

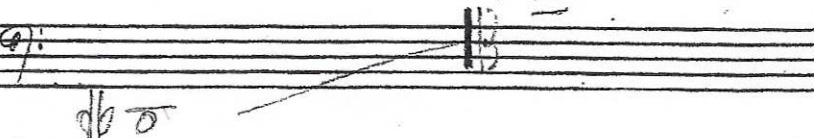
## EXTENDED TECHNIQUE FOR BASSOON

### Microtones:

Stick to quarter tones unless you have spoken to a bassoonist about smaller intervals.  
We like to use the following notation system:

d 1 quarter flat  
db 3 quarter flat

# 1 quarter sharp  
## 3 quarter sharp



These are all possible from Db to the top of the range.

### Harmonics:

There are 3 varieties of harmonics available for the bassoonist.

- 1: Using a long joint (bass note) and increasing the air pressure to produce chords
- 2: Using a long joint (bass note) and venting fingers
- 3: combination of both methods

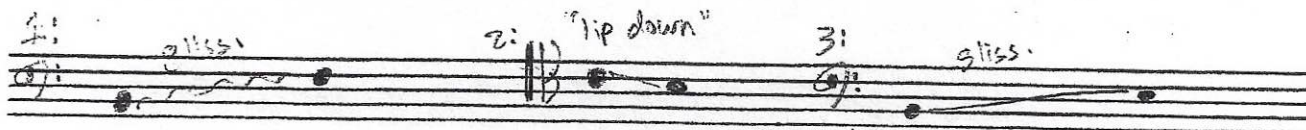
see attached sheet

Possible resultant tone range of Bb to Ab

### Glissando:

There are 3 types of glissando

- 1: Keyed glissando (think a piano)
- 2: Lip glissando. this will only raise up to a major second at the most extreme
- 3: "Slide" glissando (think trombone)



Possible the entire range. the "slide" glissando does take time between large intervals. It can take around 5 minutes to glissando the entire range of the bassoon. In general, upward glissandos are easier to do than downward.

**Multiphonics:**

There are countless numbers of multiphonics. Every bassoon, player and reed are different. In my experience, the pitches within the multiphonic chords will vary around a minor third. Because of the inherent instability of these chords, chances are you will not always hear what you are intending to. I strongly encourage you to use the first set presented, as those will be the most stable.

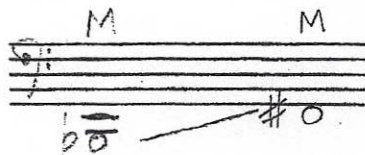
Category 1: These multiphonics are created by playing a normal fingering and lessening the air pressure. These are easy to play and can be used in any setting. Because they are standard fingerings they can be used in a variety of ways. They can be played at varying dynamics:



or written as:



Category 2: These are produced by fingering low notes and increasing lip and air pressure to create a chord. This is the exact opposite of Category 1 multiphonics. They can be played at varying dynamics:



Category 3: These 15 fingerings will almost always produce a multiphonic.

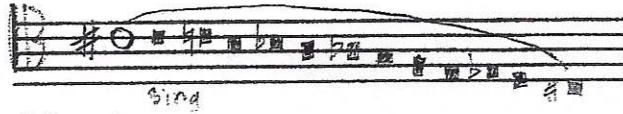
The image displays three staves of handwritten musical notation, each containing five measures. The notation includes notes, rests, and various fingerings (indicated by numbers 1-3) and slurs. The notes are often beamed together, suggesting multiphonic or complex articulation. The staves are arranged vertically, with the top staff having a treble clef and a key signature of one sharp (F#), the middle staff having a treble clef and a key signature of one sharp (F#), and the bottom staff having a bass clef and a key signature of one sharp (F#). The notes and fingerings are as follows:

- Staff 1 (Treble Clef, F#):**
  - Measure 1: Notes G4, A4, B4, C5. Fingerings: 3, 2, 1, 3.
  - Measure 2: Notes G4, A4, B4, C5. Fingerings: 3, 2, 1, 3.
  - Measure 3: Notes G4, A4, B4, C5. Fingerings: 3, 2, 1, 3.
  - Measure 4: Notes G4, A4, B4, C5. Fingerings: 3, 2, 1, 3.
  - Measure 5: Notes G4, A4, B4, C5. Fingerings: 3, 2, 1, 3.
- Staff 2 (Treble Clef, F#):**
  - Measure 1: Notes G4, A4, B4, C5. Fingerings: 3, 2, 1, 3.
  - Measure 2: Notes G4, A4, B4, C5. Fingerings: 3, 2, 1, 3.
  - Measure 3: Notes G4, A4, B4, C5. Fingerings: 3, 2, 1, 3.
  - Measure 4: Notes G4, A4, B4, C5. Fingerings: 3, 2, 1, 3.
  - Measure 5: Notes G4, A4, B4, C5. Fingerings: 3, 2, 1, 3.
- Staff 3 (Bass Clef, F#):**
  - Measure 1: Notes G3, A3, B3, C4. Fingerings: 3, 2, 1, 3.
  - Measure 2: Notes G3, A3, B3, C4. Fingerings: 3, 2, 1, 3.
  - Measure 3: Notes G3, A3, B3, C4. Fingerings: 3, 2, 1, 3.
  - Measure 4: Notes G3, A3, B3, C4. Fingerings: 3, 2, 1, 3.
  - Measure 5: Notes G3, A3, B3, C4. Fingerings: 3, 2, 1, 3.

Category 4: See attachment:

**Sing and play:**

This is possible throughout the range of the bassoon. Everyone's voice is different, so you may need to ask the performer what their comfortable range is.

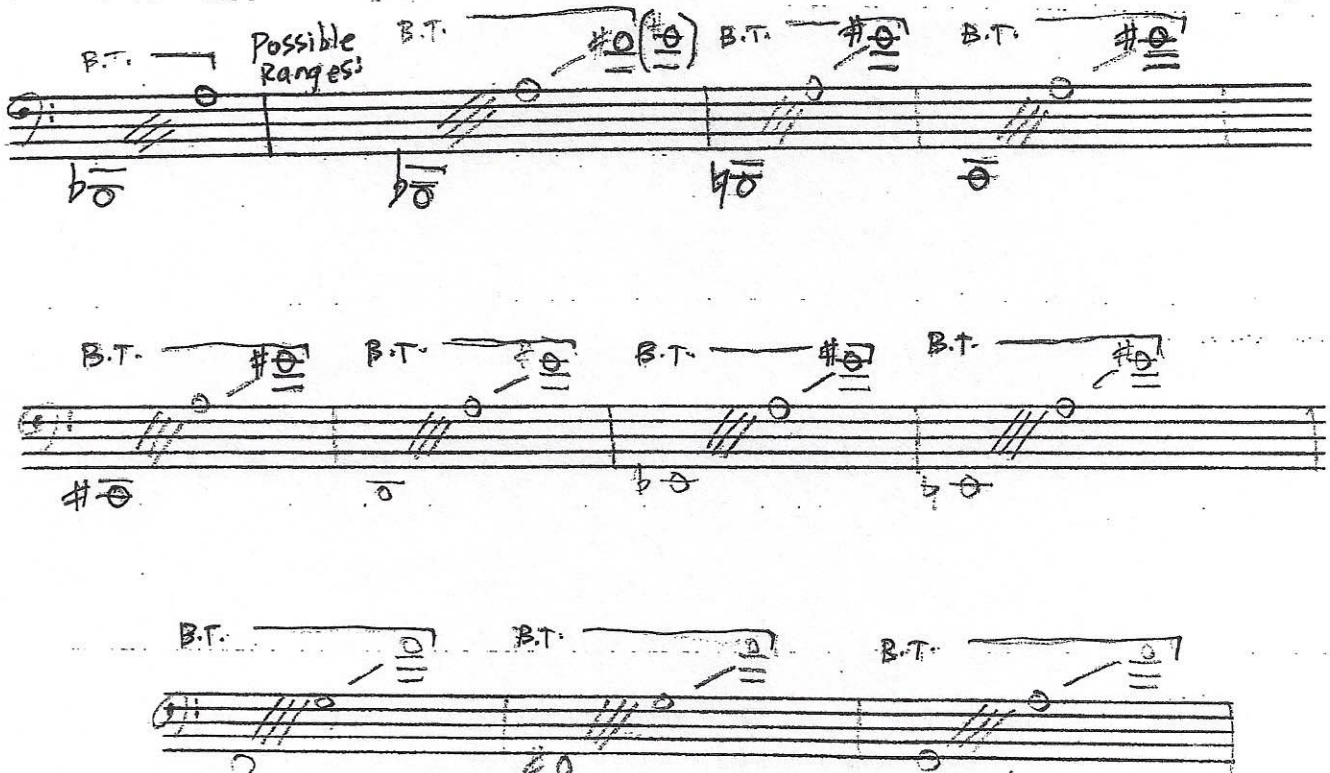


Please be clear which note is to be played, and which note is to be sung.

**"Berio tremolo":**

When we tremolo between two registers the bottom notes lower air pressure does not have enough time to stabilize. When this happens, we hear the overtone spectrum of the lower note. Luciano Berio used this phenomenon as a way to create a "synthesis" between the registers of the instrument. These are multiphonics without having to be true multiphonics.

The result is an alternating chord. Different dynamics, change of tremolo speed, tongue movement and air pressure all change the chord.



**Velvet mode:**

For special effect soft playing in the low register. This can also create harmonics. It is created by vibrating the lips with a very loose embouchure. The pitch will be a quarter tone flat at least. Can also be done in the high register. The pitch will be a quarter tone high.



*Ghost sound*

**Alternate tonguing:**

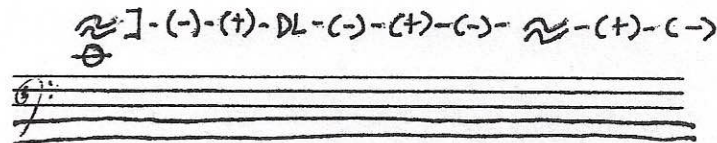
**Flap tongue:** Can be done with or without the reed. Possible only in soft dynamics. useable only in the low register



*pizzicato*

**"W" tongue: (≈)**

Quick motion of the tongue in the mouth without touching the reed. Possible in any register



**Timbral trill:**

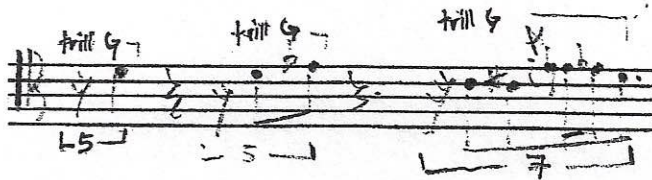
1: These are trills to the same note. Trilling an added key to the fingering gives a different timbre to the pitch.

Possible from E upwards through the entire range



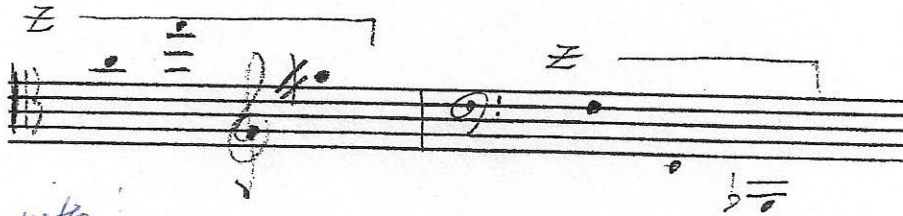
2: "Sciarrino trill": This is for tenor range notes. Trilling the "G" key gives a warbling effect to the pitch.

Possible from c-f



**Teeth on the reed:**

Sometimes used for playing in the extreme high register, but it can also raise an/or destabilize pitches. This sounds different in each register.

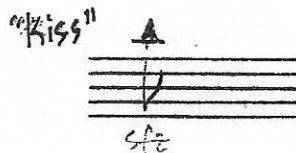


*Extreme high notes*

**"Kiss" sound:**

*"Suck"*

No specific pitch is produced. Instead an accented attack plus a harmonic will result.

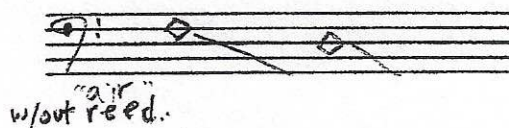


**Hiss and air noises:**

Hiss: Possible to leak air out of the corners of the mouth, or out of the nose. This will have the added effect of destabilizing the tuning of the pitch.

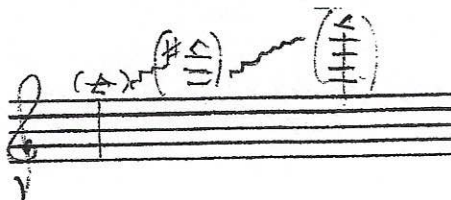


Air sounds: Unlike flute and clarinet, the bassoon is not the best at making these air sounds. If this is something you are after, consider have the reed off and the air being blown directly into the bocal, This way there is no danger of a pitch being produced by accident.



**Trumpet tone:**

Without the reed on, exhale through the bocal with a very tight embouchure. The pitches are all approximate with the lowest note being around A above the treble clef staff.



**Horn tone:**

Without the reed on, inhale through the bocal. This closely resembles the sound of a french horn.

See attachment for possible pitches.

**Circular Breathing:**

This is becoming quite common amongst performers and is now being specifically asked for by composers in the last decade or so.

Be advised that it is still somewhat of a "new technique" for a lot of performers, so always ask your performer if they can circular breathe.

Double circular breathing allows the player to expel the "stale air" and continually circular breathe for up to 20 minutes



\* Due to the shortening of the long joint of the Bassoon, the harmonics based off these "low note" fingerings are sharp (anywhere from 15-35 cents high)

# harmonics

J.S. 1

unlike string harmonics these are produced by increasing the pressure of the mouth on the reed to obtain the harmonic.

The musical notation consists of six systems, each representing a different fingering for producing harmonics on the bassoon. Each system includes a staff with notes and a corresponding fingering diagram below it.

- System 1:** Notes are G2, A2, B2, C3, D3, E3, F3, G3. Fingering diagram shows: G (b1), A (b1), B (b1), C (b1), D (b1), E (b1), F (b1), G (b1).
- System 2:** Notes are G2, A2, B2, C3, D3, E3, F3, G3. Fingering diagram shows: G (b1), A (b1), B (b1), C (b1), D (b1), E (b1), F (b1), G (b1).
- System 3:** Notes are G2, A2, B2, C3, D3, E3, F3, G3. Fingering diagram shows: G (b1), A (b1), B (b1), C (b1), D (b1), E (b1), F (b1), G (b1).
- System 4:** Notes are G2, A2, B2, C3, D3, E3, F3, G3. Fingering diagram shows: G (b1), A (b1), B (b1), C (b1), D (b1), E (b1), F (b1), G (b1).
- System 5:** Notes are G2, A2, B2, C3, D3, E3, F3, G3. Fingering diagram shows: G (b1), A (b1), B (b1), C (b1), D (b1), E (b1), F (b1), G (b1).
- System 6:** Notes are G2, A2, B2, C3, D3, E3, F3, G3. Fingering diagram shows: G (b1), A (b1), B (b1), C (b1), D (b1), E (b1), F (b1), G (b1).

\* it is possible to tremolo between harmonics with the same resultant tone (ex. #1 from 3 and #6 from 2)

J.S. Draft 1

The Bassoon

I    II    III    IV    V    VI    VII  
 B $\flat$    B $\flat$    B $\flat$    B $\flat$    B $\flat$    B $\flat$    B $\flat$   
 Ap    C''

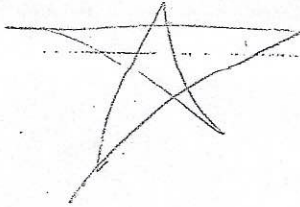
Fig 27

skills increasingly to develop as required. They also offer us the opportunity to observe how we are coping with these challenges whilst in action. Check in a mirror how much adjustment and modification of lip-on-reed position is visible. Initially we will have adopted different openings of jaw for each extreme of register; in time a wider setting will be unconsciously adopted which is equally valid for both extremes, while favouring neither: notice how much easier it is to

In Performance

I    II  
 B $\flat$    B $\flat$   
 C''    Ap

Fig 28



Accordi con timbro differente  
Chords comprising sounds of different timbre.

The image shows a handwritten musical score on five staves. The notation includes notes, rests, and various performance markings. The first staff has a circled section with a '2' above it. The second staff is labeled 'M.Pr.' and has a circled section. The third staff has a star on the left and is labeled 'P.Pr.' and 'A.Pr.'. The fourth staff has a circled section. The fifth staff is mostly empty with some notes. There are several handwritten annotations and symbols throughout the score, including a large 'X' on the first staff, a '2' above a circled section on the first staff, a star on the third staff, and a circled section on the fourth staff. The text 'Unstable chord' is written on the third staff, and 'bc - big stretch' is written on the right side of the third staff.

Unstable chord

bc - big stretch

# Horn Tone

Sound

Finger

The first system of musical notation consists of two staves. The top staff, labeled 'Sound', is in treble clef and contains nine notes: D4, D4, E4, F#4, E4, F#4, F#4, G4, and F#4. The bottom staff, labeled 'Finger', shows the corresponding fingerings: 1, 2, 3, 4, 3, 2, 1, 2, 3. Each note is represented by a stem with a triangle at the bottom indicating the finger used.

The second system of musical notation consists of two staves. The top staff, labeled 'Sound', is in treble clef and contains three notes: G4, F#4, and E4, followed by a double bar line. The bottom staff, labeled 'Finger', shows the corresponding fingerings: 2, 4, 3, followed by a double bar line.

The third system of musical notation consists of two staves. The top staff, labeled 'Sound', is in treble clef and contains nine notes: D4, E4, F#4, F#4, G4, F#4, E4, D4, and E4. The bottom staff, labeled 'Finger', shows the corresponding fingerings: 1, 2, 3, 4, 3, 2, 1, 2, 3. Each note is represented by a stem with a triangle at the bottom indicating the finger used.

The fourth system of musical notation consists of two staves. The top staff, labeled 'Sound', is in treble clef and contains one note: D4, followed by a double bar line. The bottom staff, labeled 'Finger', shows the corresponding fingering: 1, followed by a double bar line.