chordsAndVoices.ly

1. extractNote

syntax : `\extractNote #n \music`

Extracts the n-th note in each chord in music, keeping articulations. A note alone remains inchanged. If n is greater than the number of notes of a chord, the last note is extracted.

Ex :

```
music = <c e g>
\extractNote #1 \music -> c
\extractNote #2 \music -> e
\extractNote #3 \music -> g
\extractNote #4 \music -> g
music = <g e c>
\extractNote #1 \music -> g
\extractNote #2 \music -> e
\extractNote #3 \music -> c
\extractNote #4 \music -> c
```

You can avoid a section to be extracted with \notExtractNote :

```
music = { <c e g> \notExtractNote {<c e g> <c e g>} <c e g> }
\extractNote #1 \music -> { c <c e g> <c e g> c }
```

2. extractVoice

syntax : `\extractVoice #n \music`

Extracts in music, the n-th voice of simultaneous music of the same level, keeping only basic music events (no more \Voicexxx or \new Voice). A Voice separator doesn't count as a Voice.

```
music = \relative c' << { c2 d } \\ { e2 f}>>
\extractVoice #2 \music -> { e'2 f'}
music = \relative c' << { c2 d }
                        \new Voice {\voiceTwo e2 f} >>
\extractVoice #2 \music -> { e'2 f'}
```

As the function deletes a lot of \override and \set, you can avoid an event to be extracted or deleted with \notExtractVoice

```
music = \relative c' <<
    { c2 d }
    \new Voice {
      \voiceTwo
      \notExtractVoice \override Voice.NoteHead.color = #red
      e2 f } >>
\extractVoice #2 \music  ->
            { \override Voice.NoteHead.color = #red e2 f }
```

3. deepExtractVoice

syntax : `\deepExtractVoice #d \music`

d as a decimal number.

Behaves like \extractVoice, taking first the integer part of d as n argument, but goes deeper inside the resulting music, extracting voice of other potential simultaneous music, taking now as n argument the first digit of the decimal part of d, then continues always deeper with second digit and so on.

Notes that a digit of 0, means taking previous digit, so 2 is equivalent to 2,222... and 2,3 to 2,333...

```
music = \relative c' <<
  << \musicI
     \new Voice { \voiceThree \musicIII }
  >>
  \\
  << \musicII
     \new Voice { \voiceFour \musicIV }
  >>
>>
\deepExtractVoice #1.1 \music  -> \musicI
\deepExtractVoice #1.2 \music  -> \musicIII
\deepExtractVoice #2.1 \music  -> \musicII
\deepExtractVoice #2.2 \music  -> \musicIV

\deepExtractVoice #1 \music  -> \musicI
\deepExtractVoice #2 \music  -> \musicIV
\extractVoice #1 \music  -> << \musicI
                               \new Voice { \voiceThree \musicIII } >>
\extractVoice #2 \music  -> << \musicII
                               \new Voice { \voiceFour \musicIV } >>
```

4. extractPartUpper, extractPartLower

These 2 functions are a combination of `\extractNote` and `\extractVoice`. They take only one music argument.

`\extractPartUpper` takes les last note of chords and the first voice of simultaneous music, so generally the notes with the highest pitch (the soprano in a choir).

```
\extractPartUpper \music -> \extractNote #1000 \extractVoice #1 \music
```

\extractPartLower takes the first note of chord and the latest voice, so the bass.

```
\extractPartLower \music -> \extractNote #1 \extractVoice #1000 \music
```

Note that these functions assume that chords are entered as in *<c e g>* (the lowest first), not *<g e c>*. If you prefer the *<g e c>* form, you have to redefine these 2 functions.

Two shortcuts have been defined :

\ePU for *\extractPartUpper*, and

\ePL for *\extractPartLower*

5. addNote

syntax : *\addNote \music \notes*

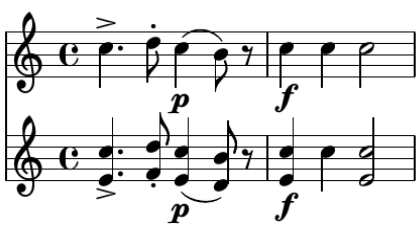
Merges in a chord, the first note or chord in \music, with the first note or chord in \notes, including articulations, then continues with the second note or chord, and so on.

- The duration of notes are taken from \music.
- In \notes, only note, chord, or skip events are kept.

  If a skip is met, nothing is added in the current note. (see example later)

Example :

```
musicA = \relative c' {
      c'4.-> d8-. c4(\p b8) r
      c4\f c c2 }
musicB = \relative c' {
      e f e d e s e }
\score { <<
  \new Staff \musicA
  \new Staff \addNote \musicA \musicB
  >> }
```



6. addVoice, addVoiceAlt

syntax : *\addVoice \music \newVoice*

\addVoiceAlt \music \newVoice

\addVoice \music \newVoice *is equivalent to :*

```
<< \music \\ \newVoice >>
```

\addVoiceAlt \music \newVoice *is equivalent to :*

```
{ << { \voiceOne \music }
     \new Voice { \voiceTwo \newVoice }
  >>
  \oneVoice }
```