## The Codex Faenza and the Tradition of Improvisation

In 1939, a collection of parchment was discovered at the Biblioteca Comunale Manfrediana in the northern Italian city of Faenza. The ninety-seven parchment folios—which contained copies of music treatises by John Hothby, Bernhard Ycart, and Johannes de Erfordia, twenty-two polyphonic vocal pieces in white mensural notation transcribed by the Carmelite monk Johannes Bonadies, and one of the largest collections of instrumental music from the 14th and 15th centuries—was named for the library in which it was found. The Bonadies or Faenza Codex was originally thought to be housed at the Carmelite monastery of St. Paul in Ferrara but had gone missing for almost a century until its new location was revealed by Gino Roncaglia in his article for the Proceedings and Memoirs of the National Academy of Sciences, Letters, and Arts.<sup>2</sup>

That same year, researchers into early music and historical performance practice began posing questions concerning the surviving texts, including speculation as to how the musicians of the early music revival might bring the music back to life. While Roncaglia was first detailing the Faenza Codex's contents, scholars such as Charles Van den Borren, Knud Jeppesen, and Dragan Plamenac, who would all write about the codex, were studying the compositional techniques of the late 15th and 16th centuries. Since its rediscovery, our understanding of the Faenza Codex, like our knowledge of early music and performance practice, has evolved. Jeppeson believed the notation of the Faenza Codex indicated its performance on wind instruments, while other scholars like Plamenac and John Caldwell argued that the inclusion of

<sup>&</sup>lt;sup>1</sup> Dragan Plamenac, "Keyboard Music of the 14th Century in Codex Faenza 117," *Journal of the American* Musicological Society 4 (1951), 178-180.

<sup>&</sup>lt;sup>2</sup> Roncaglia's article, "Intorno ad un codice di Johannes Bonadies," appeared in Atti e memorie dell'Accademia di Scienze, Lettere ed Arti di Modena, Serie V, Vol. I in 1939.

alternatim settings was clear evidence for performance on organ.<sup>3</sup> Still others, namely Timothy McGee, Roland Eberlein, and Mark Lindley, saw possibility for performance on either keyboard or lute.<sup>4</sup> In the succeeding decades, a consensus has developed that the music in the Faenza Codex and all surviving instrumental compositions from the 15th century and before were vestiges of a tradition of improvisation and a vast repertoire that had not been written down.

Much like jazz, instrumental music had been passed along through an oral tradition—embellished and transformed by the players who rearranged and glossed upon it.<sup>5</sup>

The Faenza Codex (Faenza, Biblioteca Comunale 117, I-FZc 117) comprises two distinct and independent copying layers. The first, older layer contains the untexted arrangements in black Ars Nova notation and is believed to have been created between 1420 and 1430; the second, later layer contains the autograph by friar Bonadies believed to have been copied between 1473 and 1474.<sup>6</sup> The untexted arrangements are based on vocal music from a generation earlier, that of the Ars Subtilior, Trecento, and, earlier still, the Ars Nova. A variety of genres are represented—motets, *formes fixes*, and the earliest known alternatim Mass pairs—all with instrumental glosses. Each original vocal work is used as a model for a new composition in which the tenor of the original supports a virtuosic elaboration on the cantus in florid fast notes. Included among these are embellishments on unattributed songs along with ones by Guillaume de Machaut, Jacopo da Bologna, Francesco Landini, Antonio Zacara da Teramo, and other composers. Also included are secular compositions representing the French Ivrea Codex (Ivrea,

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<sup>&</sup>lt;sup>3</sup> Plamenac, "Keyboard Music," 185-186; John Caldwell, "Two Polyphonic 'Istampite' from the 14th Century," *Early Music* 18 (1990), 371.

<sup>&</sup>lt;sup>4</sup> Timothy McGee, "Instruments and the Faenza Codex," *Early Music* 14 (1986), 484; Roland Eberlein, "The Faenza Codex: Music for Organ or for Lute Duet?" *Early Music* 20 (1992), 461; Mark Lindley, "More on the Faenza Codex." *Early Music* 21 (1993), 172.

<sup>&</sup>lt;sup>5</sup> Keith Polk, "Tradition and Innovation in Fourteenth-Century Instrumental Music: Evidence from Archival and Musical Sources," Music and Culture in the Middle Ages and Beyond: Liturgy, Sources, Symbolism (2016).

<sup>&</sup>lt;sup>6</sup> Pedro Memelsdorff, "New Music in the Codex Faenza 117," *Plainsong and Medieval Music* 13 (2004).

Biblioteca Capitolare, 115) and the Italian Squarcialupi Codex (Florence, Biblioteca Medicea Laurenziana, Med. Pal. 87), two of the largest and most prominent manuscripts of vocal polyphony from the late 14th to early 15th centuries. The breadth and variety of musical repertoire in the Faenza Codex attest to the influence and renown of the represented composers and pieces, and they also point to the pervasiveness of its style of embellishment. The Faenza Codex, more than an organist's workbook or a compendium of pieces for keyboard and plucked strings, is key to understanding how medieval instrumentalists made new music from old and learning to recreate this in our own manner. While we lack explicit instruction such as contemporaneous treatises for how to compose and improvise in the Faenza style, what we do have is the music, which invites us to reinvent our own living approach to these techniques. It is possible for early music performers to immerse themselves in and replicate the style through analysis and performance, much as jazz performers transcribe and study the recorded works of master performers in order to gain fluency in improvisation.<sup>7</sup>

Because of the apparent similarity of embellishments in the Faenza Codex, the collection is deceptively straightforward. But a close analysis reveals numerous contrasting approaches and the individuality of each improvisation. Attributions exist for many, but not all, of the original vocal models, and the collection of composers to which they are assigned varies widely from Landini to Machaut. Moreover, the embellished pieces reflect a tradition that would have included artistic ambition and skill, along with human error. We do not know the Faenza improviser's exact relationship with the original vocal models; it may even be that the Faenza Codex does not represent the work of a single musician but myriad performers who likely had no direct contact with the composers upon whose works their improvisations are based. In this

<sup>&</sup>lt;sup>7</sup> Angela Mariani, *Improvisation and Inventio in the Performance of Medieval Music: A Practical Approach* (New York, Oxford University Press, 2017), 113.

scenario, the musicians seem analogous to the generation of beboppers in the early to mid-1940s riffing on music by Duke Ellington and Billy Strayhorn.<sup>8</sup>

Bearing this in mind, my study of the codex sought to balance a similar analytical approach to all of its music while also considering both composer's and improviser's possible intent. In my analysis of Faenza Codex pieces, I endeavored to interpret the music as a performer by employing a flexible set of parameters for consideration. These included contrapuntal motion, dissonance treatment, ornamentation of cadences by different kinds of melodic figuration, and embellishment of principal pitches from the original cantus melodies. Another performer and analyst may well favor an entirely different set of criteria, interpretations, and approaches.

In the 14th century, treatises describing counterpoint were scarce, and rules of counterpoint had not yet been widely codified at the time of the Faenza Codex's compilation. From the 15th century on, more treatises appeared that provided instruction in counterpoint and improvisation, and from these we can glean information that might be applied retroactively toward music of the centuries prior. The pieces in the Faenza Codex are typically arranged with the tenor of the original vocal model supporting the cantus, which is embellished in a way that resembles the kinds of divisions written down in the 15th century and later. I have found it interesting to see whether the ways the cantus melodies were embellished were consistent with the rules of species counterpoint and if the cantus and tenor arrangements made a contrapuntally viable duo in and of themselves.

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<sup>&</sup>lt;sup>8</sup> Ibid., 113.

<sup>&</sup>lt;sup>9</sup> Sarig Sela and Roni Y. Granot, "Automatic Extraction and Categorization of Faenza Codex Figurations," *Early Music* 42 (2014). Sela and Granot recorded the boundary pitches of the most commonly occurring intervals in the Faenza Codex along with their embellishments. In their article, they asserted that embellishment in the Faenza Codex follows in a tradition of pedagogical treatises, or *cadentie*, published in the 16th and 17th centuries that listed formulas for cadential embellishment. Famous *cadentie* include Ganassi's *Fontegara* (1535), Diego Ortiz's *Trattado de glosas* (1553), and Giovanni Bassano's *Ricercate, Passaggi et Cadentie* (1585).

The late 14th- and early 15th-century repertoire falls out of the realm of 16th-century species counterpoint as formulated by Zarlino and Fux, yet it appears to perform according to similar principles, particularly conventions for consonance and dissonance treatment. In many pieces, consonant vertical intervals tend to fall on metrically strong beats more often than dissonances, though certain pieces employ pronounced dissonances on metrically strong beats. In these cases, resolution occurs but is delayed, perhaps for expressive purposes. In others, dissonance is treated quite conventionally in passing between one consonant metrically strong beat to the next and resolved in stepwise motion. Dissonances are approached in appropriate ways, largely by step, except for reasons of expression—for example, the heightening of tension before resolution.

Starting from counterpoint, I decided upon a process where, first, I looked at cadences and considered the mode of each piece. My understanding of cadences was taken from Johannes Tinctoris's definition in his *Liber de arte contrapuncti* of 1477. A cadence can help to articulate lines of text and other important structural points when a vertical major sixth between two voices expands outward by stepwise motion to an octave or a vertical minor third contracts by stepwise motion to a unison. Cadences could include suspensions comprising "agent" and "patient" voices as ornamentation: for instance, a 7-6 suspension would be the principal ornament of a major sixth expanding to an octave, and a 2-3 suspension would be the principal ornament of a minor third contracting to a unison. While other types of dissonant and consonant suspensions, such as 4-3 and 6-5, occur in the repertoire of the Faenza Codex, they do not tend to have the same structural importance, because they resolve to notes other than the final. I took my guidelines for contrapuntal motion and proper dissonance treatment from the *Regulae de* 

<sup>10</sup> Johannes Tinctoris, *Liber de arte contrapuncti*, trans. Albert Seay (American Institute of Musicology, 1961).

contrapunto ("Rules of counterpoint"), a treatise by Antonius de Leno (fl. early 15th c.). The *Regulae* is an early example of a compositional primer that lists rules for motion, namely that a dissonance may be approached by a leap but must resolve stepwise to a consonance. The treatise also states that all notes on metrically strong beats must be consonant with the tenor. <sup>11</sup> After determining the mode of each piece through cadences and melodic motion in the tenor, <sup>12</sup> I noted the frequency of different cadences to pitches within the mode, whether the final, fifth degree, or others. I noted the contour of both the cantus and tenor lines prior to cadences, including stepwise descents in the tenor or cadential figuration in the cantus. <sup>13</sup>

For *formes fixes* pieces, I noted the interaction of structurally important cadences with the poetic form, such as when a cadence and a line of poetry coincided. I examined all vertical intervals between the cantus and tenor to see whether consonances fell on strong beats and dissonances were treated in passing. I noted whether conventions for the maximum number of perfect and imperfect vertical sonorities were observed. Lastly, I compared the Faenza Codex version with its vocal model, observing where pitches from the original maintained the same metrical placement and expressivity and where they did not. In order to compose and improvise in the style of the Faenza Codex, I needed to understand the counterpoint of the original vocal model to be embellished and see which vertical intervals were consonant and dissonant, as well

<sup>&</sup>lt;sup>11</sup> Antonius de Leno, *Regulae de contrapunto*, trans. Albert Seay (Colorado Springs: Colorado College Music Press, 1977).

<sup>&</sup>lt;sup>12</sup> While both tenor and cantus would be expected to uphold parameters of modal ambitus to give the arrangement a sense of cohesion, it falls primarily to the tenor to establish and continue to assert the mode throughout the piece. An example of this occurs directly at the beginning of *Aquila altera*, where the tenor descends the modal octave from D to D. Disjunct motion occurring later in the tenor includes diatessaron leaps from D down to A along with further cadences to D.

<sup>&</sup>lt;sup>13</sup> Sela and Granot define "figuration" as "a kind of continued measured embellishment, accompaniment, or passagework." "In principal," they write, "Figuration is composed of 'figures,' or small patterns of notes occupying a beat or two of time. . . . Figuration sometimes results from the process variously known as *diminution*, *division*, or *coloration*—the breaking up of notes into figures which decorate the original pitches with little garlands of quick notes or connect one pitch with another. . . . There is no distinct boundary between what is and what is not figuration; nevertheless, the term implies something more neutral—perhaps more mechanical or stereotyped—than motivic work." "Automatic Extraction and Categorization of Faenza Codex Figurations," 560.

as where structurally important cadences occurred in relation to the poetic form. This helped me to determine how embellishing figuration in the Faenza Codex mapped onto their original vocal model and whether the arrangements reflected the meaning of both music and text.

My analysis of pieces from the Faenza Codex was aided by working with a modern score. I worked with modern editions from *Die Tastenmusik im Codex Faenza*, compiled by Michael Kugler in 1972. In this edition, the original vocal model is presented with the Faenza Codex version beneath, a boon for analysis that made it easier for me to see how Faenza Codex pieces were similar to their vocal models and where they deviated.

Or sus, vous dormés trop, an unattributed virelai with a highly onomatopoeic text and a theme like that of a chaçe, and Aquil'altera, a madrigal by Jacopo da Bologna, take a consistent approach to metrically strong consonances. In the Faenza arrangements, principal pitches from the original melody are on the whole preserved, and pitches on metrically strong beats are most often approached by legal stepwise motion. The counterpoint in the arrangements of Or sus and Aquila altera, like in the original vocal models, follows the conventions for dissonance treatment and different cadences outlined by de Leno and Tinctoris. However, in the case of Aquila altera, the rhapsodic nature of the improvised cantus often creates vertical dissonances with the tenor on metrically strong beats. The new melodic line features displacement and obfuscation of pitches from the original vocal model. Whoever conceived of the improvisation seems to have had entirely different expressive aims for Aquila altera and Or sus. For Aquila altera, the aim was to craft a new and independent melody, inspired by the cantus, but free to make its own departure.

Or sus and Aquila altera reflect the medieval tradition of featuring bestiaries in art. Both evoke a panoply of creatures to represent different subjects overtly and allegorically, and bird imagery specifically is key to their narrative thrust. However, while Or sus's onomatopoeic

evocation of bird calls is apparent, *Aquila altera*'s use of the eagle as a symbol of majesty and alignment with God is allegorical. The eagle may refer to the court of Galeazzo Visconti, which Emperor Charles IV visited between 1354 and 1355. It is believed that Jacopo da Bologna composed his laudatory madrigal to commemorate the occasion, though others argue that he composed the madrigal to celebrate the marriage of Giangeleazzo Visconti and Isabelle de Valois, daughter of the French King John II, in 1360. In *Aquila altera*'s two repeated strophes, the cantus sings of a "heavenly eagle," emblematic of the Visconti family and a possible reference to John the Evangelist. The tenor sings about a "bird of God," which might be interpreted as either the eagle or the dove. Is

If cognizant of these textual connotations, the improviser of the Faenza Codex version of *Aquila altera* may have wished to evoke a similar grandeur in his elaboration of the cantus. If not, he may have entertained the more straightforward but no less worthy aim of inventing an interesting melody. Whatever the true intent, the treatment of *Aquila altera*'s cantus shows that there might have been any number of different riffs improvised upon the piece and ways of embellishing the melody. The version I will perform is the one that had the fortune to be written down.

Or sus is more ostentatious than Aquila altera in its use of bird imagery. The piece features bucolic themes and language that evokes the soundscape of nature. Its text introduces the song of the lark, "Que dit Dieu, que te dit Dieu," ("What is God telling you?"), and the goldfinch, who "fait il chant" ("makes his songs"), along with the din of drums ("knackers") and cornamuses, to awake the poet's beloved. In the original vocal model, onomatopoeic texts help to make clear the meaning of the song. The Faenza Codex version preserves the character of the

<sup>&</sup>lt;sup>14</sup> Sarah Carleton, "Heraldry in the Trecento Madrigal" (PhD diss., University of Toronto, 2009).

<sup>&</sup>lt;sup>15</sup> Ibid., 135-136.

original cantus melody—bursting with disjunct motion, chains of thirds, and highly rhythmicized passages that dwell on a single sonority. It may have been that the Faenza Codex improviser felt the cantus of *Or sus* more worthy of preservation. Compared with *Aquila altera*, its embellishments tend to be simpler.

Still, at times, metrical displacement of the cantus melody's principal pitches does occur. 16 Displacement typically occurs to a neighboring tone on a metrically strong beat, repositioning pitches from the vocal model to metrically weaker positions. This systematizing of metrical displacement, where pitches from the original melody are shifted consistently to metrically weaker beats, may mean that the improviser had memorized the original vocal model or had access to a written version of it. Stock figuration, including the filling in disjunct intervals in the original cantus, may also have been easier to improvise throughout the work, requiring a different sort of inventiveness and virtuosity to execute than rapid melismas that alter the melodic compass. The ways in which Or sus and Aquila altera are embellished lead me to think they may have been popular pieces, included among the works of the Faenza Codex because of their appeal to listeners, their accessibility to performers, and perhaps the ease with which they might have been committed to memory. Indeed, Or sus has concordances in at least eight other sources, including the Ivrea, Reina, and Ghent codices, <sup>17</sup> and *Aquila altera* has concordances in at least five other sources, including the Reina and Squarcialupi codices and manuscript Paris 568.18

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<sup>&</sup>lt;sup>16</sup> In one rapid-fire passage, the improviser adds one figure too many when embellishing the cantus melody for the text, "Compaignons, or alon[s], et danson[s], liement. . . ." The result is the displacement of the figuration by over a breve. Shortly thereafter, further diminution in a triplet figure brings the improvisation back into rhythmic alignment with the original cantus melody. Had the improviser of *Or sus* wished to surprise his audience by such virtuoso displacement or had he simply suffered a memory lapse and needed to catch up with his tenor?

<sup>&</sup>lt;sup>17</sup> Michael Scott Cuthbert, "Groups and Projects among the Paduan polyphonic sources," *I frammenti musicali padovani tra Santa Giustina e la diffusione della musica in Europa* (2011): 193.

<sup>&</sup>lt;sup>18</sup> Lauren McGuire Jennings, *Senza Vestimenta: The Literary Tradition of Trecento Song* (New York, Routledge, 2016), 42.

The majority of two-voice arrangements in the Faenza Codex were originally for three voices: cantus, tenor, and contratenor. *Or sus* and the majority of secular arrangements omits the contratenor but preserves the original cantus and tenor lines. It was known practice at that time to perform a three-voice work as a duo by omitting the contratenor. It may be that the improviser expected most structurally important cadences to occur between the cantus and tenor lines and so considered the contratenor unnecessary.

However, in *Aquila altera*, structurally important cadences do occur between the contratenor and tenor, and these are largely absent in the Faenza Codex.<sup>19</sup> The lower voice of *Aquila altera* is derived mostly from the tenor of the vocal model and only incorporates pitches from the contratenor for the sake of musical continuity when the tenor drops out. Music for the *chiuso* ("close") ending of *Aquila altera* in the Faenza Codex is missing or has been omitted. Despite this omission, I was able to confirm the pitches of *Aquila altera*'s final cadence through comparison with the original vocal model. The omission in Faenza could be a scribal error or perhaps an invitation to the performer to finish the piece with a fresh cadential elaboration.

Looking only at the Faenza Codex version, I would never have known that there were cadences. Where there had been a cadence between contratenor and tenor in the original vocal model, in Faenza, the florid cantus continues without pause. In the original *Or sus*, the tenor features rhythmic interest: rather than moving in equal values like a long-note cantus firmus, it

<sup>&</sup>lt;sup>19</sup> Cadences that occur between the tenor and contratenor in the original vocal model of *Aquila altera* include a medial "phrygian" cadence where a minor third between the tenor's G and the contratenor's B-flat contracts to a unison on A. While a cadence to the fifth of the mode might have been considered structurally important to another musician, in this instance, the improviser considered it permissible to omit. Later on, there is a much stronger cadence between the tenor and contratenor to the final. In place of this is a florid run in the upper line, a melismatic departure from the original melody lasting for ten breves that culminates the strophe. The melisma departs entirely from the original contour of the cantus, expanding its melodic compass from a seventh (C-sharp to B) to a twelfth (C-Sharp to E). In the ritornello, a cadence to D between the tenor and contratenor is replaced by a melisma exploring the plagal ambitus of the A below the final. It expands the compass from a fifth (D to A) in the original to that of an eleventh (A to D). Far beyond metrical displacement, the integrity of the cantus in these instances is shattered.

never rests any longer than the duration of a semibreve. The contratenor sustains notes longer than the majority of those in the tenor but does not perform the function of the tenor at cadences. In practice, it may have been possible for one instrumentalist to devise a new part in his right hand, leaving to his left the supporting tenor. It may also have been possible for two instrumentalists to designate the tenor to one player, allowing the other to freely embellish the cantus. Timothy McGee has even argued that pieces in the Faenza Codex were performed by both instruments and voices doubling parts at different octaves in mixed ensemble.<sup>20</sup>

When applying my analytical approach to sacred music within the Faenza Codex, I noticed that the improvisations above the long-note cantus firmi of the plainchant *Cunctipotens Genitor Deus* were made up of motives and similar melodic figuration repeated and recombined over the entirety of one or more Mass movements. The Kyries and Glorias based on the Gregorian Mass *Cunctipotens Genitor Deus* were not originally recorded in mensural notation or sung with a regular rhythm. In order to improvise upon them, a musician would have first decided upon a regular rhythm in duple or triple mensuration for the plainchant, transforming its melody into a long-note cantus firmus.<sup>21</sup> Noting the melodic motion of the new tenor along with chant text, it would have then been possible to determine where cadences to the modal final, fifth degree, and other pitches could be placed. Cadences could be created by melodic figuration combined and repeated to make formulas that embellished the underlying structure of a major sixth expanding outward to an octave or a minor third contracting to a unison. Understanding

<sup>&</sup>lt;sup>20</sup> Timothy McGee, "Once Again, the Faenza Codex: A Reply to Roland Eberlein." *Early Music* 20 (1992), 468. In his rebuttal to Roland Eberlein's assertion that the Faenza Codex was undoubtedly meant for organ performance, Timothy McGee made an interesting point by recalling Keith Polk's observation that it was common during the 15th century for musicians to be proficient at a number of instruments, including keyboard along with plucked and bowed strings. Polk claimed that, "Restriction of the repertory to any one instrument would simply have been foreign to the conditions of music-making of performers of *bas* instruments during the fifteenth century." McGee also argued that it was common for instrumentalists to "distort" polyphony through transposition.

<sup>&</sup>lt;sup>21</sup> This approach to improvisation seems similar to 15<sup>th</sup>-century traditions of *basse danse* improvisation in which two or more players invented contrapuntally viable lines in tandem around a rhythmicized long-note cantus firmus.

that metrically strong beats—each change from one tenor note to the next—usually needed to have consonant vertical intervals, musicians could have devised a plan of which pitches and vertical sonorities they needed to play at structurally important points and, with the aid of the framework, create a new melody that abided by the rules of counterpoint and dissonance treatment. This seems today an almost impossible feat, except when we remember that musicians would have created their melodies from a repertoire of figuration they had already internalized and had experience in recombining with the cadential and melodic formulas of different tenors.

Angela Mariani has suggested an analogy between medieval improvisation and bebop.

Virtuoso improvisers at the height of bebop had their own collections of figuration, known as 
"licks" and "riffs," and they were experienced at recombining them in various ways to create 
brand new melodies. A bebopper would develop fluency in his or her musical language and an 
instinct for which dominant, half-diminished, and diminished chords combined best with 
different melodic fragments and scalar passages and which scale degrees to begin and end on in 
coincidence with the chord changes. Skilled musicians would be able to recall the figuration they 
had used throughout their improvisation and repeat it at musically significant points for 
expressive purposes. They might even quote passages from the tune being embellished so that 
listeners could recognize the model.

All of this was done in real time without the aid of a score. Accounts of bebop included differing opinions on the musical literacy and theoretical knowledge consummate musicians required. In an interview that took place forty years after the rediscovery of the Faenza Codex, Dizzy Gillespie revealed the tensions between beboppers who could read music and those who couldn't. "A modern jazz musician wouldn't necessarily have to read well to be able to create, but you couldn't get a job unless you read music," Gillespie claimed. "You had to read music to

get in a band." Gillespie went on to say that proficient beboppers internalized a variety of styles, including Latin-influenced music, blues, and rock. Their musical toolkits involved a "built-in sense of time," which allowed them to set up phrases properly, along with knowledge of chord changes and intervals, and how to get from one key to the next.<sup>22</sup>

I believe Gillespie's testament speaks to the striking similarities between medieval and modern musicians. Surely tensions must have existed among literate and illiterate musicians at the time of the Faenza Codex just as they did in the jazz age. There were countless improvisers of bebop whose music was not transcribed. Thanks to surviving recordings, we can hear the extent of their improvisations, but these represent only a fraction of the musical practices at that time.

My study of the Faenza Codex has lead me to see stark differences among the various arrangements in the collection, when, prior to analysis, I envisioned only one common approach to composition and improvisation. Confronting the individuality of each piece encouraged my own interpretation in performance and helped me to understand each work as an artistic creation, rather than a counterpoint exercise or an analytical construct.<sup>23</sup> Considering the aesthetic features of each work and their possible artistic intent also helped me to think more like a composer when writing pieces in the Faenza style.

I can only speculate as to how well the musicians of the Faenza Codex knew the original vocal models, how often they would have to had heard *Aquila altera*, *Or sus*, or *Cunctipotens Genitor Deus* sung in order to memorize them, if they had access to the originals in notation, or

<sup>22</sup> Dizzy Gillespie, quoted in Robert Walser, "The Cult of Bebop," n *Keeping Time: Readings in Jazz History* (New York: Oxford University Press, 1999), 166-167.

<sup>&</sup>lt;sup>23</sup> "Automatic Extraction and Categorization of Faenza Codex Figurations," 560. Sela and Granot pointed out that unusual (i.e., less frequently occurring figurations) may even serve as "fingerprints" for individual pieces. The rationale being that the more notes in the figuration, the less likely it resulted from coincidence.

whether this resulted in greater recollection of and fondness for one voice over another. Working with modern scores of Faenza Codex pieces at times led me to assume that the musicians of the Faenza Codex had similar access to notated versions of all voices in the model, when in fact there may only have been a single voice—a tenor or cantus—to improvise on, not unlike the chord progressions of jazz standards the best beboppers knew by heart.

Another reason for deviation and variation may be that the musicians of the Faenza Codex did not have any access to the original vocal models in notation and improvised *ala mente* ("from the mind"), just like jazz musicians. Dizzy Gillespie revealed further truth behind the improvisers he and Charlie Parker emulated amid the cult of bebop, saying, "Nowadays in jazz we know more about chords, progression—and we try to work out different rhythms and things that they didn't think about when Louis Armstrong blew. In his day all he did was play strictly from the soul, just strictly from his heart he just played. He didn't think about no chords—he didn't know nothing about no chords. Now, what we in the younger generation take from Louis Armstrong . . . is the soul."<sup>24</sup> The possibilities for improvisation, and the potential connection to our own time, are all the more compelling after realizing that the score—what enabled me to undertake my analysis—is exactly what the improvisers may have lacked. The tradition of improvisation recorded in the Faenza Codex seems in so many ways like the jazz of our own age, and it may still be possible to sit at the feet of the masters and listen.

<sup>&</sup>lt;sup>24</sup> Walser, "The Cult of Bebop," 168.