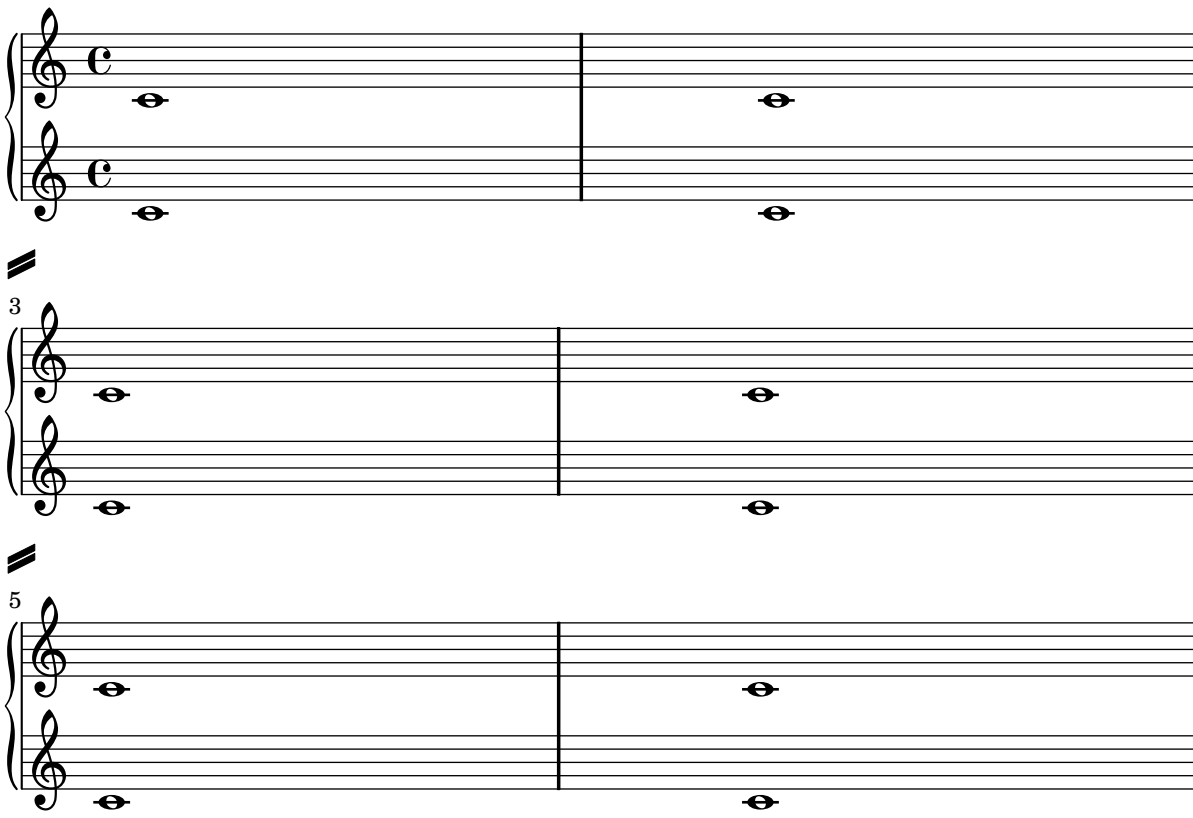
‘`system-overstrike.ly`’ By setting between-system-padding to a negative value, it is possible to eliminate the anti-collision constraints. Then setting `between-system-space` to a low (nonzero) value, print systems in overstrike.

Unfortunately, this does not show in the colllated texinfo document. Run this example stand-alone to see the effect.

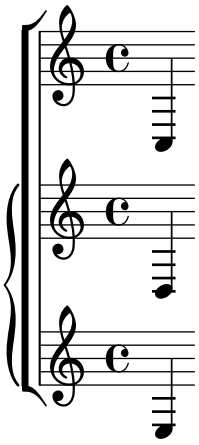




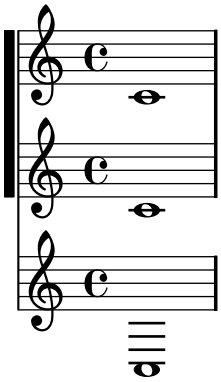
‘`system-separator.ly`’ System separators may be defined as markups in the `system-separator-markup` field of the paper block. They are centered between the boundary staves of each system.


3
5

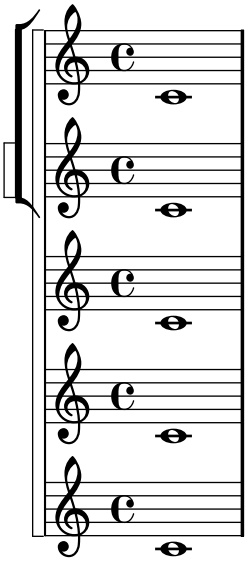
‘`system-start-bracket.ly`’ A piano context included within a staff group should cause the piano brace to be drawn to the left of the staff angle bracket.



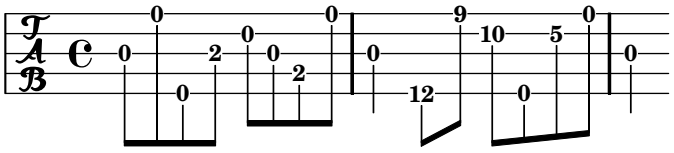
‘`system-start-heavy-bar.ly`’ A heavy-bar system start delimiter may be created by tuning the `SystemStartBar` grob.



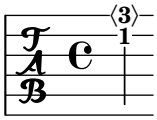
‘`system-start-nesting.ly`’ Deeply nested system braces, brackets, etc., may be created with the `systemStartDelimiterHierarchy` property.



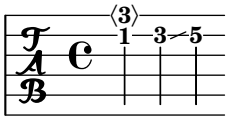
‘`tablature-banjo.ly`’ Tablature may also be tuned for banjo.



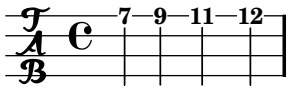
‘tablature-harmonic.ly’ Harmonics get angled brackets in tablature



‘tablature-slide.ly’ Tab supports slides.



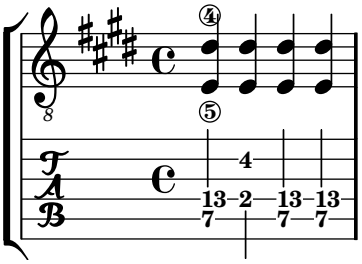
‘tablature-string-tunings.ly’ For other tunings, it is sufficient to set stringTunings. The number of staff lines is adjusted accordingly.



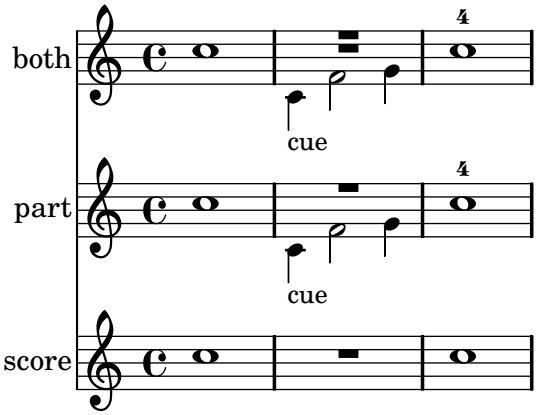
‘tablature.ly’ A sample tablature, with both normal staff and tab.

Tablature is done by overriding the note-head formatting function, and putting it on a 6-line staff. A special engraver takes care of going from string-number + pitch to number.

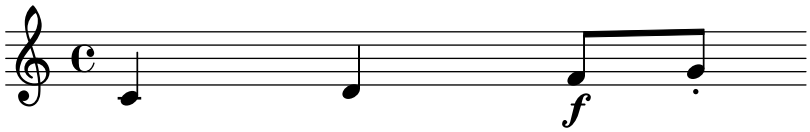
String numbers can be entered as note articulations (inside a chord) and chord articulations (outside a chord)



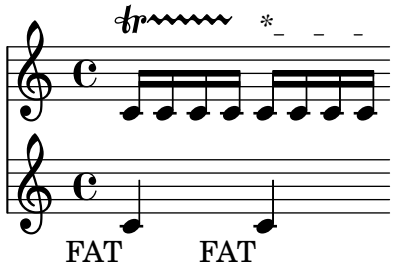
‘tag-filter.ly’ The \tag command marks music expressions with a name. These tagged expressions can be filtered out later. This mechanism can be used to make different versions of the same music. In this example, the top stave displays the music expression with all tags included. The bottom two staves are filtered: the part has cue notes and fingerings, but the score has not.



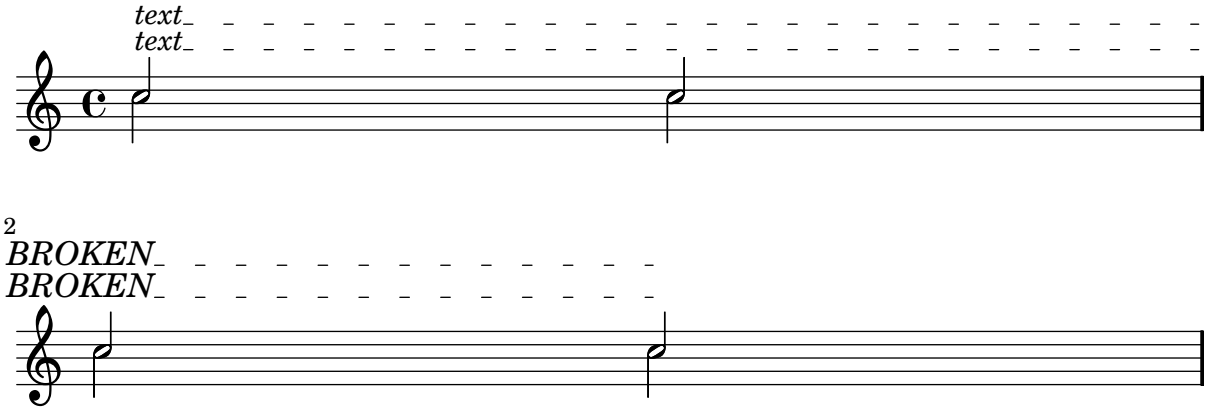
‘`test-output-distance.ly`’ This file gives a different result each time it is run, so it should always show up in the output-distance testing.



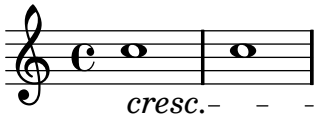
‘`text-spanner-attachment-alignment.ly`’ Text and trill spanners are attached to note columns, so attachments in other staves have no effect on them.

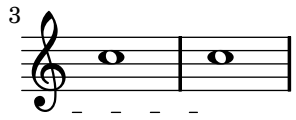


‘`text-spanner-override-order.ly`’ The order of setting nested properties does not influence text spanner layout.



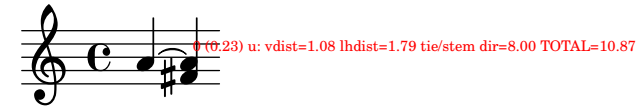
‘`text-spanner.ly`’ Text spanners should not repeat start text when broken.



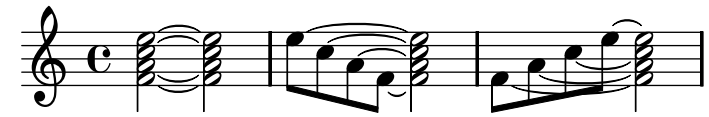


‘`tie-accidental.ly`’

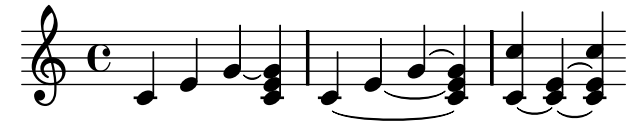
lilypond should flip the tie’s direction to avoid a collision with the sharp.



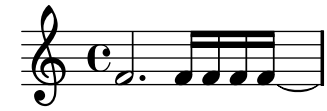
‘`tie-arpeggio-collision.ly`’ Advanced tie chord formatting also works with arpegiated ties. Due to arpeggios, tie directions may be changed relative to the unarpegiated case.

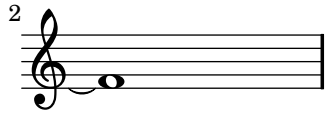


‘`tie-arpeggio.ly`’ when `tieWaitForNote` is set, the right-tied note does not have to follow the lef-tied note directly. When `tieWaitForNote` is set to false, any tie will erase all pending ties.

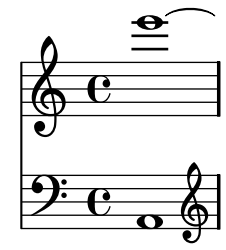


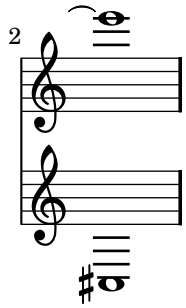
‘`tie-broken-minimum-length.ly`’ Broken ties honor `minimum-length` also. This tie has a `minimum-length` of 5.



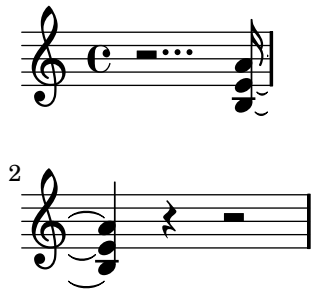


‘`tie-broken-other-staff.ly`’ Broken tie lengths are not affected by clefs in other staves.



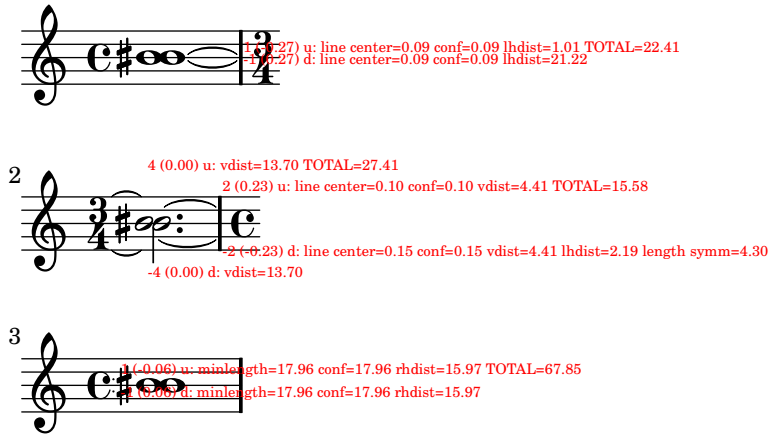


‘tie-broken.ly’ Ties behave properly at line breaks.

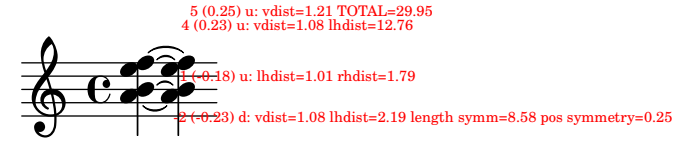


‘tie-chord-broken-extremal.ly’

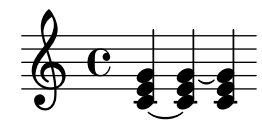
Tie detail property multi-tie-region-size controls how many variations are tried for the extremal ties in a chord.



‘tie-chord-debug.ly’ Switching on debug-tie-scoring annotates the tie scoring decisions made.

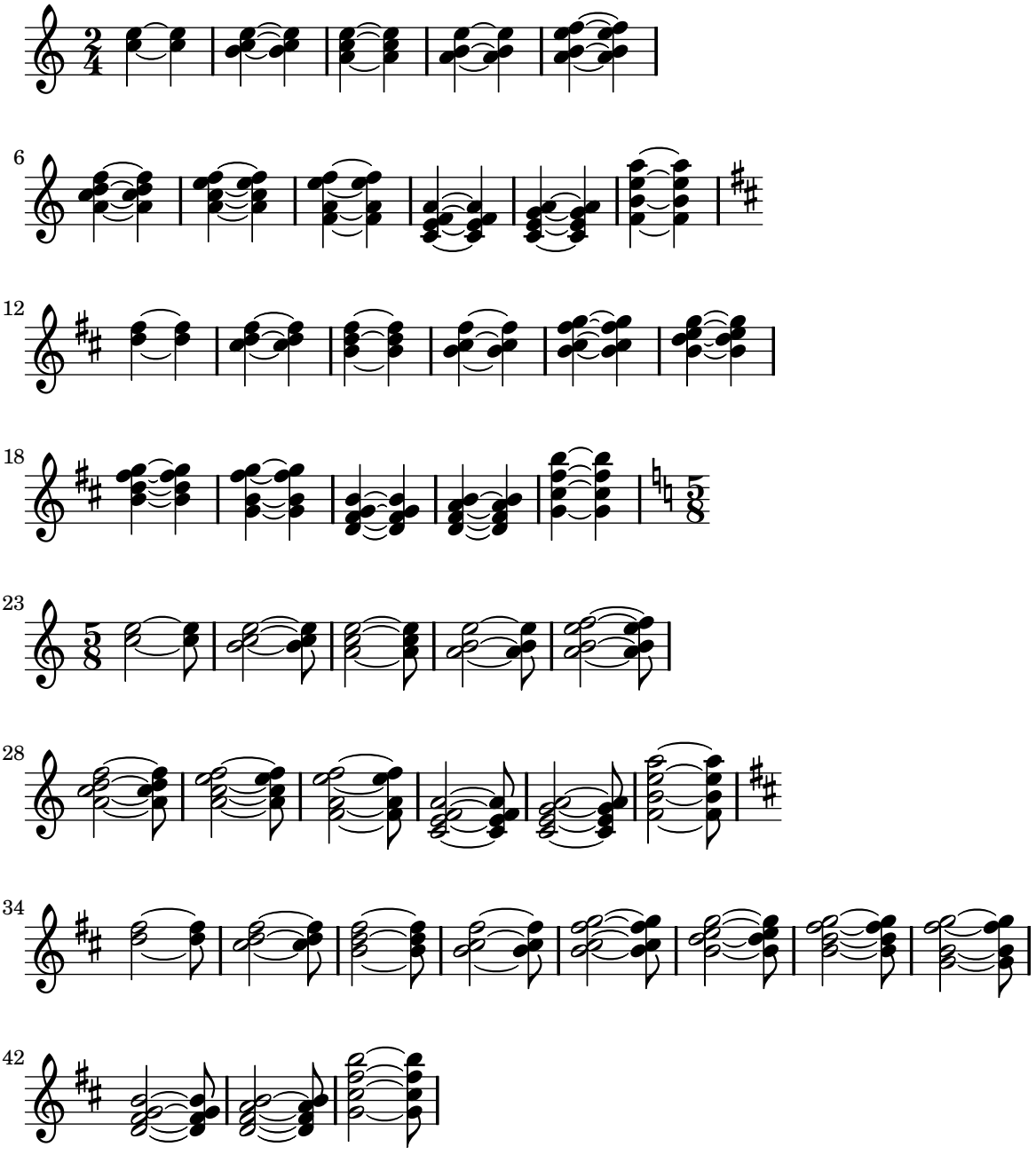


‘tie-chord-partial.ly’ Individual chord notes can also be tied

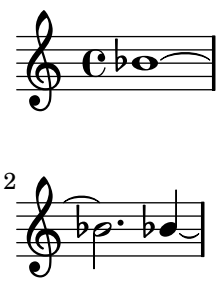


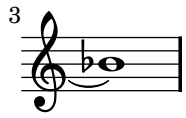
‘tie-chord.ly’ In chords, ties keep closer to the note head vertically, but never collide with heads or stems. Seconds are formatted up/down; the rest of the ties are positioned according to their vertical position.

The code does not handle all cases. Sometimes ties will printed on top of or very close to each other. This happens in the last chords of each system.

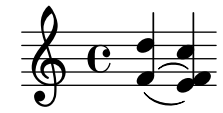


‘`tie-direction-broken.ly`’ In the single tie case, broken ties peek across line boundaries to determine which direction to take.

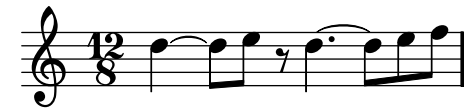




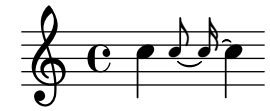
‘`tie-direction-manual.ly`’ Tie directions can be set with `_` and `^`. This makes correction in complex chords easier.



‘`tie-dot.ly`’ Ties avoid collisions with dots.



‘`tie-grace.ly`’ Tying a grace to a following grace or main note works.

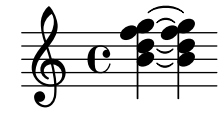


‘`tie-manual-vertical-tune.ly`’ If using integers, the tie will vertically tuned for staff line avoidance. If using a floating point number, this is taken as the exact location.

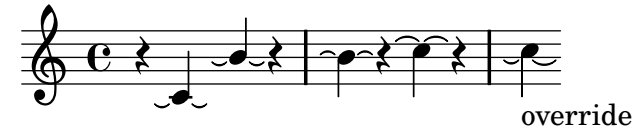


‘`tie-manual.ly`’ Tie formatting may be adjusted manually, by setting the `tie-configuration` property. The override should be placed at the second note of the chord.

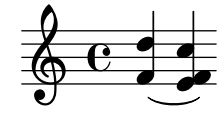
You can leave a Tie alone by introducing a non-pair value (eg. `#t`) in the `tie-configuration` list.



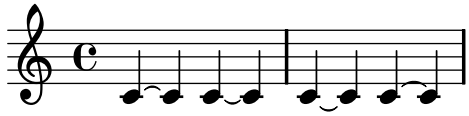
‘`tie-semi-single.ly`’ Like normal ties, single semities (LaissezVibrerTie or RepeatTie) get their direction from the stem direction, and may be tweaked with `#'direction`.



‘`tie-single-chord.ly`’ Tie directions are also scored. In hairy configurations, the default rule for tie directions is overruled.

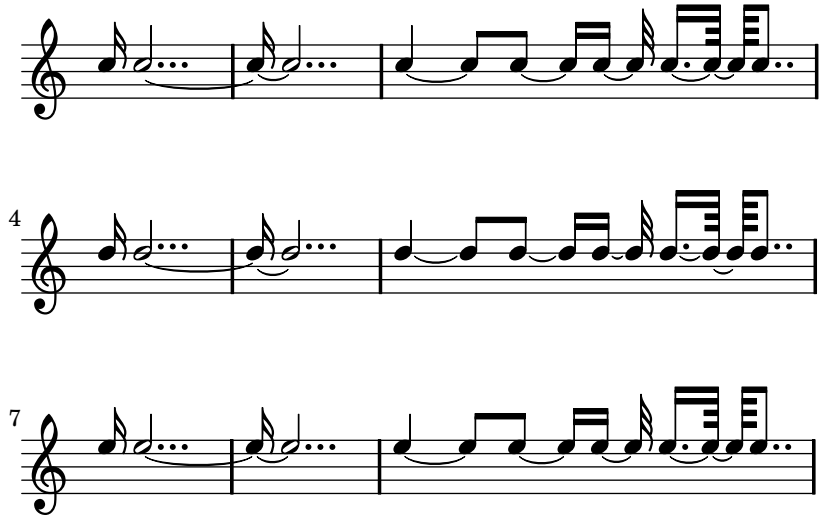


‘`tie-single-manual.ly`’ Individual ties may be formatted manually by specifying their `direction` and/or `staff-position`.

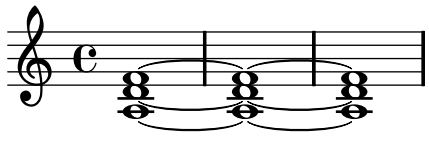


‘`tie-single.ly`’ Formatting for isolated ties.

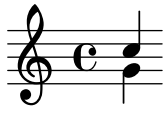
- short ties are in spaces
- long ties cross staff lines
- ties avoid flags of left stems.
- ties avoid dots of left notes.
- short ties are vertically centered in the space, as well those that otherwise don’t fit in a space
- extremely short ties are put over the noteheads, instead of inbetween.



‘`tie-whole.ly`’ For whole notes, the inside ties do not cross the center of the note head, horizontally.



‘`to-xml.ly`’ The input representation is generic, and may be translated to XML.



‘`toc.ly`’ A table of contents is included using `\markuplines \table-of-contents`. The toc items are added with the `\tocItem` command.

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The first score 2
Mark A 3
The second score 4

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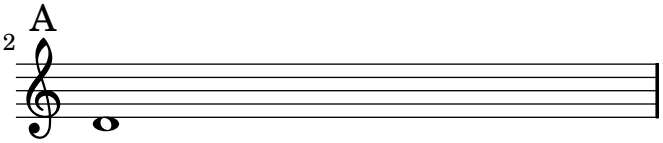
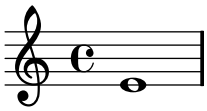


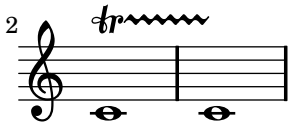
4

Second score

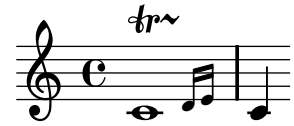


A TrillSpanner crossing a line break should restart exactly above the first note on the new line.

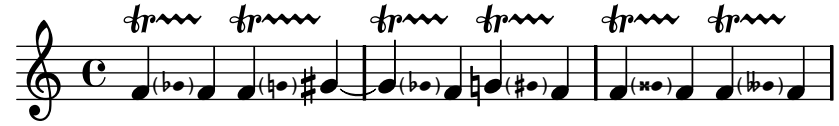




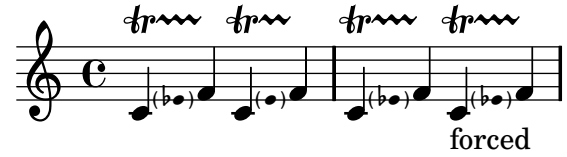
‘`trill-spanner-grace.ly`’ Trill spanner can end on a grace note



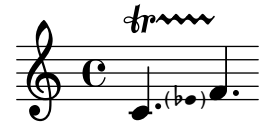
‘`trill-spanner-pitched-consecutive.ly`’ Pitched trills on consecutive notes with the same name and octave should not lose accidentals; in the following example, accidentals should be visible for all trill-pitches.



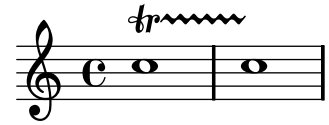
‘`trill-spanner-pitched-forced.ly`’ Pitched trill accidentals can be forced.



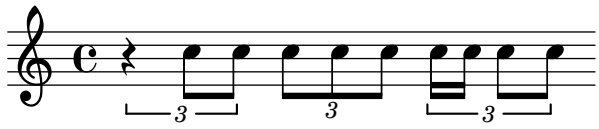
‘`trill-spanner-pitched.ly`’ Pitched trills are denoted by a small note head in parentheses following the main note. This note head is properly ledgered, and parentheses include the accidental.



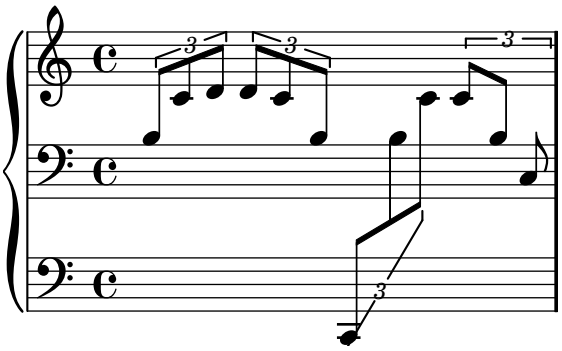
‘`trill-spanner.ly`’ The trill symbol and the wavy line are neatly aligned: the wavy line should appear to come from the crook of the r



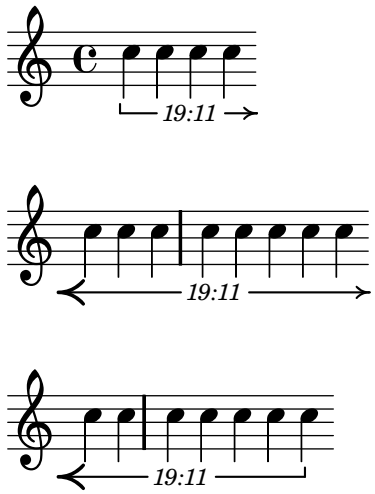
‘`tuplet-beam.ly`’ In combination with a beam, the bracket of the tuplet bracket is removed. This only happens if there is one beam, as long as the bracket.



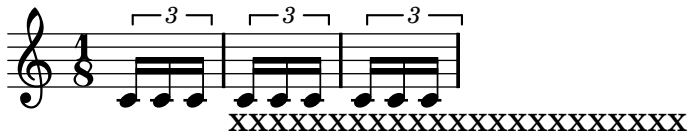
‘tuplet-bracket-cross-staff.ly’ Cross-staff tuplets are drawn correctly, even across multiple staves.



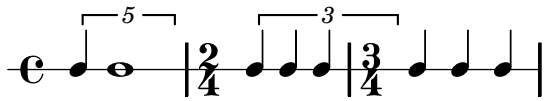
‘tuplet-broken.ly’ Broken tuplets are adorned with little arrows. The arrows come from the edge-text property, and thus be replaced with larger glyphs or other text.



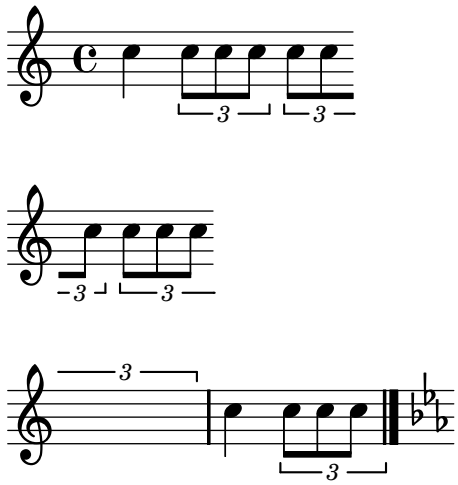
‘tuplet-full-length-extent.ly’ With full-length-to-extent, the extent of the attaching column for a full-length tuplet bracket can be ignored.



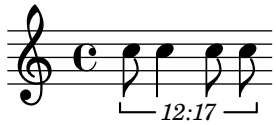
‘tuplet-full-length-note.ly’ tuplet can be made to run to prefatory matter or the next note, by setting tupletFullLengthNote.



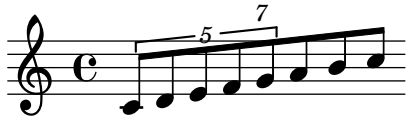
‘tuplet-full-length.ly’ If tupletFullLength is set, tuplets end at the start of the next non-tuplet note.



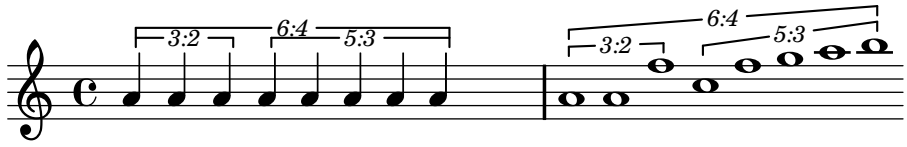
‘tuplet-gap.ly’ The size of the tuplet bracket gap is adjusted to the width of the text.



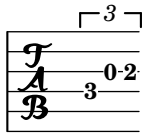
‘tuplet-nest-beam.ly’ Nested tuplets do collision resolution, also when they span beams.



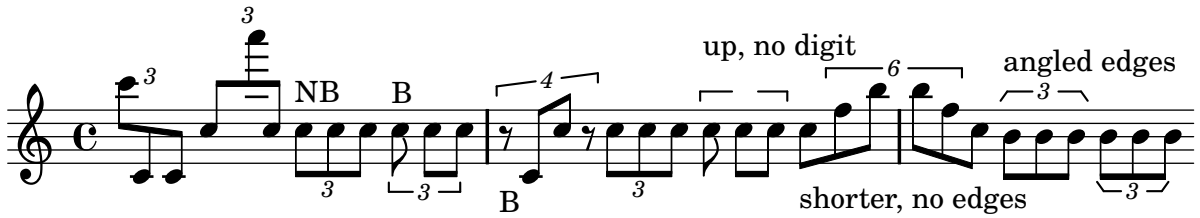
‘tuplet-nest.ly’ Tuplets may be nested.



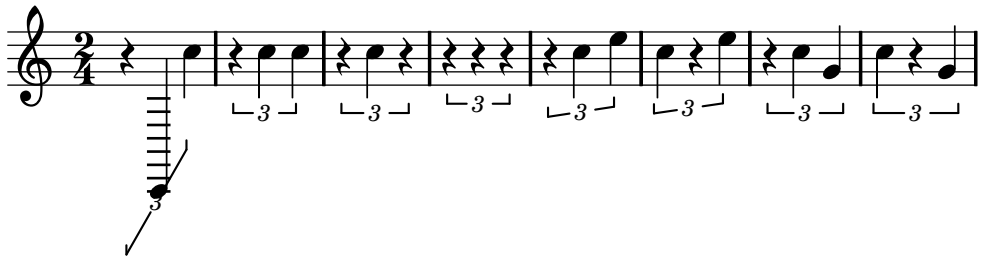
‘tuplet-no-stems.ly’ Removing Stem_engraver doesn’t cause crashes.



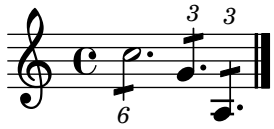
‘tuplet-properties.ly’ Tuplet bracket formatting supports numerous options, for instance, bracketed (B) and non-bracketed (NB).



‘tuplet-rest.ly’ Tuplets may contain rests.

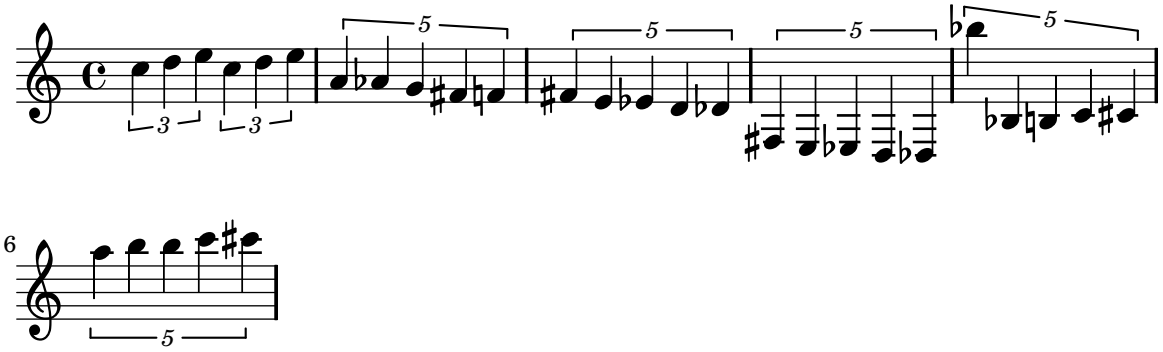


‘`tuplet-single-note.ly`’ Show tuplet numbers also on single-note tuplets (otherwise the timing would look messed up!), but don’t show a bracket. Make sure that tuplets without any notes don’t show any number, either.

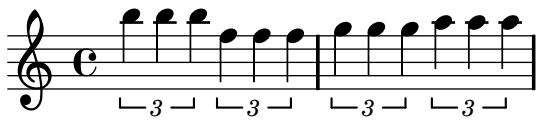


‘`tuplet-slope.ly`’ Tuplet brackets stay clear of the staff. The slope is determined by the graphical characteristic of the notes, but if the musical pattern does not follow graphical slope, then the bracket is horizontal

The bracket direction is determined by the dominating stem direction.



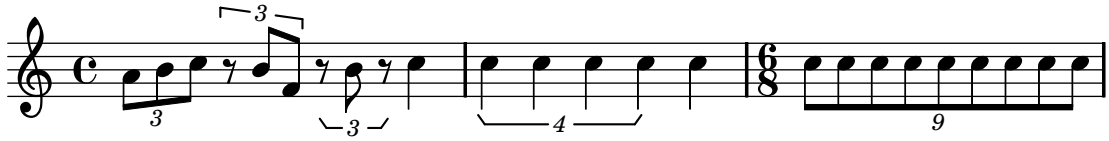
‘`tuplet-staffline-collision.ly`’ Horizontal tuplet brackets are shifted vertically to avoid staff line collisions.



‘`tuplets.ly`’

Tuplets are indicated by a bracket with a number. There should be no bracket if there is a beam exactly matching the length of the tuplet. The bracket does not interfere with the stafflines, and the number is centered in the gap in the bracket.

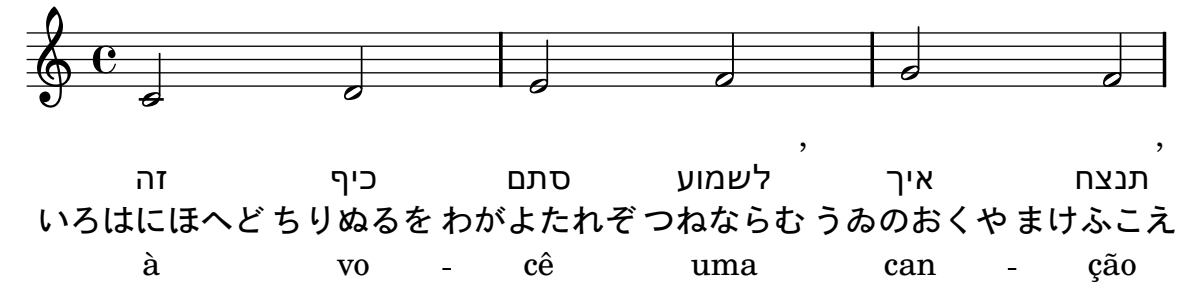
The bracket stops at the end of the stems, if the stems have the same direction as the bracket. The endings can be adjusted with `bracket-flare`.

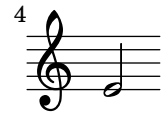


‘`utf-8-mixed-text.ly`’ words in mixed font in a single string are separated by spaces as in the input string. Here a Russian word followed by a roman word.

Hallo

‘utf-8.ly’ Various scripts may be used for texts (like titles and lyrics) introduced by entering them in UTF-8 encoding, and using a Pango based backend. Depending on the fonts installed, this fragment will render Bulgarian (Cyrillic), Hebrew, Japanese and Portuguese.

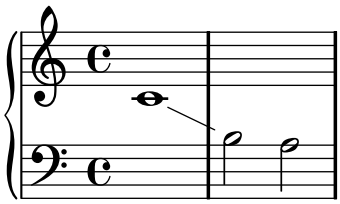




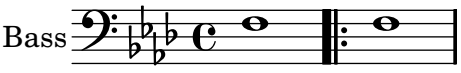
קרפד
あさきゆめみじ
legal

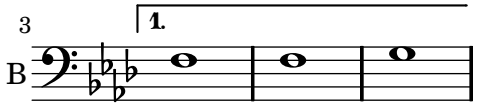
‘voice-follower.ly’

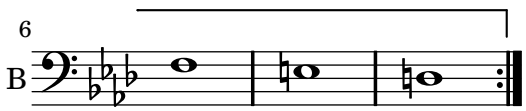
Whenever a voice switches to another staff a line connecting the notes can be printed automatically. This is enabled if the property followVoice is set to true.

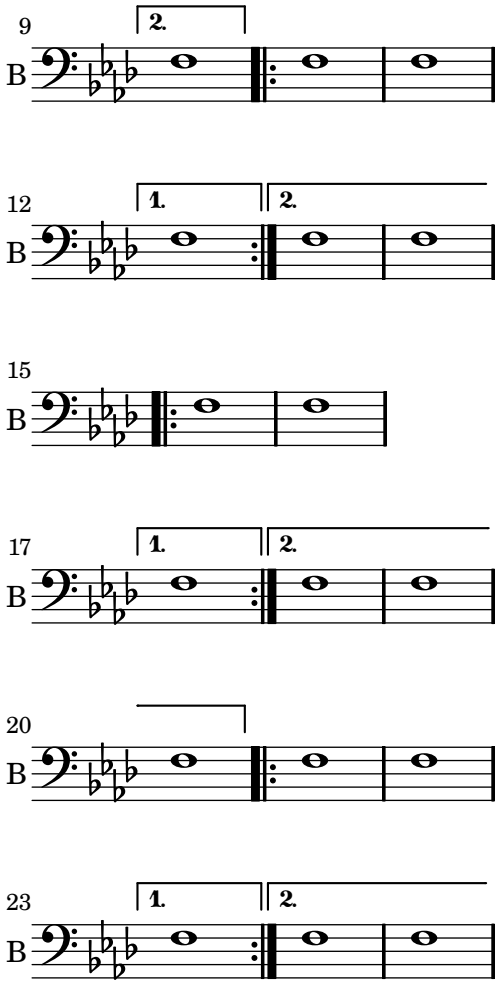


‘volta-broken-left-edge.ly’ Broken volta spanners behave correctly at their left edge in all cases.

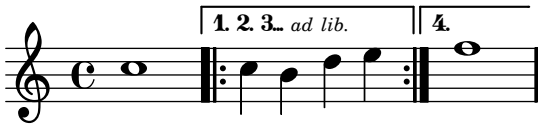




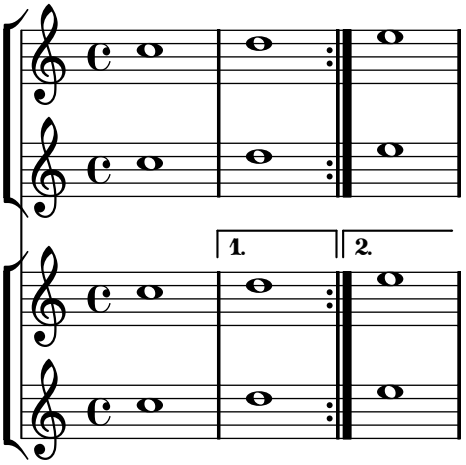




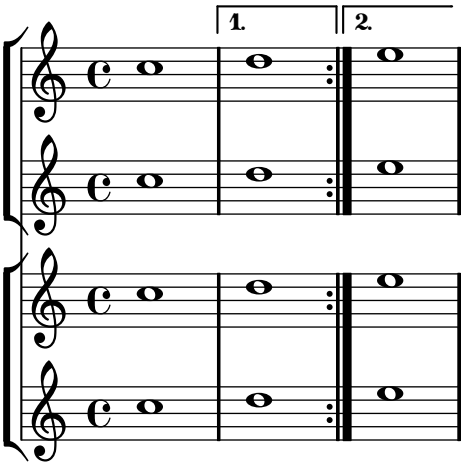
‘`volta-markup-text.ly`’ Volte using `repeatCommands` can have markup text.



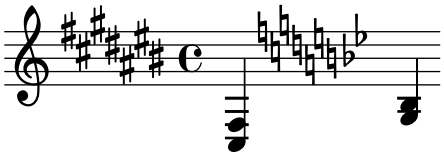
‘`volta-multi-staff-inner-staff.ly`’ By putting Volta_engraver in a staff context, one can get volta brackets on staves other than the topmost one.



‘`volta-multi-staff.ly`’ By default, the volta brackets appear only in the topmost staff.



‘`warn-conflicting-key-signatures.ly`’ If you specify two different key signatures at one point, a warning is printed.



‘`whiteout.ly`’ The whiteout command underlays a white box under a markup. The whitening effect only is only guaranteed for staff lines, since staff lines are in a lower layer than most other grobs.

