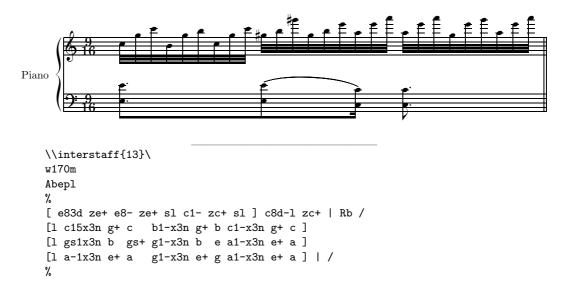# Octaviation Notation

PMX does not provide a notation for octaviation; but native MusiXTEX does: cf. the MusiXTEX manual, Sec. 2.11 for details.

Consider, for example, bar 155 of the 2nd movement of Beethovens piana sonata op. 111 :


```
\\interstaff{13}\
w170m
Abepl
%
[ e83d ze+ e8- ze+ sl c1- zc+ sl ] c8d-l zc+ | Rb /
[l c15x3n g+ c   b1-x3n g+ b c1-x3n g+ c ]
[l gs1x3n b  gs+ g1-x3n b  e a1-x3n e+ a ]
[l a-1x3n e+ a   g1-x3n e+ g a1-x3n e+ a ] | /
%
```

In most editions, you will find the figures in the right hand in the second and third three beats written in octaviation notation:

which is clearly easier to read. This octaviated version was produced by the following **PMX** code:

```
\\interstaff{13}\
w170m
Abepl
\\def\octnumber{8$^{va}$}\
%
[ e83d ze+ e8- ze+ sfu c1- zc+ sfu  ] c8d-l zc+            | Rb /
[l c15x3n g+ c    b1-x3n g+ b c1-x3n g+ c ]
\Ioctfinup1d\ [l g-s1x3n b  gs+ g1-x3n b  e a1-x3n e+ a ]
[l a-1x3n e+ a   g1-x3n e+ g a1-x3n e+ a ] \toctfin1\    |    /
%
```

The octaviation is started with the Type 1 inline TEX symbol `\Ioctfinup1d\` and ended with `\toctfin1\` ; the transposition downward is, of course, generated in the standard **PMX** way by writing `g-s1x3n` instead of `gs1x3n` . By default, MusiXTEX will start the octaviation symbol with a simple 8; this is changed to 8va by the Type 2 inline TEX symbol given in the preamble.

Note: When using this octaviation notation in a score, do not try to produce a MIDI file for that score: it will come out faulty.

C.C. Noack 2004 Feb 18