

# The instruments of the orchestra

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to Angela Colbers

# The wind instruments

At the back of the orchestra the wind instruments have found a place (**play winds, 5 sec**). Some wind instruments have been made of wood (**show**) and others are made of metal (**show**). Just like the string instruments the different wind instruments vary in size from very small (**show piccolo**) to big (**show tuba or contrabassoon**).

With string instruments, the vibrating string is the source of the sound, with wind instruments different ways are used to force the air to vibrate. At the flute mouthpiece (**show flute**) with the lips some airflow from breathing-out is directed towards a rather sharp edge causing some sound. With the so-called reed instruments (**show reeds**) a thin reed is forced to vibrate, and with the brass instruments a slight air flow between the lips causes vibration (**show brass mouthpiece**).

Then, *very important*, after the mouthpiece a piece of tube is mounted. And the air column inside that tube might vibrate as well, the so-called *resonance*. That only happens when the vibrations in the mouthpiece are at a pitch that is able to resonate in the specific length of air column. A much louder and more defined sound is then generated (**play trumpet mouthpiece separately and mounted**). That resonance happens at a *short* tube for *high pitch* (**play piccolo**) and at a *long* tube for *low pitch* (**play tuba**).

# The trombone

The standard trombone is twice as long as the trumpet and the valves are replaced by a slide (**show trombone**). That enables not only the playing of notes at specific pitch but at every pitch in between (**trombone plays glissando**). And some trombones have been equipped with valves as well for a further extension of the tube length. Trombones are built in different sizes and now the most common trombones are the tenor trombone and the bass trombone (**show different trombones**).

Because of the different trombone sizes a broad spectrum of notes can be waited from this trombone section. The tenor trombone can play the mellow mid-range parts and the bass trombone feels easy at the lower pitch, enriching the bass notes. And because the trombone sound is directed straight into the audience it delivers a welcome contribution when more sound volume is awaited.

**(Now the trombones play the trio).**

Moderato ♩ = 96

Trombone 1

Trombone 2

Trombone 3

This system contains the first seven measures of the score for three trombones. The music is in 6/8 time with a key signature of two flats. Trombone 1 starts with a rest in the first measure, then plays a melodic line starting on G2, marked *mf*. Trombone 2 plays a similar melodic line starting on E2, marked *mp*. Trombone 3 plays a rhythmic accompaniment of eighth notes, marked *mp* with a crescendo to *mf*. Dynamic markings include *mf*, *mp*, and *mp* with accents.

8

This system contains measures 8 through 14. Trombone 1 has a melodic line with a crescendo to *f* in measure 9, then a decrescendo to *mp* in measure 14. Trombone 2 has a melodic line with accents, marked *f* in measure 9 and *p* in measure 14. Trombone 3 has a rhythmic accompaniment with accents, marked *f* in measure 9 and *mp* in measure 14. Dynamic markings include *f*, *mp*, and *p*.

15

This system contains measures 15 through 19. Trombone 1 has a melodic line with accents, marked *f* in measure 15. Trombone 2 has a melodic line with accents, marked *f* in measure 15. Trombone 3 has a rhythmic accompaniment with accents, marked *f* in measure 15. Dynamic markings include *f*.

# Finale

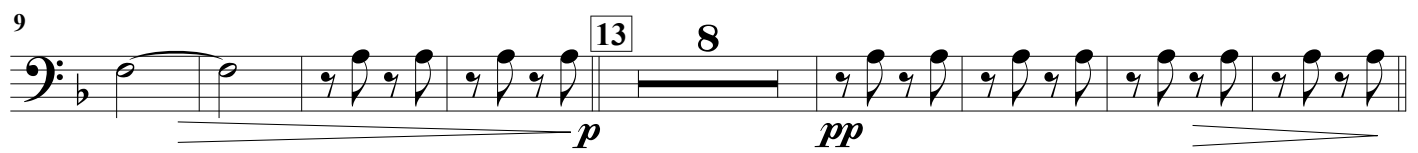
Allegro maestoso, ♩ = 112

Trombone 2



*f*

9



*p* *pp*

25



*p*

34



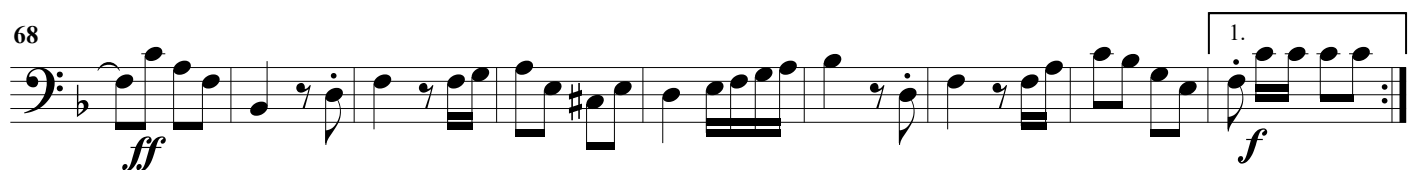
*f*

56



*f* *f*

68

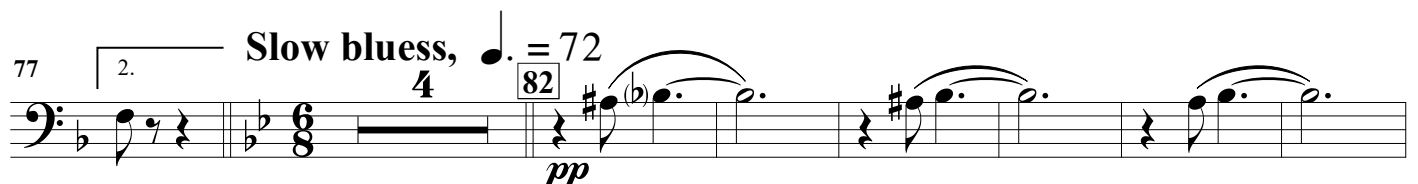


*ff* *f*

77

2.

Slow blues, ♩ = 72



*pp*

88



*mp*

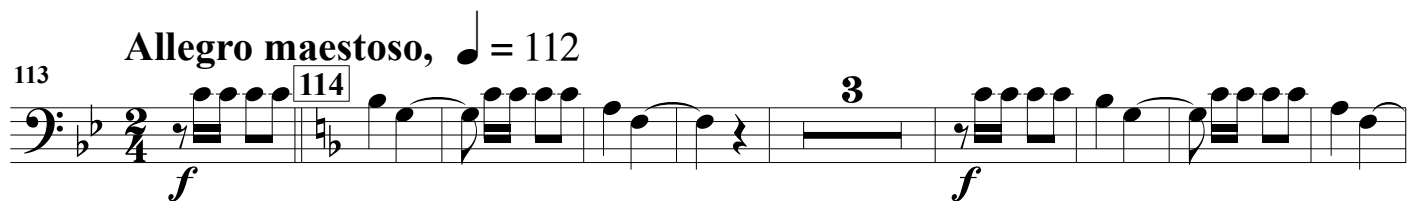
106



*mp*

113

Allegro maestoso, ♩ = 112



*f* *f*

125



*ff*