

The Development of the Modern Orchestra and its Instruments

Part I: The Instruments Themselves

November 19, 2020

The Development of the Modern Orchestra

- Quick Introductory Notes
- The History of Instruments
 - String
 - Woodwinds
 - Brass
 - Percussion
 - Keyboard/Plucked Instrument
- Put Them Together
- Q&A

Before we begin...

- **Our focus is on the instruments that eventually became part of the Modern Symphonic Orchestra**
 - That does not mean that all of them stuck around
 - We will omit solo instruments in all their forms (for now)
- **Lots of cross-pollination and parallel play**
 - Geographic
 - Usage
- **Quite difficult to determine exact lineages**
- **We are talking mostly about the instrument itself**
 - Not much about specific techniques
 - Not much about a composer's use
 - Not much about the physical set-up of the modern orchestra
- **These will be generalizations**
 - We will leave out many details

General Usage

- **Medieval**
 - Dance music
 - Self accompanying
- **Renaissance**
 - Church (not much at first--not always allowed in the building)
 - Canzona
 - Dance/Variations
- **Baroque**
 - Idiomatic writing
 - Almost equal of voices
 - Middle class amateurs began to use
 - How to structure when there are no words?
 - Lully: Added many woodwinds to the orchestra
- **ALSO: Outdoor vs. Indoor (yes!)**
 - Haut or Bas was a standard differentiation

The String Section

- **Vielle**
 - Medieval bowed instrument
 - Pear shaped, lost out to (merged with?) viol family
- **Rebec**
 - Older stringed instrument
 - Likely merged with da braccio family
- **Viola da braccio (violin family)**
 - Became the viola, violin, bass violin (cello)
 - Separated out by 16th Century
- **Viola da gamba (viol family)**
 - Generally died out before the 19th Century
 - Many had frets
 - Perhaps became the bass
- **Modern bow vs. Baroque bow**

TODAY'S NOMENCLATURE

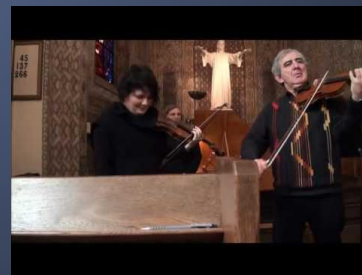
Viola

Violino = Small Viola

Violone = Big Viola

Violoncello = Small Violone

The String Section



The Woodwind Section

- **Flute**

- Oldest woodwind
- **Open Hole Transverse** vs. Open Hole End Blown vs. Fipple
- Wood until Romantic

- **Oboe**

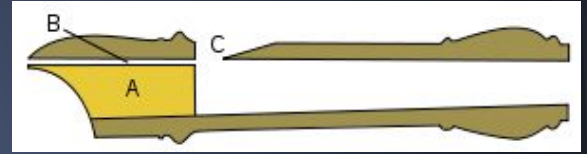
- Shawm was a Renaissance oboe (Middle Eastern origin)
- Krumhorn was similar (and yet...)
- Oboe entered orchestral service in the 17th Century

- **Clarinet**

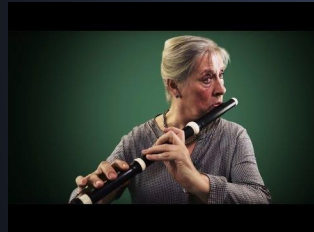
- Chalumeau (low range) from early Renaissance
- Clarinet (“small trumpet” high range) invented around 1700

- **Bassoon**

- “Faggotte” from middle Renaissance
- Dulcian in 1600s
- Modern version in use by 1700s



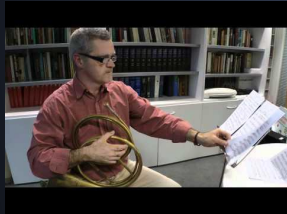
The Woodwind Section



The Brass Section

- **Horn** (conical bore)
 - Based on hunting/postal horns--Only used for music starting in 17th Century
 - Used crooks to change tonal centers
- **Trumpet** (cylindrical bore) & **Cornet** (conical bore)
 - Very ancient concept--Only used for music starting in 15th Century
 - Cornetto: wooden, finger holes, brass-style mouthpiece
 - Natural Trumpet until late 18th Century
 - Clarino register in 18th Century
 - Valves in late 18th/Early 19th Century
- **Trombone** (cylindrical bore)
 - Slide trumpet to Sackbut in Renaissance
 - Trombone = “Large trumpet”
- **Tuba** (conical bore)
 - Serpent (late 1500s)
 - Ophicleide (invented 1821)
 - Tuba in 1835

The Brass Section



The Percussion Section

- **Timpani**
 - Calf skin
 - Machine tuning in 1820s
- **The others we will leave until Part 2**



The Keyboards & Plucked/Fretted

- **Keyboard**

- Clavichord developed in early 14th Century
 - Hammered (sort of)
 - Small sound
- Harpsichord (clavicembalo, clavecin, cembalo) developed early 15th Century
 - Plucked
 - Somewhat louder
- Fortepiano developed around 1700
 - Hammered
 - Dynamics available

- **Harp**

- Based on the ancient lyre
- Developed pedals at turn of 17th Century

- **Plucked/Fretted**

- Lute is an ancient instrument
- Theorbo/Archlute developed late 16th Century

The Keyboards & Plucked/Fretted



Put them all together...



Q & A

- Please unmute if you have a question.
- If you feel more comfortable, type into the Chat.
- I will answer all of your questions!

Coming Soon to an **INBOX** Near You...

- You will be receiving an email from the MSOL
 - Link to these SLIDES
 - Link to recording of tonight's presentation
- Also my email if you have any follow up questions or comments
 - smkurr@gmail.com

Up Next:

- **December**
 - No program--enjoy the MSO events!
- **January**
 - MSO Education Programming
- **February**
 - Leotha and Tamera Stanley [tentative]
- **March**
 - The Development of the Modern Orchestra, Part 2

Finally: Some Resources

- [Medieval Instruments](#)
- [Orchestra of the Age of Enlightenment YouTube Channel](#)
- [Hannover Band YouTube Channel](#)
- [Orchestre Révolutionnaire et Romantique YouTube Channel](#)
- [John Eliot Gardiner YouTube Channel](#)
- [National Music Museum](#) in Vermillion, SD
- [Music Instrument Museum](#) in Phoenix

Thank you!

These slides were created by Steve Kurr for the Madison Symphony Orchestra League Connect Events. Please direct comments and questions to smkurr@gmail.com.