

# The Renaissance Recorder: Resembling the Human Voice

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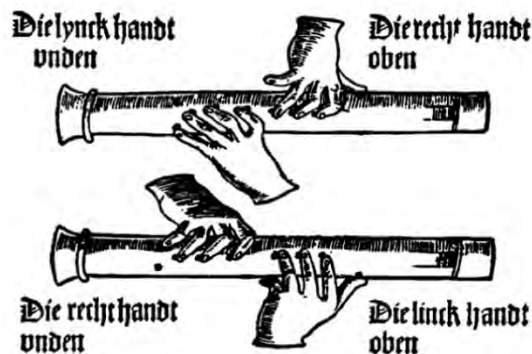
During the Renaissance, the voice was the instrument people wished they could master. The voice was highly regarded by the people of Renaissance Europe, especially those who were members of the church. This desire to imitate the human voice is what began the development of modern instruments. For example, the string instrument's ability to blend mimicked a choral sound, and the recorder mimicked the purity of a boy soprano. The recorder was used in the Renaissance primarily to emulate the human voice. This can be seen in a variety of ways, including fingerings, articulations, ornamentation and even repertoire of the time. Through the evolution of these musical characteristics in the Renaissance, recorder players gradually grew closer to achieving a sound that resembled the human voice. Renaissance musical treatises—including Sebastian Virdung's *Musica Getutscht*, Sylvester Ganassi's *Opera Intitulata Fontegara*, and Martin Agricola's *Musica Instrumentalis Deudsch*—provide numerous examples of efforts to make the recorder sound like the human voice.

The model of vocal music in the Renaissance was the motet. A motet is a piece of choral music, usually sacred, that is characteristically unaccompanied and polyphonic (music is considered polyphonic when two or more melodic lines are being played at the same time). People desired instruments that were strong in their mid and lower ranges, and those ranges did not need to cover more than about an octave and a half. Recorders sound an octave above the human voice after which they are named: soprano, alto, tenor, and bass. Instruments that most resembled the voice in tone quality were especially favored and given priority. For this reason, the recorder was considered to be one of the leading instruments of the period. Instruments, including the recorder, were so closely related to the singing voice that they were considered able to take its place. Each group of instruments developed variants that included at least a descant (an independent treble melody sung or played above the original melody), treble, tenor and bass member, each of which was capable of replacing the corresponding human voice. This development began

toward the end of the 15<sup>th</sup> century. Since the recorder was made in various pitches, this instrument worked well with this particular development.<sup>1</sup>

The fingerings that correspond with these ranges evolved during the Renaissance. The first fingering chart for recorder came from Sebastian Virdung in his musical treatise *Musica Getutscht*, published in 1511.<sup>2</sup> This treatise was written in a manner that allowed any level of musician, from no experience to years of experience, to understand the material through an easy question-and-answer format. The novel presentation differed from other musical treatises and enabled someone with no musical experience to understand the material. Hand placement played a big part in how an instrumentalist fingered certain notes in order to create the best intonation to emulate the human voice. During this time, hand placement on the recorder was up to the instrumentalist; either hand could serve as the bottom hand. Virdung emphasized that the two holes at the bottom of the recorder facilitated either hand placement. The hole that was not being used was plugged with wax. He showed the placement of the musician's fingers according to their preferred hand placement in Figure 1.<sup>3</sup>

Figure 1:



Virdung organized his fingering charts by the size of the recorder. This organization is helpful because one of the difficulties posed by Virdung's woodcut illustrations was that they offer no hint of scale or proportion to identify the different recorders.<sup>4</sup> Figure 2 is a modernized fingering chart showing his version of fingering the first octave of a tenor recorder; dark circles are closed, light circles are open, and circles with a line through them are partially closed.

Although recorders sound an octave higher than written, the pitch given in Virdung's fingering chart corresponded exactly to that of the other instruments. Virdung's original fingering chart was far more complex than the modernized version given in Figure 2 and included symbols that indicate specifications in fingering, for example, when the

<sup>1</sup> Stanley Sadie and John Tyrrell, "Recorder: Bibliography," *The New Grove Dictionary of Music and Musicians*, 2nd ed., vol. 21 (Oxford University Press, 2004).

<sup>2</sup> Sebastian Virdung, *Musica Getutscht*, Venice, 1511, 1-288.

<sup>3</sup> *Ibid.*, 170.

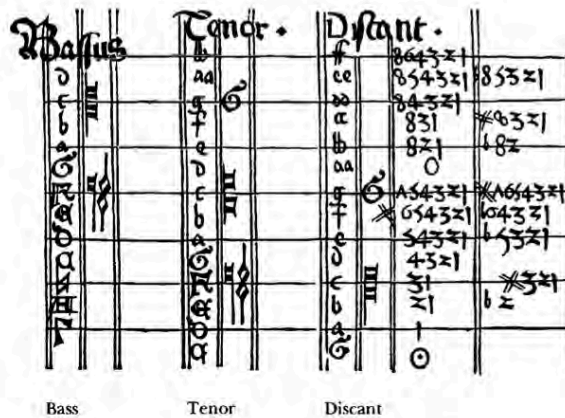
<sup>4</sup> Horace Fitzpatrick, "The Medieval Recorder," *Early Music* 3.4 (1975): 361.

**Figure 2:**

Note →	C	D	E <sup>b</sup>	E	F	F	G	A <sup>b</sup>	A	B <sup>b</sup>	B
Thumb	•	•	•	•	•	•	•	•	•	•	•
1	•	•	•	•	•	•	•	•	•	•	•
2	•	•	•	•	•	•	•	•	•	•	•
3	•	•	•	•	•	•	•	○	○	•	○
4	•	•	•	•	•	•	○	•	○	○	○
5	•	•	•	•	•	•	○	○	○	○	○
6	•	•	○	○	○	○	○	○	○	○	○
7	•	○	•	○	○	○	○	○	○	○	○

player should raise the third and first fingers, but keep the second finger down. Charting how to finger notes on the recorder was quite complex in Renaissance Europe, and fingering symbols had to be explained in musical treatises so that musicians knew how to play the instrument. Figure 3 shows Virdung’s original fingering chart.<sup>5</sup>

**Figure 3:**



Sylvester Ganassi’s fingering chart, which differed from Virdung’s, was included in his *Opera Intitulata Fontegara*, published in 1535.<sup>6</sup> Ganassi’s fingerings aimed to achieve the best intonation of the notes.<sup>7</sup> Figure 4 shows a modern version of Ganassi’s fingering chart. These fingerings are also for the first octave of a tenor recorder.<sup>8</sup> The Eb, F#, and Ab differ from Virdung’s fingering chart. Ganassi acknowledged that, by covering holes or slightly changing the bottom half of the fingering (also known as shading), the player could produce a better intonation. This improved intonation was beneficial to instrumentalists

<sup>5</sup> Virdung, 179.

<sup>6</sup> Sylvestro Ganassi, *Opera Intitulata Fontegara*, Venice, 1535, 158.

<sup>7</sup> Margaret A. Nosek, “The Recorder in the Sixteenth and Early Seventeenth Centuries—Part 1,” *Bach* 3.3 (1974): 31.

<sup>8</sup> Bolton, Philippe. *Philippe Bolton, Recorder Maker*. <http://www.flute-abec.com/tablistocomparatifgb.html#ganassi> .

because it pushed them one step closer to emulating the human voice. Ganassi believed that true recorder playing involved “imitation,” “dexterity,” and “elegance.” He, like Agricola and Virdung, believed that the purpose of the recorder player was to imitate all the dynamics and articulation of the human voice.<sup>9</sup>

**Figure 4:**

Note →	C	D	E <sup>b</sup>	E	F	F <sup>#</sup>	G	A <sup>b</sup>	A	B <sup>b</sup>	B
Thumb	•	•	•	•	•	•	•	•	•	•	•
1	•	•	•	•	•	•	•	•	•	•	•
2	•	•	•	•	•	•	•	•	•	•	•
3	•	•	•	•	•	•	•	○	○	•	○
4	•	•	•	•	•	○	○	•	○	○	○
5	•	•	•	•	○	•	•	○	○	○	○
6	•	•	○	○	•	•	○	○	○	○	○
7	•	○	○	○	○	•	○	○	○	○	○

Ganassi also revealed that one could produce seven extra notes above the previously recognized thirteen notes.<sup>10</sup> With the charts in Figure 5, Ganassi showed the seven extra notes that Virdung had not included in his fingering chart.<sup>11</sup>

**Figure 5:**

Ganassi's Seven Extra Notes from *Opera intitulata Fontegara*  
(Venice, 1535)

<sup>9</sup> Noseck, 30.

<sup>10</sup> Noseck, 31.

<sup>11</sup> Ganassi.

Martin Agricola's fingering chart correlated his fingering notation to that of vocal notation and allowed recorder players to emulate the human voice more effectively than they could with Ganassi's or Virdung's fingering charts. Although his text *Musica Instrumentalis Deusch* was published in 1529, it is likely that Agricola based his fingering chart on vocal notation both because he believed the recorder should emulate the voice and because some of the earliest music for recorder was thought to be vocal music that had been transcribed for the purpose.<sup>12</sup> Agricola thought that wind instrumentalists should simply read vocal music rather than music notated specifically for their instrument.<sup>13</sup> Like Virdung, who considered singing to be the only useful foundation for instruction in recorder playing,<sup>14</sup> Agricola said that any learner who could not sing would not master the recorder.

Agricola also stated in his *Musica Instrumentalis Deusch* that the musician had the choice of which hand to serve as the bottom hand. Like Virdung, he told the player to plug up the unused hole at the bottom of the recorder with wax (seen in Figure 6).<sup>15</sup> He also labeled the finger holes from bottom to top (seen in Figure 7).<sup>16</sup>

Figure 6:

8 3 2 1	c	fa	i	d	8 5 4 3 2 1	fol	
8 3 1	b	fa	i	h	8 4 3 1	fa	
8 7 1	G	fa	i	a	8 2 1	ve	
				G	○ all auf	fol	Der Tromp hörer zu.
6 4 3 2 1	D	fa	i	E	7 4 3 2 1	fa	
7 3 2 1	G	fa	i	D	7 4 3 2 1	ve	
5 1	B	fa	i	C	4 3 2 1	fa	
2	G	fa	i	A	3 2 1	mi	
8	B	fa	i	F	1	re	
				ff	● all zu	fa	Der Bass ten zu yn die treffe.
				E	3 2 1	mi	
Die Tromp hörer				D	2 1	re	
				C	1	fol	
				B	● all zu	fa	Blas mehr lich.

The transcribed pieces for recorder have since been lost. However, imitation of vocal styles is seen in music that was written for recorder later in the Renaissance.<sup>17</sup> One example, edited by Nicolas Sanserlat and published by Jacques Moderne in about 1550, is

<sup>12</sup> Sadie and Tyrrell, 46.

<sup>13</sup> Martin Agricola, *Musica Instrumentalis Deusch*, Wittenberg: Georg Rhaw, 1529, 1-194.

<sup>14</sup> Virdung, 161.

<sup>15</sup> Agricola, 9.

<sup>16</sup> Ibid.

<sup>17</sup> Sadie and Tyrrell, 47.

*Musique de Joye*, a polyphonic recorder quartet for soprano, alto, tenor, and bass recorders.<sup>18</sup> This piece's imitation of vocal style, using the same four parts as for the human voice, is evident in figure 8 from the very beginning of the piece. Like Virdung, *Musique de Joye*'s editor gave the fundamental notes of the different recorders as f, c' and g', calling the middle instrument the tenor-treble recorder.<sup>19</sup>

Figure 7:



Figure 8:



Musicians who played the recorder often performed in groups, known as copples. Agricola made no mention of music making by mixed groups of instruments, nor did Ganassi's recorder method. This does not mean that instruments did not play in combination with voices as well as with one another. In 1519, Arnt von Aich published a songbook in which was stated, "In this little book are fine songs to be bravely sung by soprano, alto, bass and tenor voices. Some of them may also be played on recorders or fifes and other musical instruments."<sup>20</sup> Nearly all the printed music of this period began with this invitation. Music became more complex since the songs could now be sung and accompanied by instruments.<sup>21</sup> Performances did not have to rely purely on vocalists or on instrumentalists. In a piece for several parts, it was possible to double parts on voice and

<sup>18</sup> Nicolas Sansarlat, ed. *Musique de Joye*, Lyon: Jacques Moderne, n.d. (c.a. 1550). [http://ks.imslp.net/files/imglnks/usimg/1/13/IMSLP164351-PM1P119657-Dances\\_musicales.pdf](http://ks.imslp.net/files/imglnks/usimg/1/13/IMSLP164351-PM1P119657-Dances_musicales.pdf). The complete score can be found on IMSLP.

<sup>19</sup> Ibid.

<sup>20</sup> Hildemarie Peter and Robert Lienau, *The Recorder: Its Traditions and Its Tasks*, Berlin-Lichterfelde: Robert Lienau, 1953, 41.

<sup>21</sup> Nicolas S. Lander, "Repertoire," *Recorder Home Page*, 2018. 1 December 2018. <http://www.recorderhomepage.net/repertoire/>

instruments. This was such a common practice that Arnt von Aich gave specific directions to clarify that some compositions were specifically intended for instrumental performance.<sup>22</sup> During this period, the choice of instruments was left to the discretion of the performers and depended to a large extent on which singers and players happened to be available.<sup>23</sup>

Recorder players and instructors also developed ornamentation and tonguing techniques during the Renaissance. The treatises described in detail the method of sounding the recorder with different tonguing techniques, important to produce a wholesome tone. Clarity in the production of successive notes, or articulation, was also important to recorder players because the instrument is incapable of producing a broad dynamic range. Ganassi emphasized articulation in *Opera Intitulata Fontegara*. Tongued syllables engage the hard palate for /t/, /d/, and /l/ sounds, and the soft palate for /k/ and /g/ sounds. The throat produces sounds such as the French guttural r (/ʀ/). Ganassi listed three main types of syllables: /teke/ (hard), /tere/ (medium) and /lere/ (soft).<sup>24</sup> In connection with his three basic forms of articulation, Ganassi gave detailed instructions for practicing the various tonguings, differentiating between the main and the secondary syllables, which he called /dritta e riversa/. Tonguing for the /dritta/ produced the syllables more harshly, and tonguing for the /riversa/ produced them more smoothly. The first two forms /te ke/ and /te re/ each consists of a /dritta e riversa/, whereas in the third form (le re) both syllables are /riversa/. The /dritta/ is always connected with an impulse of the tongue and is therefore called /lingua di testa/. The /riversa/ syllable /ke/, on the other hand, is a /lingua de gorza/. For practice, Ganassi recommended taking first the percussive consonants singly (/t t t t/ or /d d d d/) and so on, then adding each of the vowels (/ta te ti/ to /tu, ka ke ki ku/) and so on, finally combining them with the initial consonant of the /riversa/ syllable (/tar, ter, tir, tor, tur;/ /dar, der, dir, dor, dur;/ /kar, ker, kir, kor, kur;/ /lar, ler, lir, lor, lur/) and so on.<sup>25</sup> Ganassi's method for proper articulation on the recorder showed another relation the recorder has to singing through the comparison of proper vowel placements and proper articulation.

In contrast, Agricola advocated using t̄ü and r̄ü as the main articulations. He mentioned in his work that the most common articulation is t̄ü, which is used almost universally for whole notes, half notes, and quarter notes, and for most eighth notes, whether the notes are skipping or on the same line. T̄ü and r̄ü are used alternately when the notes rise or fall diatonically ("any stepwise arrangement of seven 'natural' pitches (scale degrees) forming an octave without altering the established pattern of a key or mode"<sup>26</sup>). Another articulation that Agricola advocated was /diri diri de/. He put the /di/ on the strong part of the beat and /ri/ on the weak. For quick embellishments, he suggested using /telelelele/. He also preferred the softer articulation found in the /d/ sound.<sup>27</sup> Agricola and Ganassi had some difference of opinion when it came to articulations, more than likely because they spoke different native languages. Ganassi's Italian and Agricola's German

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<sup>22</sup> Ibid.

<sup>23</sup> Peter and Lienau, 53.

<sup>24</sup> Noseck, 32.

<sup>25</sup> Ganassi.

<sup>26</sup> "Diatonic," *Encyclopedia Britannica* (Encyclopedia Britannica, Inc., 2017).

<http://www.brittanica.com/art/diatonic> .

<sup>27</sup> Agricola, 11.

yielded different pronunciations of words and caused the difference in their descriptions of articulation. Renaissance recorder players' articulation skills helped gain a sound that resembled the human voice. Heavily articulated words in a vocal piece can give the piece a different emotion. Likewise, hard and soft articulation techniques help the recorder player project a range of emotions.

Earlier in the Renaissance, recorder players read off vocal music when they accompanied a vocalist. Eventually, composers like Monteverdi started composing music for the recorder that was separate from vocal music. Unfortunately for the musicians, music in the Renaissance was characterized by the lack of any direct instructions for instrumentation. Due to this lack of instruction, ornamentation became an important technique for musicians. Ornamentation enabled instrumentalists to make a piece sound more interesting and to emulate the voice through musical liberties. A vocal piece is not meant to sound concrete and inflexible, but to flow from one phrase to another. Recorder players were able to achieve this flow using ornamentation, rather than producing the limited sound of arpeggios of chords. Ornamentation had some rules. In *Opera Intitulata Fontegara*, Ganassi said, "[R]emember that every division must begin and end with the same note as the unornamented ground. [S]o doing, it will be a tastefully constructed ornament."<sup>28</sup> No matter the circumstance, it was imperative that the instrumentalist begin and end on the note that was written, but otherwise the musician was free to add ornamentation between those two notes. Ganassi produced dozens of examples of his interpretation of ornamentation, but one example is "Regola Prima," in which he uses ascending and descending seconds, thirds, fourths, and fifths to add ornamentations. Figure 9 shows the unison and the ornamented versions with the ascending seconds and ascending thirds.<sup>29</sup> Ganassi gave definite rules for the application of these embellishments to a composition. The embellishments go beat by beat and mainly from whole note to whole note.

**Figure 9:**

The figure displays three staves of musical notation in a single system, all in treble clef and common time. The top staff is labeled 'unison' and shows a sequence of six measures. Above the first two notes of each measure are labels: 1a, 1b, 1c, 1d, 1e, and 1f. The second staff is labeled 'ascending 2nds' and shows the same six measures with ascending second intervals between notes. The third staff is labeled 'ascending 3rds' and shows the same six measures with ascending third intervals between notes. The notation uses various note values including whole, half, quarter, and eighth notes, with some measures containing beamed eighth notes.

The intervals of Figure 9 are named according to the interval established by the first two half notes in each example. A new melodic pattern is created to fill the two beats in the next measure before the next half note. The new pattern does not necessarily follow the outline of the melodic unit that was given in the unison example. However, both of the examples end on the correct notes according to the interval that was substituted for the unison melodic pattern.

<sup>28</sup> Ganassi.

<sup>29</sup> William F. Long, *Introduction to Embellishment of Renaissance Music*, 2003, A1. [https://drdrbill.com/downloads/music/embellishment/Renaissance\\_Embellishment.pdf](https://drdrbill.com/downloads/music/embellishment/Renaissance_Embellishment.pdf)



When instruments were introduced in the Renaissance, the timbre of the voice was still so popular that people wanted instruments to emulate the voice. Instruments that most resembled the voice in tone quality were especially favored and given priority. For this reason, the recorder was one of the leading instruments of the period. Instruments like the recorder were so closely related to the singing voice that they were considered able to take its place. The similarity was enhanced in a variety of ways, including fingerings, articulations, ornamentation and even repertoire of the time. Many examples can be found in Renaissance musical treatises, including those by Sebastian Virdung, Sylvester Ganassi, and Martin Agricola. Virdung explained the recorder in his musical treatise *Musica Getuscht*. He established a fingering chart for the recorder that stood as a basis for the new and improved fingering charts by Agricola and Ganassi. Although *Musica Getuscht* is not solely based on the recorder, Virdung expressed the importance of singing ability to the mastery of the recorder. His was the first treatise to put the recorder and the voice in the same context. Agricola and Ganassi elaborated on the importance of articulations and ornamentation in their musical treatises *Musica Instrumentalis Deudsch* and *Opera Intitulata Fontegara*, respectively. These men also improved the fingering chart for the recorder to produce a better tone from the instrument. The explanations of fingerings, articulations, and ornamentation in the musical treatises of Virdung, Ganassi, and Agricola reveal that emulating the voice was an important part of the recorder's role in the Renaissance.

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