

CHANGEPIITCH.LY

—

Contents

1	Description	2
2	Articulations	2
3	Events between 2 notes in <code>pattern</code>	2
4	Using <i>rests</i> and <code>\skip</code> events in <code>newnotes</code>	2
5	Using a function <code>\insert</code> in <code>newnotes</code>	3
6	Using a function <code>\samePitch</code> in <code>pattern</code> - Automatic tie grouping	3
7	Using a function <code>\nCopy</code> in <code>newnotes</code> - Speeding notes entry	4
8	shortcuts	5

INDEX

1 Description

The syntax of `\changePitch` is :

▷ *syntax* : `\changePitch pattern newnotes`

This will replace each notes (or chords) in `pattern` by notes or chords from `newnotes`. If the notes count in `newnotes` is greater, the pattern is copied repeatedly and truncated if needed.

EXAMPLE 1

```
pattern = { c8.-> c16-. }
newnotes = \relative c' {
  c d e f
  <e g> <d f> <c e> <b d>
  c }
\changePitch \pattern \newnotes
```



2 Articulations

All events attached to a note or a chord in `newnotes` (such as scripts, articulations, dynamics etc...) are mixed with those, contained in the current note of `pattern`.

Here is the result, when replacing the `newnotes` definitions of the example 1 :

EXAMPLE 2

```
newnotes = \relative c' {
  c^- \p( d) e \< f
  g^-( f) e^"hello" d
  c^- \f
}
```

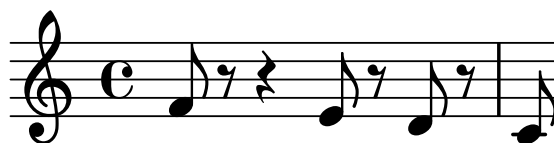


3 Events between 2 notes in pattern

All events after the current note (rests, overrides) in `pattern` are added unless the last notes of `newnotes` is reached.

EXAMPLE 3

```
pattern = { c8 r r4 c8 r c r }
newnotes = \relative c' { f e d c }
```



If you do want those events at the end, see 4) with the usage of `\skip` in `newnotes`.

4 Using rests and \skip events in newnotes

Rests in `newnotes` are allowed (the note in `pattern` is just replaced by the rest) but `\skip` events in `newnotes` have a special meaning :

when a `\skip` event is encountered in `newnotes`, the current note in `pattern` (and all not-note events after it) will be skipped. `\changePitch` will jump to the next note of the pattern.

Here is example 3 with a `\skip` added to the end of `newnotes`

EXAMPLE 4

```

pattern = { c8 r r4 c8 r c r }
newnotes = \relative c' { f e d c s }

```



5 Using a function `\insert` in `newnotes`

▷ *syntax* : `\insert music`

The `\insert` function has to be used in `newnotes`. It will insert a piece of music *between the current notes of pattern and his following*. All extra existing music (rests for example) between these 2 notes will be replaced.

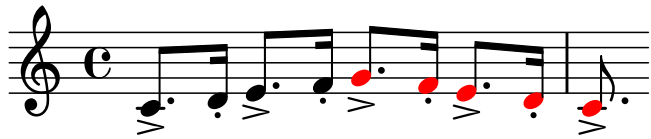
It is also possible to insert a music even if the current note of `pattern` is the last one.

EXAMPLE 5

```

pattern = { c8.-> c16-. }
newnotes = \relative {
  c d e f
  \insert { \override Voice.NoteHead #'color = #red }
  g f e d
  c }

```



6 Using a function `\samePitch` in `pattern` - Automatic tie grouping

▷ *syntax* : `\samePitch music`

- The `\samePitch` function has to be used in the `pattern`. It allows you to group several notes and assign all notes of this group to the same current pitch in `newnotes`.

EXAMPLE 6A

```

pattern = { c4 \tuplet 3/2 \samePitch { c8 c c } }
newnotes = \relative c' {
  c d e f g }

```



- Since version year 2016, `\changePitch` has a new behaviour with tied notes. Now, two tied notes are automatically grouped in a `\samePitch` section.

EXAMPLE 6B

```

pattern = { c4 c4~ \tuplet 3/2 { c8 c c } c4 }
newnotes = \relative c' {
  c d e f g a b c d e }

```



- In some situations, you may want to mimic this behaviour but with two not-tied notes. In such case, you can tag the first note with a special `\tag : fakeTie` as follow :

EXAMPLE 6C

```

pattern = { c4 \tag #fakeTie c4 \tuplet 3/2 { c8 c c } c4 }
newnotes = \relative c' {
  c d e f g a b c d e }

```



- For compatibility for pieces done with previous version of *changePitch.ly* (before 2016), you can add the following special instruction to the very beginning of these pieces, just before the `\include` :

```
 #(define cPCheckForTies #f)
 \include "changePitch.ly"
```

7 Using a function `\nCopy` in newnotes - Speeding notes entry

▷ *syntax* : `\nCopy n music`

`\nCopy n music`

has the same effect than

`\repeat unfold n music`

but `\repeat` doesn't work inside newnotes. `\nCopy` does.

```
 \changePitch {c8. c16}
 { \nCopy 2 {a b c' d'}
   \nCopy 2 {e' f' g' a'}}
```

will produce

```
{ a8. b16 c'8. d'16
  a8. b16 c'8. d'16
  e'8. f'16 g'8. a'16
  e'8. f'16 g'8. a'16
}
```

In relative mode, you have to repeat `\relative` to each call

```
 \changePitch {c8. c16}
 { \nCopy 2 \relative {a b c d}
   \nCopy 2 \relative {e' f g a}}
```

8 shortcuts

Three shortcuts have been defined : \cP \cPI and \cPII

For shortcuts \cPI et \cPII you have first to define patterns called respectively patI and patII

shortcut	effect
\cP pattern newnotes	\changePitch pattern newnotes
\cPI newnotes	\changePitch \patI newnotes
\cPII newnotes	\changePitch \patII newnotes

Here is the last example (in a more complex situation)

```
patI = \repeat unfold 2 {r8 \repeat unfold 2 {g16 c e}}
patII = \repeat unfold 2 { <<
      \new Voice {\voiceTwo c2 }
      \new Voice {\voiceOne r16 e8.~ e4 }
    >> }
\score { \new PianoStaff <<
  \new Staff \cPI \relative c' {
    g' c e
    a, d f
    g, d' f
    g, c e
    a, e' a
    fis, a d
    g, d' g
    e, g c
    e, g c
    d, fis c' %etc
  }
  \new Staff {
    \clef bass
    \cPII \relative c' {
      c e
      c d
      b d
      c e
      c e
      c d
      b d
      b c
      a c
      d, a' %etc
    }
  }
}
>>
}
```

EXAMPLE 7

The first system of musical notation consists of two staves. The upper staff is in treble clef with a common time signature (C). It begins with a quarter rest, followed by a quarter note G4, an eighth note A4, and a quarter note B4. This is followed by a quarter rest, then an eighth note C5, a quarter note D5, and a quarter note E5. The second measure contains a quarter rest, an eighth note F5, a quarter note G5, and a quarter note A5. The lower staff is in bass clef with a common time signature. It starts with a quarter rest, followed by a quarter note G2, an eighth note A2, and a quarter note B2. This is followed by a quarter rest, then an eighth note C3, a quarter note D3, and a quarter note E3. The second measure contains a quarter rest, an eighth note F3, a quarter note G3, and a quarter note A3.

The second system of musical notation consists of two staves. The upper staff continues the melody from the first system. The lower staff continues the bass line, maintaining the same rhythmic pattern of quarter and eighth notes.

The third system of musical notation consists of two staves. The upper staff continues the melody. The lower staff continues the bass line. A sharp sign (#) appears above the first note of the second measure in the upper staff, indicating a change in pitch.

The fourth system of musical notation consists of two staves. The upper staff continues the melody. The lower staff continues the bass line.

The fifth system of musical notation consists of two staves. The upper staff continues the melody. The lower staff continues the bass line. A sharp sign (#) appears above the first note of the second measure in the upper staff, indicating a change in pitch.

INDEX

a

articulations 2
automatic tie grouping 3

c

changePitch 2
cP 5
cPI 5
cPII 5

d

dynamics 2

f

fakeTie 3

i

insert 3

n

nCopy 4
newnotes 2

p

pattern 2

r

repeat percent 4
rest 2

s

samePitch 3
scripts 2
skip 2

t

tied notes 3