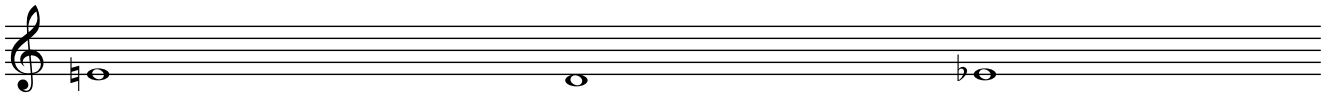
Cell techniques in Anton Webern's Five Pieces for Orchestra, opus 10 no 1 (1913)

The premiere of Anton Webern's Five Pieces for Orchestra, Op. 10 was on June 22, 1924, over 10 years after its completion, during the fourth festival of the International Society for Contemporary Composers in Zurich. Critics wrote favorable reviews of the work and described Webern as "a true musical poet". Op. 10 brought Webern international fame.

These pieces are the last orchestral works Webern published before his adoption of the 12-tone method; hence Five Pieces for Orchestra, Op. 10 are pieces of "free atonality".

The first piece from Anton Webern's Five Pieces for Orchestra, opus 10 no 1, is from melodic and harmonic point of view based on a small melodic cell, consisting of a succession of a major and minor second interval.



Example 1: basic melodic cell

major second **minor second**

The order of the second intervals can of course be modified, the intervals can be varied by octave changes and also interpolated with another cell (or one or more cell elements).

Example 2: melody based modified cells

which can be explained as an interpolation of cell 1 by cell 2:

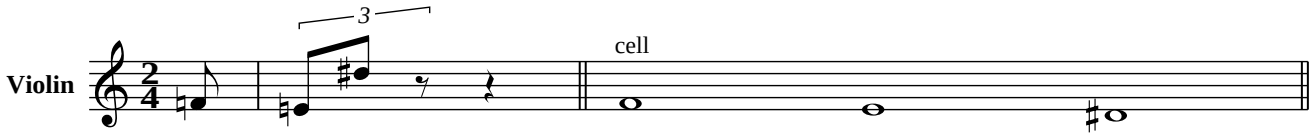
Example 3: cell 2 as an interpolation of cell 1

With these cell techniques (interpolation, octave changes) the complete melodic and harmonic organization of Webern's piece can be described. I'll present all elaborations of Webern in a more or less ascending order of complexity.

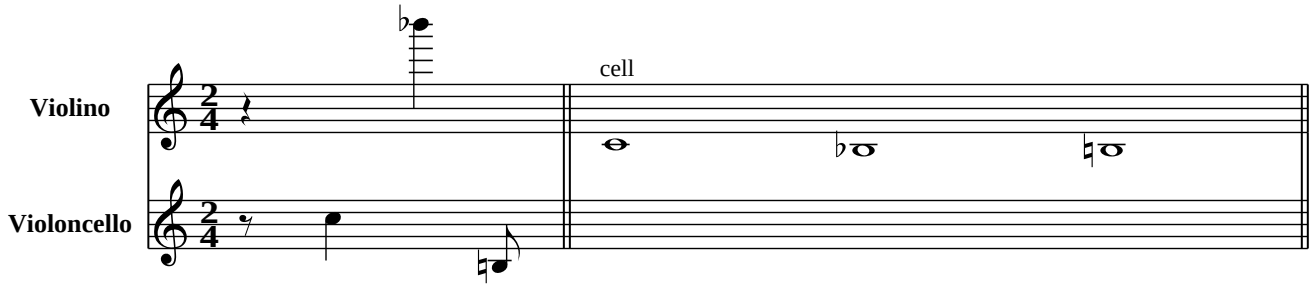
Notice that the interval succession of minor and major second and vice versa can be replaced by major-major second or minor-minor second successions.

The first examples show the melodic relations. Example 10 and later investigate the harmonic characteristics.

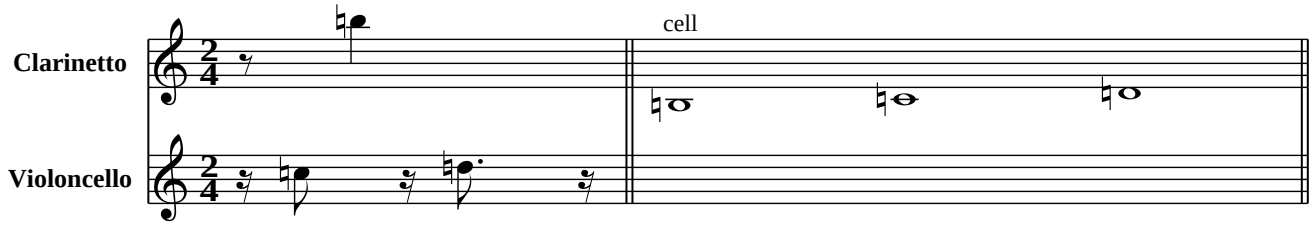
Example 4: bar 1-5



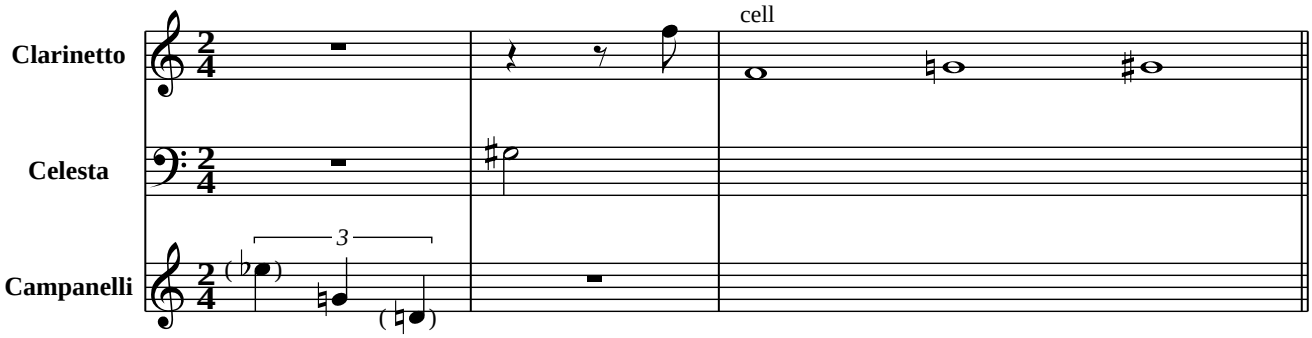
Example 5: bar 8-9



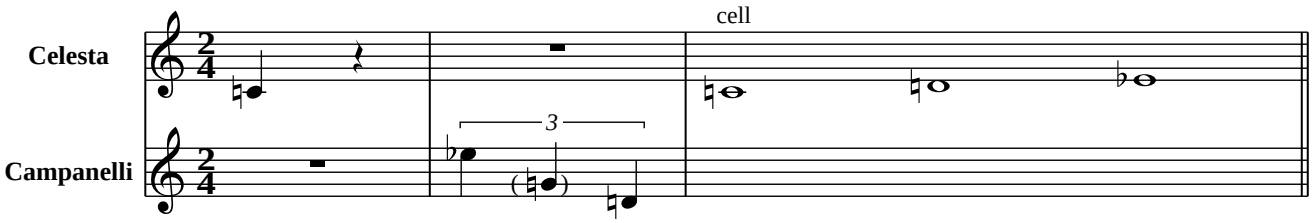
Example 6: bar 7



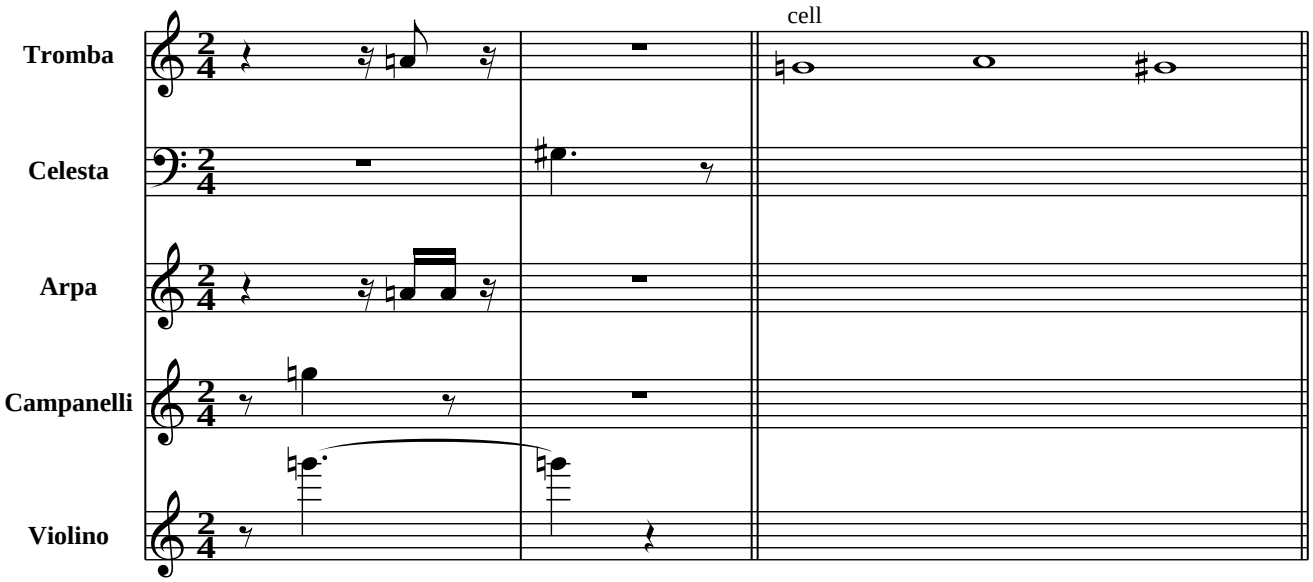
Example 7: bar 6



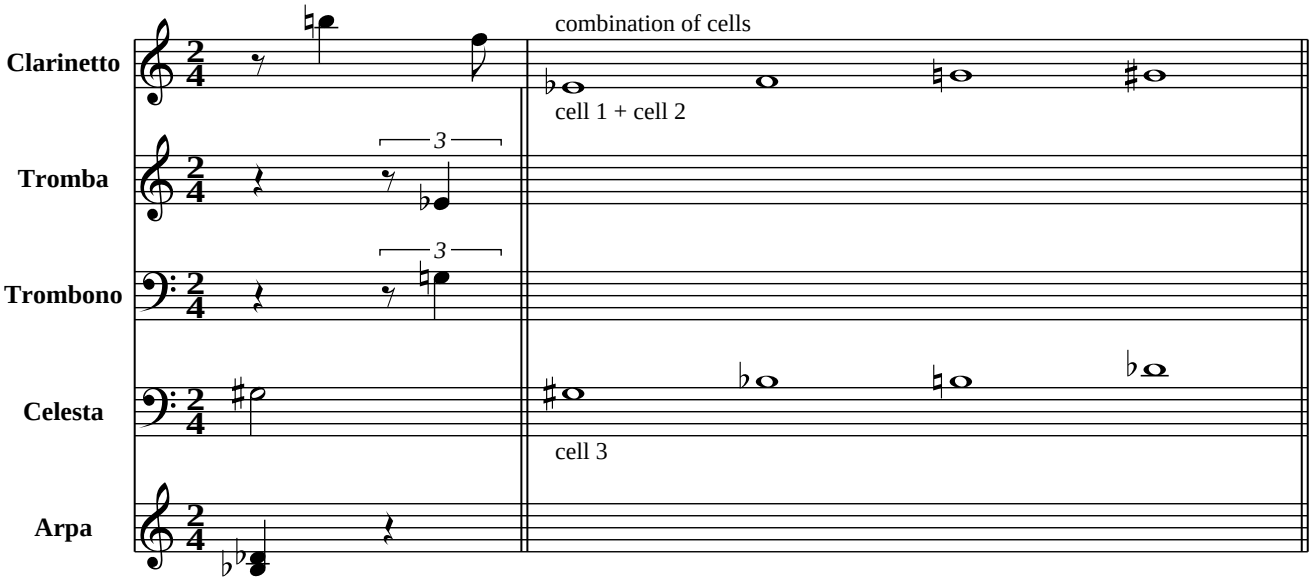
Example 8: bar 2-3



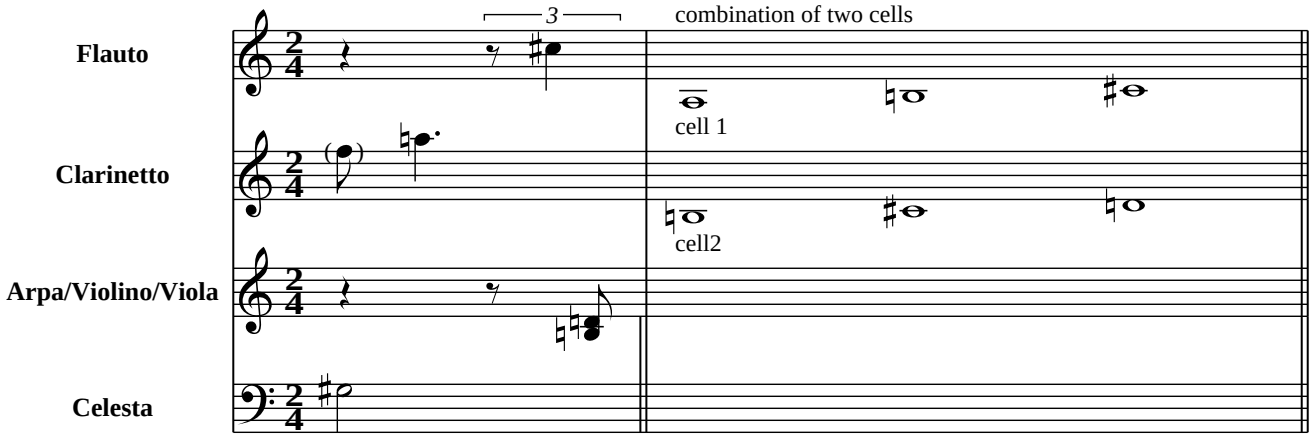
Example 9: bar 1-2



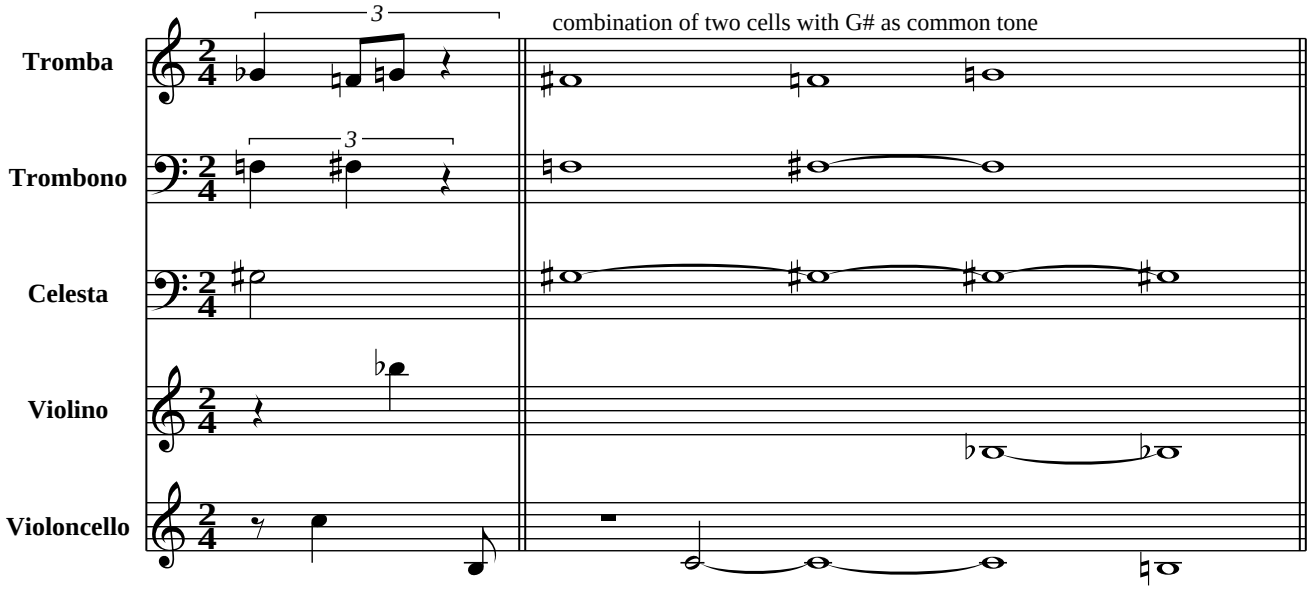
Example 10: bar 9



Example 11: bar 6

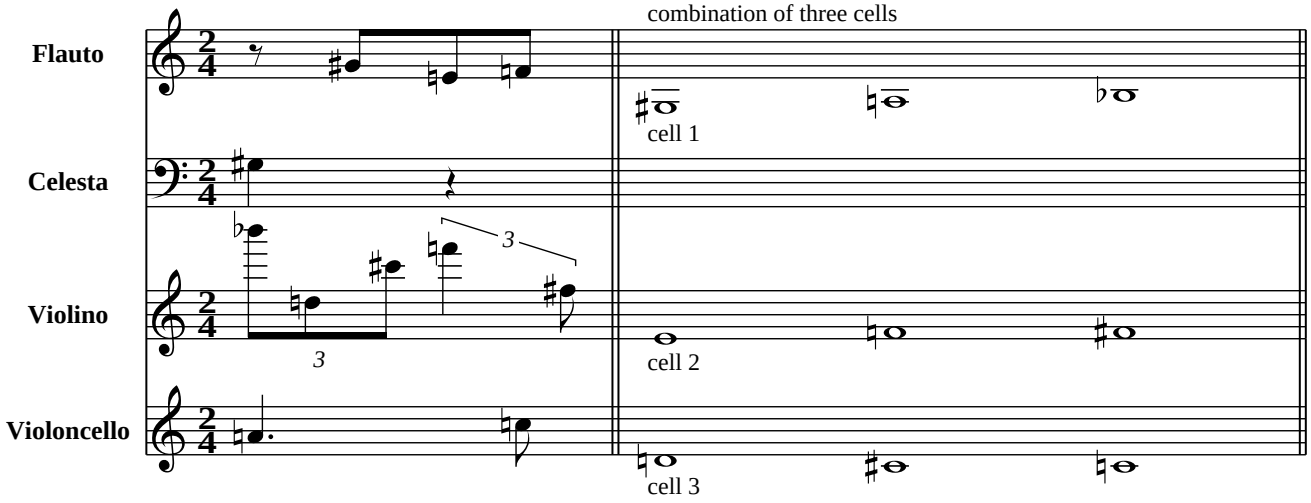


Example 12: bar 4



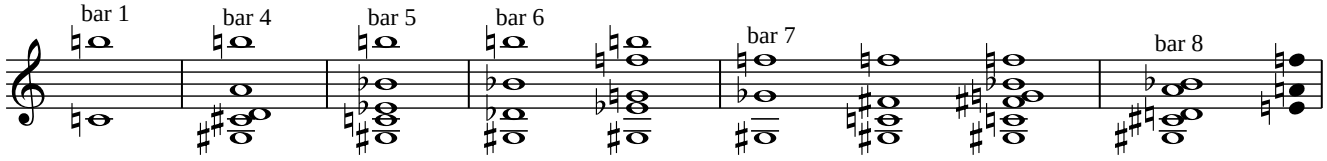
Example 13: bar 7

The C in example 13, played by the violoncello, could be interpreted as an anticipation: tone Bb in the violin completes the (harmonic) cell G#-Bb-C



Example 14: bar 8

Let's investigate the sounds that contains three or more different voices after the opening major seventh. For better readability, the octave of the voices can be changed.



Example 15: all 'chords'

Apart from the fact that all sounds are a verticalization of the basic melodic cell of example 1 (e.g. each sound has at least two adjacent seconds), they all have tones in common. The other tones move stepwise.

Conclusion: the organization of melody and of harmony is based on simple rules that can be derived from a simple cell that contains Webern's melodic and harmonic laws.

About the author:
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