String Technique (Orchestral Examples)

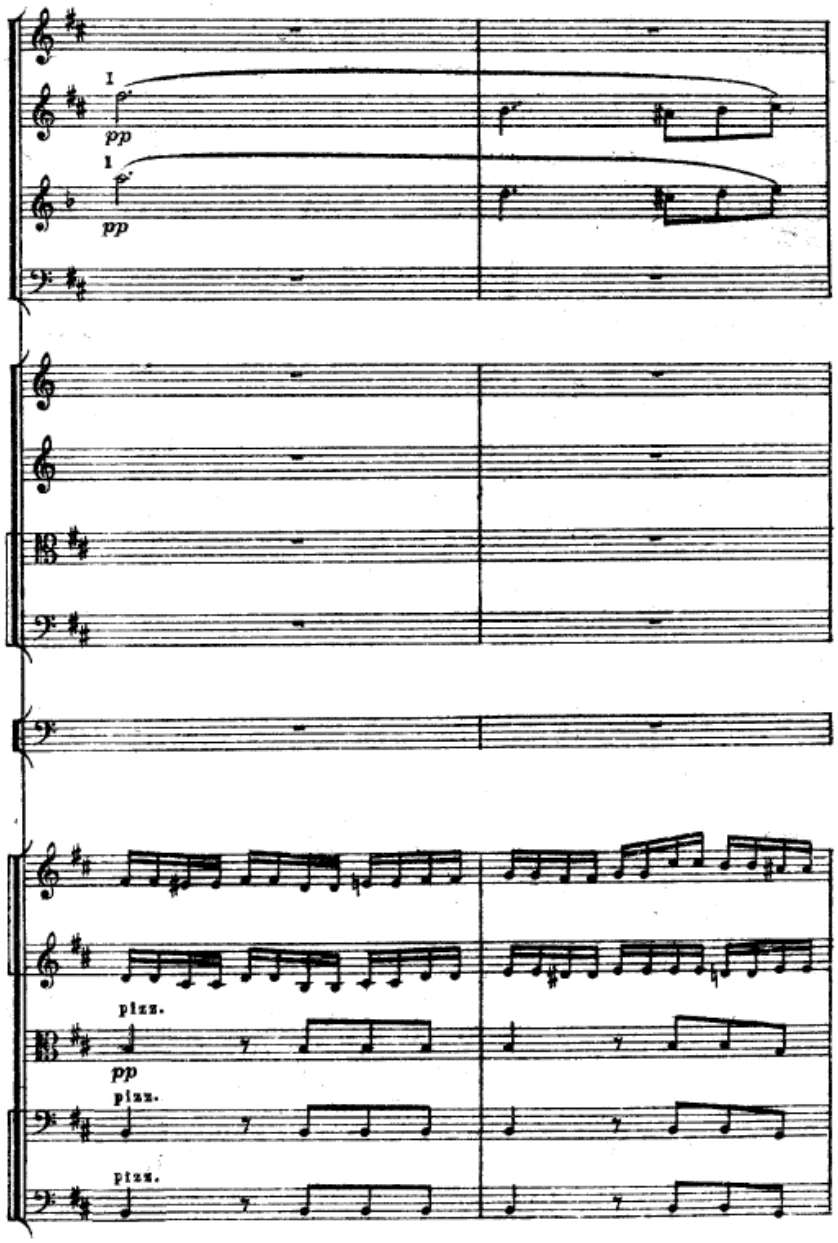
Introduction

For a general introduction to writing for strings and for basic examples, look under *String Techniques* in the **String Writing (Quartets)** section above. This document offers a few further examples of string techniques in the context of orchestral writing. There are many further examples in the extract from Walter Piston's book on Orchestration (below this file on Moodle).

Pizzicato

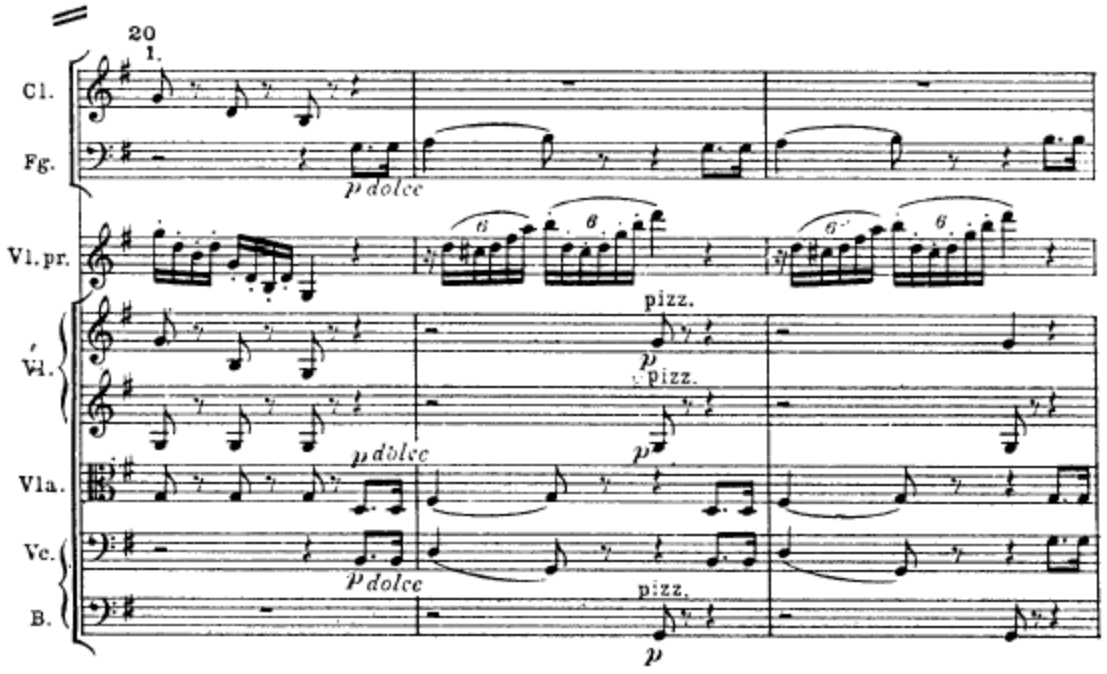
The classic use of pizzicato for accompaniments is as a bass line. Here the violas, cellos and double basses play in octave unison whilst the woodwind play the tune and the violins add a busy semiquaver figuration.

Example 1: Schubert Unfinished Symphony, 1st Movement



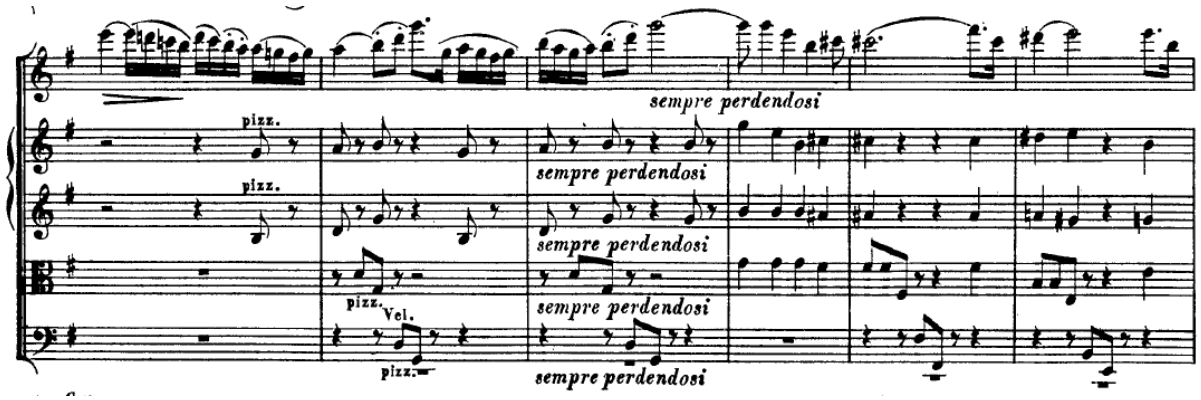
In this movement the pizzicato is used not as an accompaniment but more as an added colour – like adding a percussion instrument. Beethoven adds unison pizzicato chords as interjections between the short phrases of the melody.

Example 2: Beethoven Violin Concerto, 2nd Movement, Bar 20



Later in the same movement, Beethoven uses the entire string section to provide a pizzicato accompaniment to the solo violin (could work with a wind instrument playing the melody too). Initially the violins play chords, which the violas and cellos cascade falling fifths and octaves that reinforce the harmony. In the fourth bar of the extract all the strings play homophonic chords before returning to the previous texture.

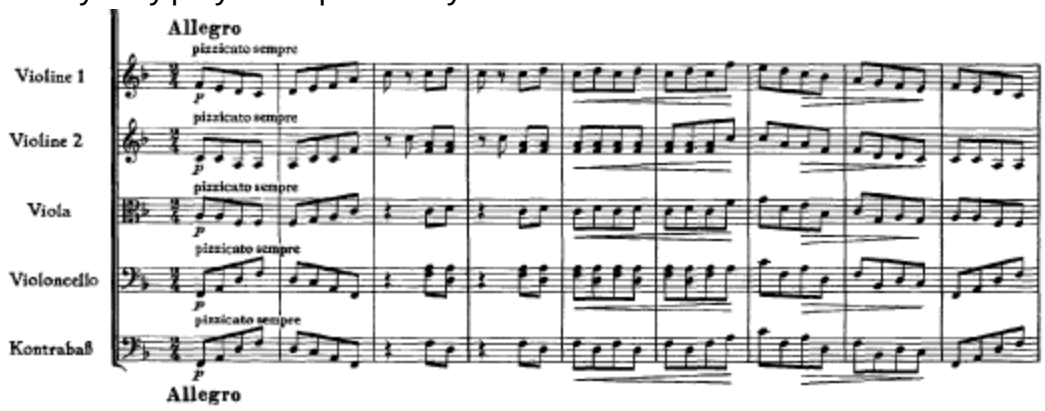
Example 3: Beethoven Violin Concerto, 2nd Movement



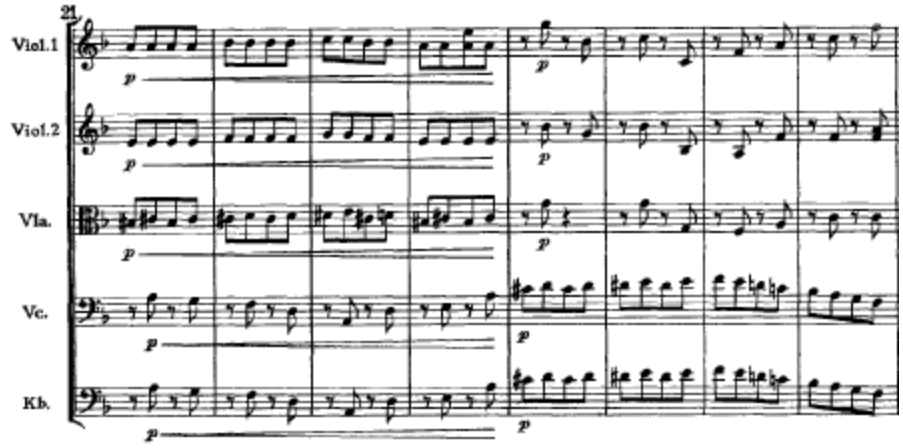
Example 4: Tchaikovsky Symphony No. 4, 3rd Movement

Tchaikovsky is one of several composers to use string pizzicato much more extensively. The strings pizzicato all the way through the third movement of his fourth symphony.

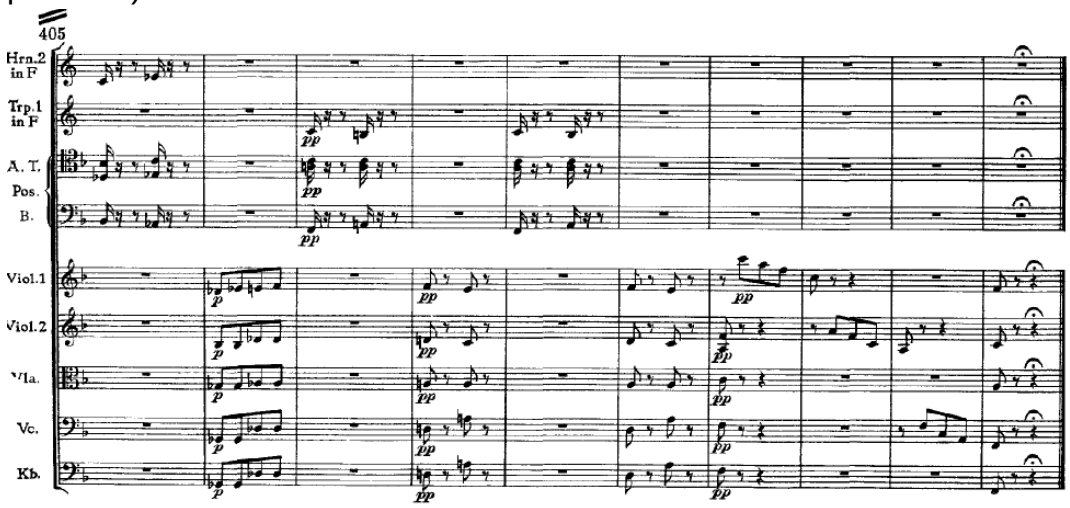
Initially they play homophonically:



Then the melody moves between the upper and lower strings, whilst the others play accompanying chords:



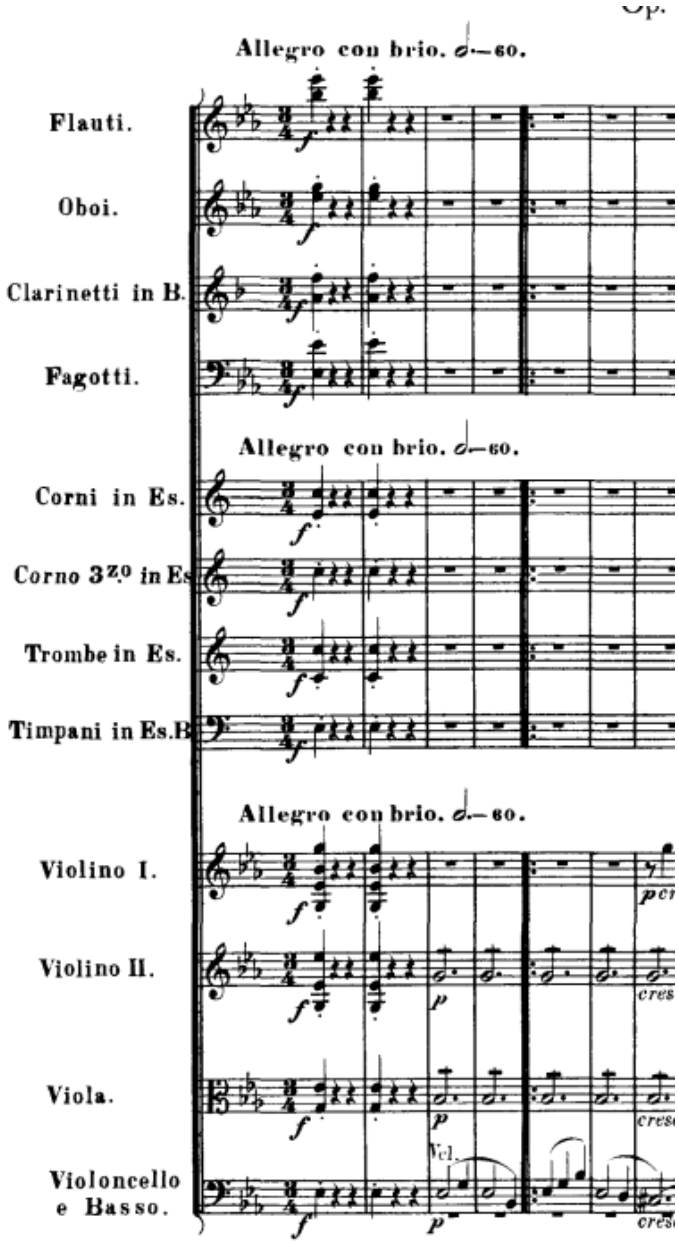
In the last part of the movement the strings alternate with woodwind and brass and the movement ends with this arpeggio falling through the string section (still all pizzicato):



Double, triple and quadruple stopping

Multiple stops are often used in orchestral textures for big tutti chords as in the famous opening to Beethoven's Symphony No. 3. Rapidly repeating or changing chords are not practical:

Example 5: Beethoven Symphony No. 3, 1st Movement



Tremolo

Unmeasured tremolo

There are lots of excellent examples of quiet shimmering tremolo textures in the Debussy Prelude in the Anthology:

- A quiet and relatively low bowed tremolo accompanies the flute in bar 11 on p. 88
- This texture crescendos to **forte** on p. 90
- In bar 94 (p. 114) the strings accompany the flutes with an ethereal fingered pianissimo tremolo with the bow over the fingerboard (see below under sul tasto)

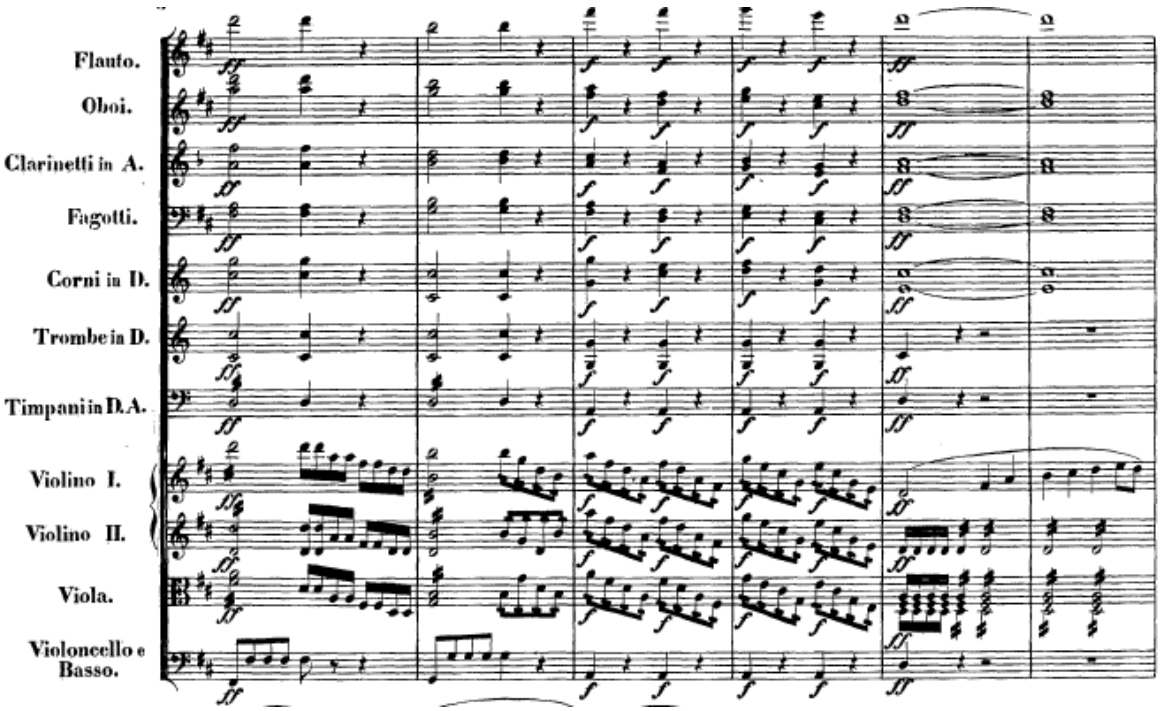
Example 6: Debussy, Prelude a l'apres-midi d'un faune

[see anthology p. 86]

Measured tremolo

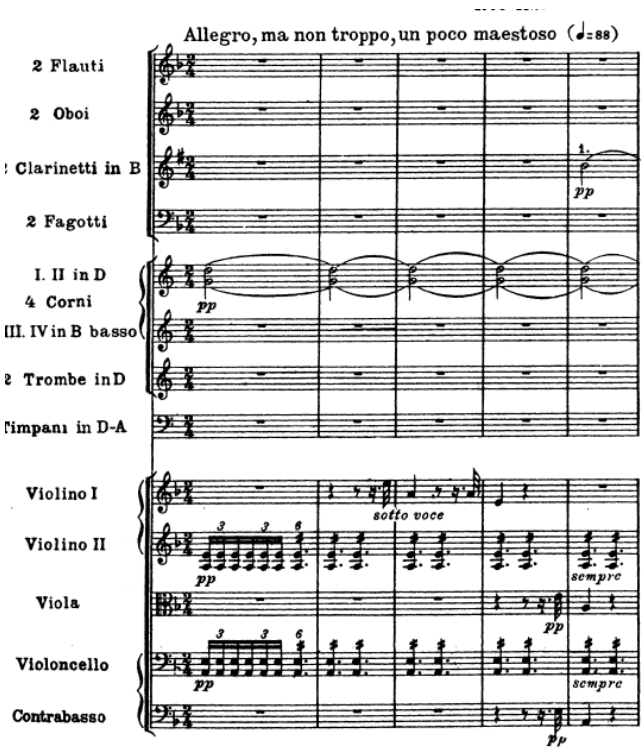
In this example, Beethoven uses measured tremolo to create rhythmic energy. In the first six bars of the excerpt the tune, which mostly moves in quavers, is energised by repeating each note in semiquavers and in the seventh bar the tremolo switches to accompanying chords in the violas and seconds, creating a robust sound, reinforced by the wind and brass chords above. It is worth noting that on the whole measured tremolo is more effective in loud passages than unmeasured, which can get quite scratchy.

Example 7: Beethoven Violin Concerto in D, first movement



Another example from Beethoven is the famous beginning of his Ninth Symphony, with its tense and quiet sextuplet tremolo texture:

Example 8: Beethoven Symphony No. 9, first movement

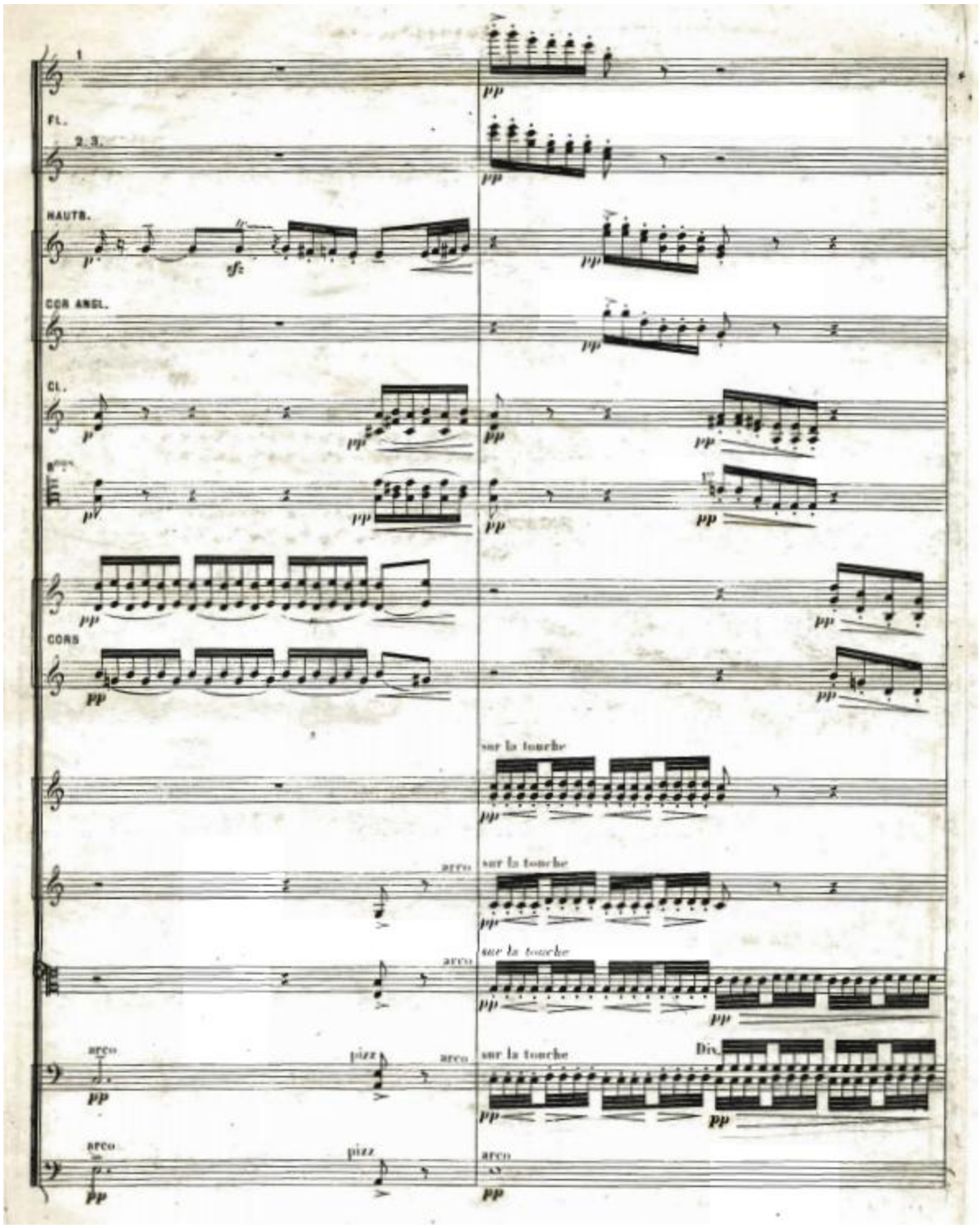


Bow placement

Sul tasto / Sur la touche

Playing over the fingerboard creates a very light and wispy sound. Here Debussy uses it for colour as the strings play quiet staccato chords as the woodwind cascade down:

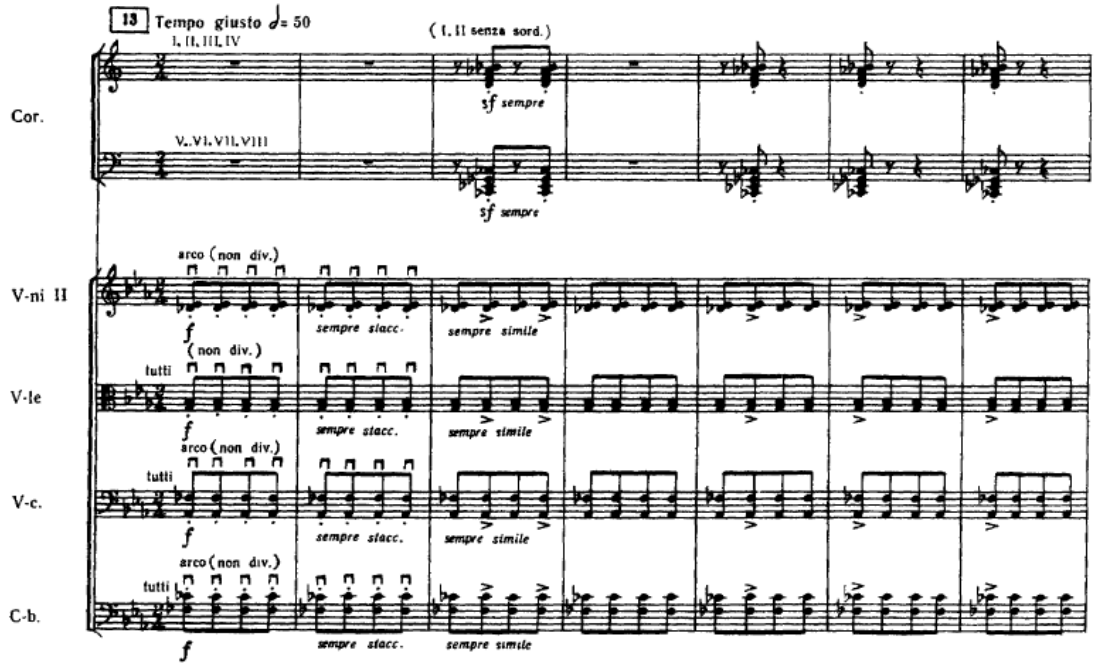
Example 9: Debussy, Prelude a l'apres midi d'un faune, bb. 85-6



Repeated Down Bows

In this famous example from Stravinsky's Rite of Spring, all the strings play accented chords with repeated down bows, creating a very aggressive effect.

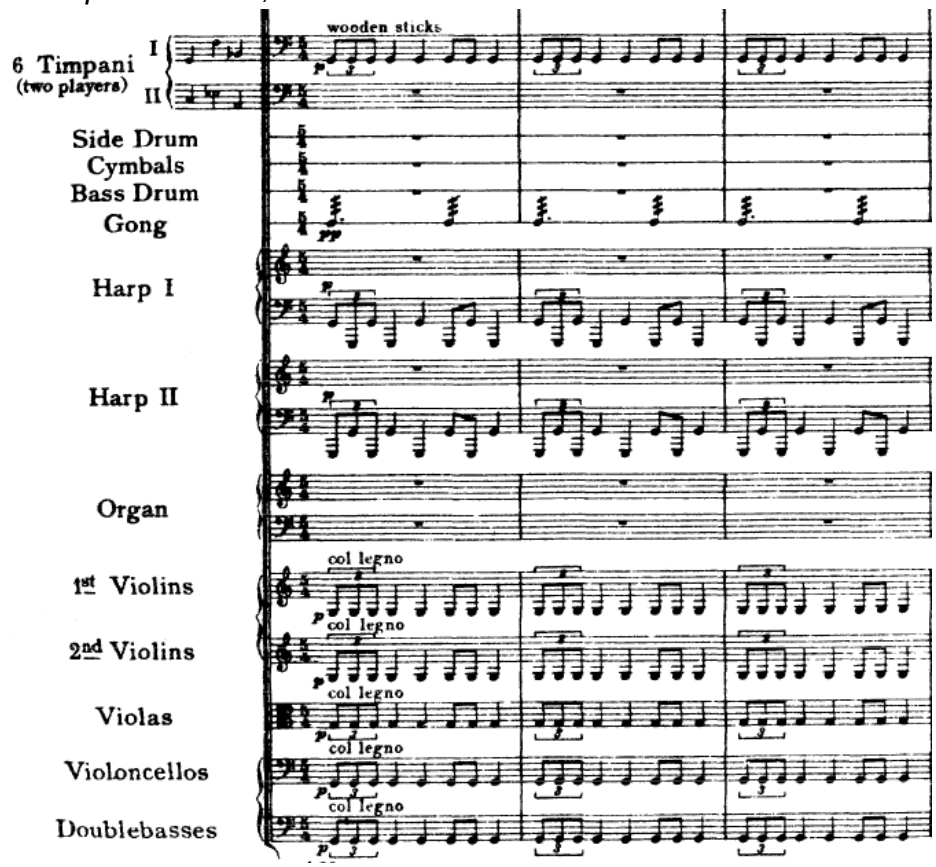
Example 10: Stravinsky Rite of Spring, Dances of the Young Girls



Col legno

In this famous example from The *Planets* the strings all play the menacing rhythm with the wood of the bow.

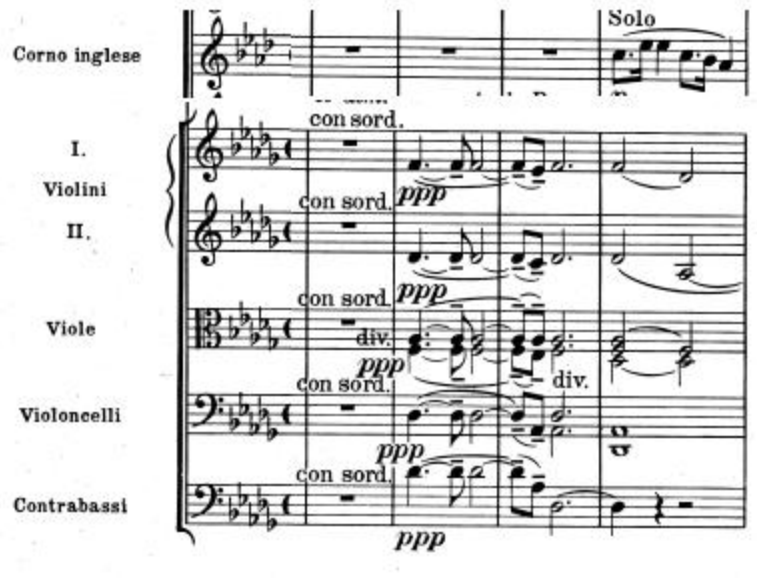
Example 11: Holst, Mars from The Planets



Muted timbres

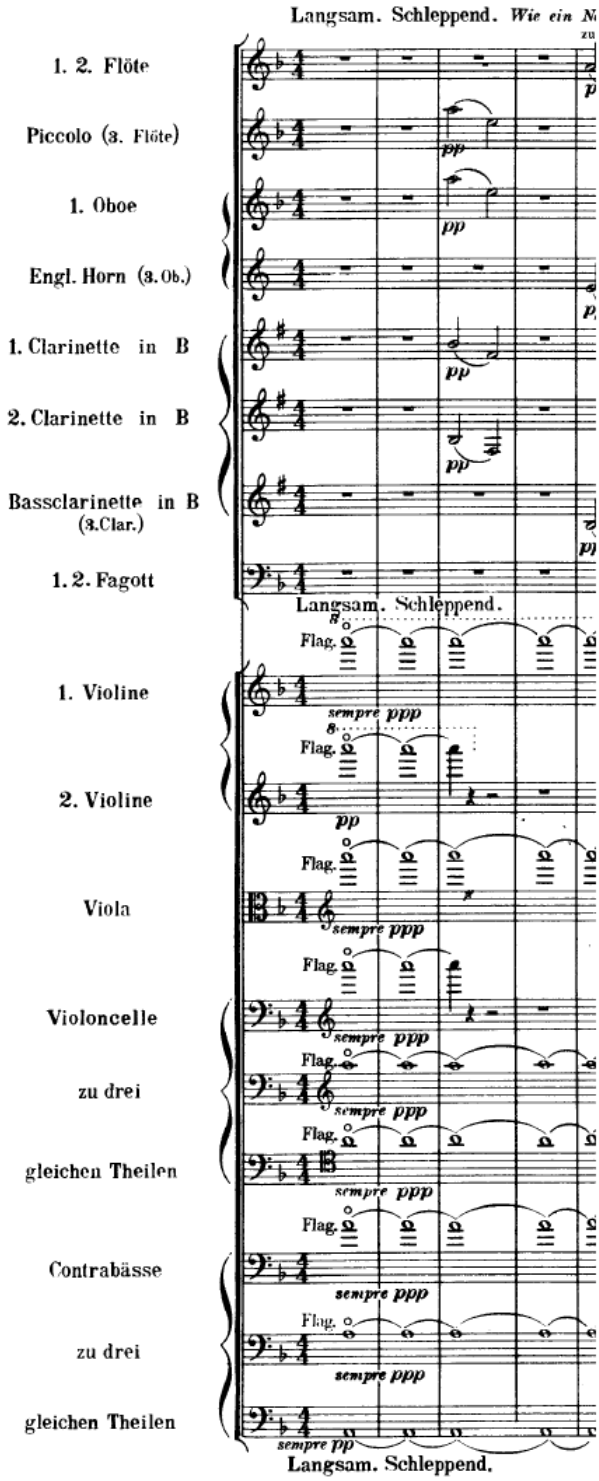
Muted strings make an effective quiet accompaniment for gently woodwind solos. One of the most famous examples is the Cor Anglais solo from Dvorak's New World Symphony.

Example 12: Dvorak, Symphony No. 9, second movement



Harmonics

Natural harmonics

The mysterious beginning to Mahler 1 opens with shimmering natural harmonics in the strings that form a backdrop to wind fragments that drift into the texture. Notice that basses and cellos are divided.

Example 13: Mahler, Symphony No. 1, first movement.