

The Origins of the Italian Madrigal

OR

La questione del madrigale

Julie Cumming

McGill University

Cory McKay

Marianopolis College

Zoey Mariniello Cochran

Université de Montréal

ReRenaissance Festival 2025

September 26, Basel, Switzerland



Social Sciences and Humanities
Research Council of Canada

Conseil de recherches en
sciences humaines du Canada



The Madrigal: A new musical genre

Emerges in Florence c. 1515-1525

- Became the dominant Italian-texted secular genre during the 16th century (next concert)
- Expanded to other regions (especially England) at the end of the 16th century
- We focus on the **origins** of the madrigal
 - Using computer tools to compare madrigals to other genres
- And we explain how and why the madrigal was created

What is a madrigal?

- A musical setting of serious Italian poetry
- Few repeated musical sections
- Its music responds to the mood and meaning of the text in subtle - and not so subtle - ways
- 3 to 5 voices; early Madrigals are for four voices

Theories on the origins of the madrigal

- **Alfred (NOT Albert) Einstein (1949):** transformation of the **frottola**
- **Haar, Fenlon, Carter (1986, 1988, 1992):** combined aspects of the **motet and French chanson**
- **Anthony Cummings (2004):** came out of the **Florentine** genres of the carnival song and the villotta

They all believe that the madrigal developed or evolved out of earlier genres

We tested these theories using **corpus studies**

Corpus studies

- A corpus is a collection of examples of something you want to study; in our case **music in Florentine sources c. 1515-25**
- Pieces in different genres (147 total)
 - Early Madrigals (69), together, and
 - divided into 3 groups, by composer
 - **Pisano** (plus similar anonymous pieces) = **Pisano+** (26)
 - **Sebastiano Festa** (plus similar pieces) = **Festa+** (20)
 - **Verdelot** (plus similar pieces) = **Verdelot+** (23)
 - Chansons (24)
 - Motets (12)
 - Carnival songs (26)
 - Frottole (23)
 - Villotte (29)

We transcribed all the pieces from the original notation

- In a consistent way, to avoid bias in the computer analysis
 - Note values
 - Barring
 - No added sharps or flats
- We created a MIDI file for each piece
- For use in computer analysis

Some of our Features

- **Pitch statistics (41):** common pitch classes, highest and lowest pitches, distance between them, most common pitch, first and last pitch, etc.
- **Melody and horizontal intervals (25):** melodic intervals, arpeggiation, repeated notes, stepwise motion, direction of melodic motion, length of melodic arcs, etc.
- **Chords and vertical intervals (35):** major, minor, diminished triads; number of simultaneous pitches, most common vertical interval, etc.
- **Rhythm (95):** rhythmic values, meter, number of notes, range of rhythmic note values, note density, rests in individual voices and across all voices, etc.
- **Relation between voices (24):** number of independent voices; voice equality; overlap in range; parallel, similar, contrary, oblique motion

Comparing genres using musical features

To quantify how **similar or different** the genres are from each other

Differentiation accuracy

- **100%** = the computer can **always distinguish** the pieces in one genre from the pieces in the other genre; they are very different
- **50% or lower = chance**; the computer **cannot distinguish** the two genres; they are very similar
- **70-75%** = in the middle; the two genres are **similar**

The first three composers of madrigals all had strong Florentine connections

- Bernardo Pisano: c. 1490-1548
 - Florentine; also worked in Rome under a Florentine Pope
 - First madrigals c. 1515
- Sebastiano Festa: c. 1490-1524
 - Worked in Rome under a Florentine Pope
 - First madrigals c. 1520
- Philippe Verdelot: c. 1485-c. 1530
 - Born in France, arrived in Florence in 1521 and stayed there
 - First madrigals c. 1526

Differentiation between other genres and Madrigals

Genre	vs.	Genre/Composer	Differentiation accuracy	Meaning
Chansons	vs.	Pisano+ and Festa+ Madrigals	100%	Extremely different
Motets	vs.	Pisano+ and Festa+ madrigals	100%	Extremely different
Frottola	vs.	Verdelot+ madrigals	97.8%	Very different
Carnival song	vs.	All madrigals	94.4% to 98.1%	Very different
Frottola	vs.	Pisano+ and Festa+ madrigals	88.4% to 90.7%	<i>Less different</i>
Villotta	vs.	All madrigals	87.3% to 88.5%	<i>Most similar</i>

Conclusions suggested by results

- The style of the madrigal is very **different** from that of the **frottola**
 - as opposed to Einstein
- The style of the madrigal is very **different** from that of the **motet and chanson**
 - as opposed to Haar, Fenlon, and Carter
- The madrigals are **closer in musical style to the villotta than to any of the other genres**
 - supporting Anthony Cummings
(though he was wrong about the carnival song)

Comparing the Madrigals by different Composers

Composer	vs.	Composer	Classification Accuracy	Meaning:
Verdelot +	vs.	Pisano +	95.8%	Very different
Pisano +	vs.	Festa +	93.5%	Different
Verdelot +	vs.	Festa +	90.7%	Least different

The three composers each had a different approach to the new genre

Information gain: What musical features contribute to the difference?

- **Information gain** analysis provides insight into
 - which **individual musical features** are
 - statistically most effective in **separating** the genres
- We identified the features with the highest information gain for each classification task

Pisano, Che deggio Madrigal

Andreas de Silva Motet

Four features with the highest individual information gains in separating madrigals from motets

Information Gain (high)	Feature Name
0.890	Variability in rhythmic value run lengths
0.890	Prevalence of very long rhythmic values
0.890	Mean rhythmic value run length
0.890	Rhythmic value variability

Pisano, Che deggio Madrigal

Andreas de Silva Motet

Four features with the highest individual information gains in separating madrigals from motets

Information Gain (high)	Feature Name
0.890	Variability in rhythmic value run lengths
0.890	Prevalence of very long rhythmic values
0.890	Mean rhythmic value run length
0.890	Rhythmic value variability

Pisano, Che deggio Madrigal

Andreas de Silva Motet

Cantus

Altus

Tenor

Bassus

Long strings of half notes

Cantus

Altus

Tenor

Bassus

Varied note values, fewer repeated values

5

7

Four features with the highest individual information gains in separating madrigals from motets

Information Gain (high)	Feature Name
0.890	Variability in rhythmic value run lengths
0.890	Prevalence of very long rhythmic values
0.890	Mean rhythmic value run length
0.890	Rhythmic value variability

Pisano, Che deggio Madrigal

Ninot, Et la la la Chanson

Musical score for the first system of 'Pisano, Che deggio Madrigal'. It features four staves: Cantus (Soprano), Altus (Alto), Tenor, and Bassus (Bass). The music is in 2/4 time and G major. The Cantus part begins with a whole rest, followed by a half note G4, quarter notes A4 and B4, and a half note C5. The other parts provide harmonic support with various rhythmic patterns.

Musical score for the first system of 'Ninot, Et la la la Chanson'. It features four staves: Cantus (Soprano), Altus (Alto), Tenor, and Bassus (Bass). The music is in 2/4 time and G major. The Cantus part begins with a whole rest, followed by a half note G4, quarter notes A4 and B4, and a half note C5. The other parts provide harmonic support with various rhythmic patterns.

Musical score for the second system of 'Pisano, Che deggio Madrigal', starting at measure 5. It features four staves: Cantus (Soprano), Altus (Alto), Tenor, and Bassus (Bass). The music continues with complex polyphonic textures.

Musical score for the second system of 'Ninot, Et la la la Chanson', starting at measure 5. It features four staves: Cantus (Soprano), Altus (Alto), Tenor, and Bassus (Bass). The music continues with complex polyphonic textures.

Four features with the highest individual information gain in separating madrigals from chansons

Information Gain (high)	Feature Name
0.798	Partial chords
0.798	Average number of simultaneous pitches
0.798	Average number of simultaneous pitch classes
0.798	Chord type histogram (just two pitch classes)

Pisano, Che deggio Madrigal

Ninot, Et la la la Chanson

Musical score for the first system of 'Pisano, Che deggio Madrigal'. It features four staves: Cantus (Soprano), Altus (Alto), Tenor, and Bassus (Bass). The music is in a 2/4 time signature and begins with a rest in the Cantus part, followed by a melodic line in the other parts.

Musical score for the first system of 'Ninot, Et la la la Chanson'. It features four staves: Cantus (Soprano), Altus (Alto), Tenor, and Bassus (Bass). The music is in a 2/4 time signature and shows an imitative texture with many rests in the Cantus and Tenor parts.

Imitative texture with many rests; 2 & 3 vv sounding

Musical score for the second system of 'Pisano, Che deggio Madrigal', starting at measure 5. It continues the four-part setting with Cantus, Altus, Tenor, and Bassus parts.

Musical score for the second system of 'Ninot, Et la la la Chanson', starting at measure 5. It continues the four-part setting with Cantus, Altus, Tenor, and Bassus parts, showing the imitative texture.

Four features with the highest individual information gain in separating madrigals from chansons

Information Gain (high)	Feature Name
0.798	Partial chords
0.798	Average number of simultaneous pitches
0.798	Average number of simultaneous pitch classes
0.798	Chord type histogram (just two pitch classes)

Pisano, Che deggio Madrigal

First system of the musical score for 'Pisano, Che deggio Madrigal'. It features four vocal parts: Cantus, Altus, Tenor, and Bassus, and a keyboard accompaniment. The score is in 2/4 time and begins with a treble clef and a key signature of one flat (B-flat).

Second system of the musical score for 'Pisano, Che deggio Madrigal', starting at measure 5. It continues with the four vocal parts and keyboard accompaniment.

Four features with the highest individual information gain in separating madrigals from OITs

Pesenti, O dio Villotta

First system of the musical score for 'Pesenti, O dio Villotta'. It features four vocal parts: Cantus, Altus, Tenor, and Bassus, and a keyboard accompaniment. The score is in 2/4 time and begins with a treble clef and a key signature of one flat (B-flat).

Second system of the musical score for 'Pesenti, O dio Villotta', starting at measure 5. It continues with the four vocal parts and keyboard accompaniment.

Information Gain (low)	Feature Name
0.388	Relative note durations of lowest line
0.351	Rhythmic value histogram (eighth notes)
0.351	Prevalence of short rhythmic values
0.343	Total number of notes

Pisano, Che deggio Madrigal

First system of musical notation for 'Pisano, Che deggio Madrigal'. It consists of four vocal staves: Cantus (Soprano), Altus (Alto), Tenor, and Bassus (Bass). The music is in 2/4 time and begins with a key signature of one flat (B-flat). The Cantus part starts with a whole rest, followed by a half note G4, a quarter note A4, and a quarter note B4. The other parts provide harmonic support with various rhythmic patterns.

Second system of musical notation for 'Pisano, Che deggio Madrigal', starting at measure 5. It continues the vocal and instrumental parts from the first system, showing more complex rhythmic patterns and melodic lines.

Four features with the highest individual information gain in separating madrigals from OITs

Pesenti, O dio Villotta

First system of musical notation for 'Pesenti, O dio Villotta'. It consists of four vocal staves: Cantus, Altus, Tenor, and Bassus. The music is in 2/4 time and begins with a key signature of one flat (B-flat). The Cantus part starts with a half note G4, a quarter note A4, and a quarter note B4. The other parts provide harmonic support.

Second system of musical notation for 'Pesenti, O dio Villotta', starting at measure 5. It continues the vocal and instrumental parts from the first system.

Villotte are shorter (fewer notes)

Information Gain (low)	Feature Name
0.388	Relative note durations of lowest line
0.351	Rhythmic value histogram (eighth notes)
0.351	Prevalence of short rhythmic values
0.343	Total number of notes

Pisano, Che deggio Madrigal

Musical score for the first system of 'Pisano, Che deggio Madrigal'. It features four vocal parts: Cantus, Altus, Tenor, and Bassus. The Cantus part begins with a whole rest, followed by a half note G4, a quarter note A4, and a quarter note B4. The other parts provide harmonic support with various note values.

Musical score for the second system of 'Pisano, Che deggio Madrigal', starting at measure 5. The Cantus part has a quarter rest, followed by quarter notes G4, A4, B4, and a half note C5. The other parts continue their harmonic accompaniment.

Four features with the highest individual information gain in separating madrigals from OITs

Pesenti, O dio Villotta

Musical score for the first system of 'Pesenti, O dio Villotta'. It features four vocal parts: Cantus, Altus, Tenor, and Bassus. The Cantus part begins with a whole note G4, followed by a quarter note A4, a quarter note B4, and a quarter note C5. The other parts provide harmonic support.

Musical score for the second system of 'Pesenti, O dio Villotta', starting at measure 5. The Cantus part has a quarter rest, followed by quarter notes G4, A4, B4, and a half note C5. The other parts continue their harmonic accompaniment.

Villotte have shorter note values (esp. in bass)

Information Gain (low)	Feature Name
0.388	Relative note durations of lowest line
0.351	Rhythmic value histogram (eighth notes)
0.351	Prevalence of short rhythmic values
0.343	Total number of notes

Pisano vs. Festa: Different Approaches (93.5%: very different)

Pisano, Che debbio far, Petrarch text
Voices enter one after another:
Imitation; independent rhythms

Musical score for Pisano, measures 1-4. The score is for four voices: Cantus, Altus, Tenor, and Bassus. The music is in 2/4 time and G major. The voices enter one after another, illustrating independent rhythms and imitation.

Musical score for Pisano, measures 5-8. The score continues with four voices: Cantus, Altus, Tenor, and Bassus. The music is in 2/4 time and G major. The voices continue to enter one after another, illustrating independent rhythms and imitation.

Festa, O passi sparsi, Petrarch text
Voices aligned with same rhythms;
makes it easy to understand the words

Musical score for Festa, measures 1-4. The score is for four voices: Cantus, Altus, Tenor, and Bassus. The music is in 2/4 time and G major. The voices enter together and are aligned with the same rhythms, making it easy to understand the words.

Musical score for Festa, measures 5-8. The score continues with four voices: Cantus, Altus, Tenor, and Bassus. The music is in 2/4 time and G major. The voices continue to enter together and are aligned with the same rhythms, making it easy to understand the words.

Festa and Verdelot: Similar declamatory styles

Musical score for S. Festa, O passi sparsi. The score is written for four voices: Cantus, Altus, Tenor, and Bassus. The key signature is one flat (B-flat) and the time signature is 2/4. The music is characterized by a declamatory style with long, horizontal lines of notes, often using half and whole notes, and frequent rests. The Cantus part features a melodic line with some grace notes and a final cadence. The other parts provide harmonic support with similar rhythmic patterns.

S. Festa,
O passi sparsi
(text by Petrarch)

Musical score for Verdelot, O dolce nocte. The score is written for four voices: Cantus, Altus, Tenor, and Bassus. The key signature is two flats (B-flat and E-flat) and the time signature is 2/4. The music is characterized by a declamatory style with long, horizontal lines of notes, often using half and whole notes, and frequent rests. The Cantus part features a melodic line with some grace notes and a final cadence. The other parts provide harmonic support with similar rhythmic patterns.

Verdelot,
O dolce nocte
(text by Machiavelli)

Performance by Ensemble KIMA

- Kaho Inoue, soprano Ivana Ivanovic, mezzo
- Martin Kautzsch, tenor Arthur Baldensperger, baryton

Excerpts of:

- Pisano, *Che debbio far* (Text by Petrarch)
- Sebastiano Festa, *O Passi sparsi* (Text by Petrarch)

And a villotta (the genre least different from the madrigal):

- Anon. *O dolce farfarella* (poet unknown)

Why did these three composers create the Madrigal?

Zoey Cochran: The madrigal was created in relation to the Italian debates about language and politics known as the

Questione della lingua (The question about the Italian language)

- Which version of the Italian language should be the **literary** standard of Italy?

Three competing views on literary Florentine

1. Archaic Florentine (the 14th-c. Florentine of Petrarch, Dante, and Boccaccio): Pietro Bembo, from **Venice**

2. Italianist or “lingua cortigiana romana” used in the papal court in Rome: Trissino and Castiglione, in **Rome**

3. Modern Florentine (late 15th- and 16th-c. Florentine), Machiavelli (the political theorist) and Martelli, in **Florence**

Why did it matter?

- Because of the advent of **printing and proofreading** in Venice: if you are making hundreds of copies of a text, you need to proofread it
- In order to proofread you have to agree on what is **correct; you have to establish a norm**
- The Venetian publishers wanted the “authentic” language of Petrarch
- The Romans supported a practical compromise among different varieties of Italian
- The Florentines valued the living language of modern Florence

What does this have to do with the Madrigal?

- Florentine poets and intellectuals involved in the debates around the *Questione della lingua* met to discuss the issues in the *Orti oricellari*, a recreational garden in the center of Florence
- Composers Pisano and Verdelot were also members of the group
- Pisano, Festa, and Verdelot set 14th-century poems by **Petrarch**, and poems by **contemporary Florentine poets** who were involved in the language debates
- We know the names of the poets of almost all the early madrigals (unlike most secular music of the period); this suggests that **the poets were involved with the creation of the madrigals**

16th-century Florentine poets of madrigal texts supported the Modern Florentine position

Poet (no. of madrigal texts)	Writings on the <i>Questione</i> ; and supporters
Machiavelli (5)	<i>Discorso intorno alla nostra lingua</i> (1524)
Martelli (3)	<i>Risposta alla epistola del Trissino delle lettere nuovamente aggiunte alla lingua volgar fiorentina</i> (1524)
Bonaccorsi (1)	Machiavelli's "most fervent admirer and friend" (De Caro, 1972).
Tolomei (1)	<i>Polito (De le lettere nuovamente aggiunte)</i> (1525)
Strozzi, Lorenzo (10)	Machiavelli's patron; involved in the <i>Orti Oricellari</i>
Anonymous (5)	Linguistic characteristics of modern Florentine
Petrarch (14th-c.) (17)	The central poet for the language debates

Which kind of Italian is found in the Madrigal sources?

- Modern Florentine Italian is found in all the **madrigals** in Florentine manuscripts
- And also in the Florentine carnival songs

But ...

- Modern Florentine is NOT found
- **in the other Italian-texted genres** (Frottole and Villotte) most of which come from Northern Italy, **even when copied in Florentine sources**

Imagine an evening in the Orti Oricellari

- Poets, composers, and intellectuals meet to talk about the *questione della lingua*.
- “Why don’t we create a new Italian-texted musical genre with texts in Modern Florentine in order to support the Modern Florentine Position?”
- Pisano, Festa, and Verdelot chose to do exactly that!
- They each came up with a new kind of music, different from the other genres of the time, and different from each other
 - Festa and Verdelot chose declamatory approach, making the text very clear
 - Pisano chose a more imitative and varied texture, more serious and similar to sacred music

Conclusions

- Computer tools can allow us to compare musical genres of the past
- The madrigal did not evolve gradually out of earlier genres (in contrast to earlier scholars)
- Florentine composers and poets worked together to create a new genre, motivated by language politics
- As you hear later madrigals during the ReRenaissance Festival, notice how the genre grew and changed across the 16th century

Acknowledgements

It takes a team to make a corpus. Thanks to the students and former students who worked on this project:

Ian Lorenz, Jonathan Stuchbery, Linda Pearce, Sara Sabol, Vi-An Tran, Zoey Cochran, Tristan Tenaglio, Rían Adamían, Mayu Egan, Sylvain Margot, James Renwick, Ellis Reyes, Leah Weitzner, and Thomas Yakey, for their contributions and expertise.

Thanks to Ichiro Fujinaga for his support.

Financial support was generously provided by the following organizations.

SIMSSA | Single Interface for Music
Score Searching and Analysis

CIR Centre for Interdisciplinary Research
MMT in Music Media and Technology

Fonds de recherche
Société et culture



Social Sciences and Humanities
Research Council of Canada

Conseil de recherches en
sciences humaines du Canada



Pisano: Text and translation

Che debb'io far, che mi consigli, Amore?
Tempo è ben di morire
ed ò tardato piú ch' i' non vorrei:

Madonna è morta ed à seco il mio core,
e volendo' l seguire
interromper conven quest' anni rei;

perché mai veder lei
di qua non spero, e l' aspettar m' è noia:
poscia ch' ogni mia gioia
per lo suo dipartire in pianto è volta,
ogni dolcezza de mia vita è tolta.

Fuggi' l sereno e' l verde,
Non' appressare ove sia riso o canto Canzon mia, no,
ma pianto:
Non fa per te di star fra gente allegra Vedova,
sconsolata, in veste negra.

What must I do? What do you counsel, Love?
The time has come to die
And I have lingered more than I would wish

My lady is dead, and with her my heart
And if I want to follow her
I must interrupt these cruel years

Because I will never see her again
I have no hope, and waiting hurts me:
Since all my joy,
Through her parting, has turned to tears
All sweetness has been taken from my life.

Flee the serene and green
Don't approach either laughter or song
My song, no, my lament:
Don't take your place among happy people, Widow,
disconsolate, in black clothing.

S. Festa: Text and translation

O passi sparsi, O pensier vaghi et pronti,
O tenace memoria, O fier ardore,
O possente desir, O debil core
O ochi mei, ochi non già, ma fonti;

O fronde, honor delle famose fronti
O sola insegna al gemino valore
O faticosa vita, O dolce errore
Che me fat' ir' cercando piagge et monti;

O bel viso, ove amore insieme pose
Li sproni e'l freno, onde el mi ponge e volve
Come a lui piace, et calcitrar non vale;

O anime gentile et amorose
Se alcun ha'l mondo, et vui nude ombre e polve
Deh, restate a veder qual e'l mio male.

O scattered steps; O vague and ready thoughts;
O constant memory; O fierce ardor;
O strong desire; O weak heart;
O my eyes, no longer eyes, but fountains;

O fronds, honor of famous brows
O only marks of double valor;
O tiresome life, O sweet error
That made me search the beaches and the mountains;

O lovely face, where love together placed
Both spurs and reins, where I am placed and turn
As he pleases and no kicking avails;

O noble, loving spirits,
(If such they be) and you, naked spirits, now dust,
Ah, stay and see how great is my pain.

Rucellai gardens and language debates

- Poets, composers, artists, and intellectuals met there to discuss the arts and language politics
 - Composers: Pisano and Verdelot
 - Poets of the madrigal texts:
- We know who wrote the texts for almost all the poets of the early madrigals (unlike other secular music of the period)
- Petrarch and his suggests that they were involved with the creation of the madrigals