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Ekaterine Diasamidze, John Graham and Davit Shugliashvili performing Georgian chants and folk songs at the concert on the opening day of the Conference. (Photo: DL)

JOHN A. GRAHAM

WITHOUT PARALLEL:

VOICE-CROSSING AND TEXTUAL RHYTHM IN WEST GEORGIAN CHANT

Several studies in recent decades have shown that the structure of Georgian Orthodox liturgical chant is organized around model melodies sung in the highest voice part.¹ Not only are the 200-300 phrase-length melodies preserved through oral tradition important referents for the three-part polyphonic realization of each chant, but the entire Georgian *oktoechos* is based on their tonal and genre assignment. In short, these melodies have clearly played a critical role in centuries of transmission of the liturgical chants for the services of the Georgian Orthodox Church. Thus it comes as a surprise that in many manuscript transcriptions,² the first voice does not sing the referent melody,

1 See Davit Shugliashvili dissertation, V. Sarajishvili State Conservatoire, Tbilisi Georgia, 2009, pp. 18-19 (Georgian); John A. Graham, "The Role of Memory in the Transmission of Georgian Chant," *Proceedings of the Fourth International Symposium on Traditional Polyphony*, published by the V. Sarajishvili State Conservatoire, Tbilisi, Georgia, 2008 (English and Georgian).

2 Many thousands of pages of transcriptions survived the Soviet era suppression of Orthodox chant. These are mostly to be found in the National Centre of Manuscripts, but also in the Folklore Centre, the Patriarchate of the Georgian Orthodox Church, and private

but something entirely different. In certain cases, entire chant phrases appear in these transcriptions without any trace of it. This anomaly raises a number of questions about performance practice in the oral tradition. For example, how was it possible, in the absence of notation, to realize the musical phrase without hearing (or singing) the referent melody? In such cases, were there other musical parameters that enabled singers to maintain the form, and if so what were they?

The deliberate avoidance of the referent melody is relatively unusual, occurring only in particular circumstances involving advanced ornamentation. For example, when the upper two voices temporarily switch ranges in a voice-crossing motion known as *gadajvaredineba* [lit. "the crossing of the cross"],³ the second voice does not replace the melody, thus leaving the referent as an unsounded, imagined line. The practice of "crossing" two voice parts over one another is not unique to Georgian liturgical music, but can be found among many indigenous folk traditions of the world.⁴ It was also a technique used by 11th-13th century medieval Western composers from Perotin to Machaut, whose pieces often feature voice-crossings and voice exchanges.⁵

In the Georgian case, voice-crossing is a natural development of a polyphonic vocal culture that prized ornamentation and improvisation. Even so, it occurs only in particular instances, and was governed by "rules" of variation that prevented the plain mode structure from being corrupted over time. The

collections in Tbilisi, Georgia. Many of the chants are duplicate copy, or variations of the same chant, as the semi-improvised performance of chant was notated over several decades. The main historical figures in the preservation of this invaluable material include saints Ekvtime Kereselidze, Pilimon Koridze, and Vasil Karbelashvili. Other important figures include Razhden Khundadze, Anton Dumbadze, Vasil Kutateladze, Dimitri Chalaganidze, Ivliane Tsereteli, Nestor Kontridze, Melkesidek Nakashidze, Ivliane Nikoladze, saint Polievktos Karbelashvili, Grigol Karbelashvili, Grigol Mghebrishvili, Alexander Molodinashvili, Maksime Sharadze, saint Ilia Chavchavadze, and their teachers before them.

3 The etymology of this word is as follows: *gada-* is a preverb meaning 'to go across'; *jvari* is the noun root which means 'the cross'; *-dineba* is a suffix meaning 'going with the flow' (*moedineba* - flows towards, *chaedineba* - flows down), which gives the cumulative literal meaning of 'to go across the cross going with the flow.' Another related term in Georgian is *jvaredini khaze*, which means 'to cross the line.' This term may be a translation of the Russian *perekreshchivanie*.

4 Voice crossings can be found, for example, in the vocal polyphony of the Ba'aka people in the Democratic Republic of Congo, Albanian drone polyphony, and Lithuanian *sutartines* among many others.

5 There is extensive literature on the use of voice-crossing and voice-exchanges in 11th-14th century Western polyphony. See for example, Anna Zayaruznaia, "'She has a Wheel that Turns...': Crossed and Contradictory Voices in Machaut's Motets," *Early Music History* 28 (2009): 185-240. Unlike medieval voice exchange, however, the second voice in Georgian chant never replaces or duplicates the melody of the first voice. Rather, each voice part remains independent even when ranges overlap. Another important feature in the Georgian case concerns the fact that instances of voice-crossing are initiated by the primary melodic and harmonic referent (the first voice). Thus this referent is unsounded in the process of voice-crossing.

strict transmission of these rules, and the techniques that bound them, was the special purview of the master chanter, as the successful transmission of Georgian chant depended upon students being able to accurately remember each chant in its most basic form while singing it in its most complex.

Before exploring the technique of *gadajvaredineba*, one of the most complex forms of ornamentation in the repertory, it is important to introduce the melodic voice and its role within the structure of Georgian chant.

REFERENT MELODIES

In Georgian liturgical music, the singer of the top voice is called the *mtkmeli* [lit. 'one who speaks']. Typically the *mtkmeli* is responsible for singing the prescribed series of phrase-length melodies that musically define the chant as belonging to a particular genre and tonal assignment. These melodies also served an important role in the oral pedagogy of Georgian chant. Students in the medieval apprenticeship system, which dominated transmission into the mid-twentieth century, would typically study for 5-6 years. It seems that the first stage in the study of chant involved singing in parallel octaves, fourths, and fifths.⁶ These parallelisms, called "study voices," were probably only used as a preliminary pedagogical step in a student's musical education, as such predictable parallelisms are rarely found in the transcription record whereas simple counterpoint and variation are widespread. Parallelism seems to have assisted students in the critical memorization of the primary referent melodies, however, and could later be discarded in favor of regionally stylistic variation.⁷

During a period of intensive chant transcription from the 1880s to 1910s, it was considered important to notate both the *sada* (plain) and *gamshvenebuli* (ornamental) variants of each chant, a goal reflected in the transcription record. The art of ornamentation was prized among the community of chanters, so in some cases, only the ornamented variations were transcribed (the plain mode being assumed common knowledge). This presented a certain problem, clearly elucidated by Ekvtime Kereselidze, who in the 1910s and 1920s recopied and organized many thousands of disorganized transcriptions.

"If there were not a *kilo* (mode, or melody), how could we ornament it? Every movement of the voice is dependent and connected like veins to the structure of the *kilo*, which is therefore the foundation of any chant. Only that person who has learned the *kilo* expertly will be able to guess where and how it is suitable to ornament the movement of the voices."⁸

With this important insight, Kereselidze identifies the most fundamental structures of Georgian chant. He explains how ornamental variants must be based

6 See Davit Shugliashvili, "Similarities and Differences in the Georgian Chant School Traditions," pp. 183-190 in this volume.

7 John A. Graham, "The Role of Memory in the Transmission of Georgian Chant," *Proceedings of the Fourth International Symposium on Traditional Polyphony*, published by the V. Sarajishvili State Conservatoire, Tbilisi, Georgia, 2008 (English and Georgian).

8 marginalia, p. 189, Q672, National Centre of Manuscripts, Tbilisi, Georgia

on plain mode structures, and identifies the melody as the cornerstone of this system.

Kereselidze understood the importance of making sure that both ornamented and plain mode variants of each chant were preserved, a remarkable foresight considering the advantage it gives modern scholars attempting to understand the practice of chant in the oral tradition. When recopying ornamental chants in his well organized volumes of transcriptions, Kereselidze often penciled in the referent melody in small noteheads where it had been omitted in favor of an ornamental line. See for example, a single page from one of his massive 815-page compendiums completed during the height of the Bolshevik revolution in the 1920s (Example 1), which shows the referent melody in small note-heads above the highly ornamented *mtkmeli* voice.



Example 1. Referent Melody in Small Noteheads.

Manuscript page from Ekvtime Kereselidze's volume of liturgical chant. Q672, page 528, National Centre of Manuscripts, Tbilisi Georgia.

Model melodies are often quite simple, occupying the range of just a tetrachord or pentachord. Phrase lengths vary between 8-15 notes in length, but can typically be sung in one breath.⁹ Each melody is unique, and only occurs in the chant genre to which it has been assigned. For example, the melody of

9 Longer phrases that require more than one breath are the result of ornamental variations that slowed the performance tempo in order to accommodate the addition of more passing notes.

the first phrase of the Paschal troparion, *aghdgomasa shensa* (Example 2a) is the melody that begins almost all troparion genre chant texts assigned to the Sixth tone. For ease of comparison, we have used this melody to show common variations, as seen in Examples 2a, 2b, 2c, 3a, 3b, 4a, 4b, 5a, and 5b. The basic form of the Tone VI troparion melody occupies the descending tetrachord D-A, comprises two halves, and cadences on B. It is often ornamented in the approach to the medial point or the phrasal cadence (as seen in Example 2b), simply because the destination of the cadence pitch dictates the preparatory linear motion of each voice.

2. Referent Melody Comparison

Aghdgomasa Shensa (melody only), Paschal Troparion, Tone VI, Gelati Monastery School

Example 2a, Simple Mode

Mtkmeli Voice

Agh-dgo - ma - sa shen - sa kris - te ma - tskho - var

Example 2b, Ornamental

Mtkmeli Voice

Agh-dgo - ma - sa shen - sa kris - te ma - tskho - var

Example 2c, Ornamental with *gadajvaredineba*

Mtkmeli Voice

Agh-dgo - ma - sa shen - sa kris - te ma - tskho - var

The subject of this paper, the technique of *gadajvaredineba*, involves the *mtkmeli* voice abandoning the referent melody to descend temporarily into a lower range (Example of 2c). By comparing this example with the other two variants (Examples 2a and 2b), several interesting points emerge. Perhaps what is most remarkable is that the variants are not as dissimilar as one might expect: other than the radical dive half way through the *gadajvaredineba* phrase in Example 2c, the ornamentation is confined to minor elaborations before points of rest at the middle and ends of phrases. Structurally, we see even more rigidity. Each phrase is the same length, occupies the same range, cadences on the same pitch, and the main contour of the referent melody is preserved. It seems that these features remain stable within different levels of variation, and across diverse geographical and stylistic monastery traditions.¹⁰

Only the advanced ornamentation of *gadajvaredineba* breaks these observed constructs, an anomaly that presents some degree of mystery. How could master singers continue chanting when the referent melody was not only disguised, as in Examples 3, 4, and 5, but completely absent as in Example 6? The following discussion illustrates the improvisatory possibilities of this particu-

¹⁰ John A. Graham, "The Role of Memory in the Transmission of Georgian Chant," *Proceedings of the Fourth International Symposium on Traditional Polyphony*, published by the V. Sarajishvili State Conservatoire, Tbilisi, Georgia, 2008 (English and Georgian).

lar technique, as well as the flexibility and constraints of the form that allows for it.

GADAJVAREDINEBA (VOICE-CROSSING)

Georgian traditional music, both sacred and secular, is characterized by three-voiced, close-harmony singing. There is a wide range of multi-voiced styles between the twelve regions of Georgia including drone polyphony, homophony, and heterophony, as well as stylized vocal techniques such as yodeling.¹¹ The richness of regional folk-singing cultures throughout Georgia is also clearly reflected in the ornamental variations of sacred polyphony. Certain techniques act as regional signatures, allowing listeners to easily recognize a chant or folk song from a particular region or monastery. *Gadajvaredineba* is one such technique, as it is only found in the Gelati and Shemokmedi monastery traditions in West Georgia.

The technique of *gadajvaredineba* is an advanced form of ornamentation distinguished from other forms in that it required chanters to sing without reference to the melody. To perform *gadajvaredineba* without notation of any kind required a thorough knowledge of the referent melody, the structure and length of the chant phrase, and mastery of the art of improvisation. Its use seems to have been widespread by chanters throughout West Georgia, but not in East Georgia. "In the simple mode from the Karbelashvili brothers, one characteristic is that they do not use voice-crossings,"¹² noted Davit Shugliashvili, referring to the East Georgian chant tradition. This is not surprising considering that voice-crossing is rare in the folk music of those regions, while it is relatively common in the West Georgian regions.

Gadajvaredineba is generally a feature of feast-day chants in the heirmoi and troparion genres. Despite their relatively infrequent performance -- some feast-day chants are sung only once per year -- their melodies are ubiquitous. Throughout the calendrical feast-day cycle, there may be dozens of unique texts set to the same melodies of any particular genre and tonal assignment (such as the troparion Tone VI melodies featured in this paper).¹³ These melodies are just flexible enough to accommodate different length texts, but just durable enough to be recognizably different from one another. This system made it possible for master chanters to apply the advanced musical ornamentation developed within one group of melodies to all the other chants that used those same melodies, thus explaining how rarely performed chants could be so complicated.

11 For a broad overview of Georgian vocal polyphony, see Joseph Jordania, *Garland Encyclopedia of World Music Volume 8: Europe*, p. 826-834, ed. Timothy Rice, Routledge Publishing, 2000.

12 Davit Shugliashvili, *Kartuli galobis "unisonuri" mravalkhmanoba*, Tbilisi State Conservatory Press, 2001.

13 This type of chant organization may be likened to the Byzantine *idiomela-prosomoia* melodies. See E. Wellesz: *A History of Byzantine Music and Hymnography* (Oxford, 2/1961), 243-5.

The origin of *gadajvaredineba* is not well understood. One explanation suggests that the *mtkmeli* voice avoided fatigue by sometimes singing in a lower range. Another explains that the timbral differences in the highest sounding part were pleasing to chanters. Others point to traditional folk music, where the arts of variation and improvisation were prized even above having a good voice or memory. The simplest explanation may be just that master chanters enjoyed the challenge of 'breaking' the form in order to create momentary spaces conducive to improvisation. Heirmoi and troparion chants suited the experimental evolution of the form because of their celebratory themes within the liturgy, and as Malkhaz Erkvanidze remarked, "voice-crossing is just one manifestation of the development of vocal polyphony."¹⁴

Returning now to the form of *gadajvaredineba*, it will be useful to look at a few more examples. Ornamentation in Georgian chant occurs in all three voice-parts, particularly the lower two. Therefore, while isolating the melodic voice is useful for comparative-analytical purposes, ultimately it is necessary to examine these model tunes in the context of the three-voiced structure. To begin with, let's consider the melody of the first phrase of the Paschal troparion *aghdgomasa shensa* (Example 2), in its three-voice polyphonic context (Example 3).

3. Simple vs. Ornamental 3-voiced Comparison

Aghdgomasa Shensa (first phrase), Paschal troparion, Tone VI, Gelati Monastery School

Example 3a, Simple Mode

Example 3b, Ornamental

Each voice part in the simple mode of *aghdgomasa shensa* (Example 3a) is relatively confined to its own unique range of four or five notes. Contrast this with the ornamental mode of the same phrase situated directly below it (Example 3b). Here, the bass voice is rhythmically and harmonically more active, while the middle voice employs more passing tones to ornament its line. In

14 Malkhaz Erkvanidze, personal interview, June 1st, 2011

the second half of the phrase, the *mtkmeli* initiates a voice-crossing with the middle voice by descending into its range. Despite this 'intrusion,' the second voice simply ornaments the notes G-A-G-F-E, the same set of notes it sang in the simple variant (compare to the middle voice in Example 3a).

But as voice-crossings become more complex, the second voice is forced to improvise away from its own line as in, for example, the second phrase of *aghdgomasa shensa* (Example 4b). Here the *mtkmeli* voice physically takes the place of the middle voice by singing the notes A-G-F on the syllable *-lo-* (compare Examples 4a and 4b), forcing the middle voice to remain in a higher range and improvise on the words *-lo-en tsa-ta shi-na*.¹⁵ In such moments, the middle voice never sings the referent melody in place of the *mtkmeli* voice, as one might have expected. Instead, the second voice must improvise a unique ornamental line in the upper register, a phenomenon that only occurs in the context of *gadajvaredineba*.

4. Simple vs. Ornamental 3-voiced Comparison

Aghdgomasa Shensa (second phrase), Paschal troparion, Tone VI, Gelati Monastery School

Example 4a, Simple Mode

Example 4b, Ornamental

The bass voice reacts in predictable ways to the *mtkmeli* voice by increasing its lower range. For example, after rising to an F on the syllable *-lo-* (Example 4b) the bass is forced to leap uncharacteristically down the scalar ladder to a low B to avoid a bass-*mtkmeli* overlap, a mishap that seems to have been widely discouraged.¹⁶ This obligatory reaction increases the range of the bass

¹⁵ The same phenomenon --the *mtkveli* replacing the second voice in harmonic and melodic positioning-- occurs in the middle of the following example as well (Example 5b).

¹⁶ The bass and *mtkmeli* voice parts almost never overlap in the transcription record, suggesting that it was not an acceptable movement in the improvisatory space of *gadajvaredineba*.

voice and provides additional improvisatory space (note the increased range from 3 notes to 7 notes in Examples 4a and 4b).¹⁷

But what of the harmony? As the *mtkmeli* voice leaves the referent melody, descending into the fabric of the polyphonic sound-tapestry, its melodic function ceases. This loss of the referent might lead one to expect a certain degree of compensatory stability from the harmonic relationships of the three voice parts. The opposite --the disruption of the basic harmonic framework-- would seem to even further destabilize the structure of the phrase, and call into question the overall importance of harmony as a critical factor in the transmission of Georgian chant.

5. Simple vs. Ornamental 3-voiced Comparison

Jvarsa Shensa, Feast of the Cross troparion, Tone VI, Gelati Monastery School

Example 5a, Simple Mode

Example 5b, Ornamental

A quick referral to the basic chord patterns on strong beats in the troparion *jvarsa shensa* (Example 5) confirms that the harmony during *gadajvaredineba* passages changes drastically. For example, the triad B-G-E on the word *tsemt* (from highest to lowest heard pitch) is an unrelated chord to the triad A-F-D in the ornamental variant at the same place, and cannot be considered to be similar. The series of chords that follow are also fundamentally different (see chord charts above the staves, Examples 5a and 5b). This observation supports the hypothesis that the standardization of harmony is not a determining factor in the successful performance of ornamental chants.¹⁸ Rather, the musical

¹⁷ Similarly in the first phrase of the Tone VI troparion, *jvarsa shensa*, the bass voice also quickly and radically increase its lower range (Example 5b).

¹⁸ John A. Graham, "The Role of Memory in the Transmission of Georgian Chant," *Pro-*

integrity of the phrase, in the absence of the referent melody, must rely upon other factors.

The following discussion concerns the most extreme case of *gadajvaredineba*: chants phrases where the referent melody is entirely un-sounded. In these instances, three chanters are required to improvise for an entire phrase without the typical melodic and harmonic references associated with the performance of chant in the oral tradition. This was an extremely difficult performance practice, and one that was likely quite rare.¹⁹ For example, in the final phrase of the third canticle of the Paschal canon *movedit da vsvat* (compare Examples 6a and 6b), the ornamental *mtkmeli* voice sings the entire phrase in an inverse relationship to the middle voice. Looking at the opening chords, the simple variant begins on the notes E-C-E, while the ornamental variant begins on the unrelated notes of D-A-D.

6. Simple vs. Ornamental 3-voiced Comparison

Movedit da Vsvat, 3rd Canticle, Paschal Canon, Gelati Monastery School

Example 6a, Simple Mode

Example 6b, Ornamental

The image displays two musical examples, 6a and 6b, comparing simple and ornamental 3-voiced chant. Each example consists of three staves: Mtkmeli Voice (top), Middle Voice (middle), and Bass Voice (bottom). The lyrics are: kmni - li kris - tes sa - pla - vi - it. Example 6a, Simple Mode, shows a simple harmonic structure with the Mtkmeli Voice starting on E, Middle on C, and Bass on E. Example 6b, Ornamental, shows a more complex structure with the Mtkmeli Voice starting on D, Middle on A, and Bass on D. The Mtkmeli Voice in 6b is highly ornamental, featuring many grace notes and rapid passages.

These harmonic discrepancies continue throughout the phrase, again begging the question, if harmonic predictability did not compensate for the missing referent melody in moments of *gadajvaredineba*, what other *musi-*
ceedings of the Fourth International Symposium on Traditional Polyphony, published by the V. Sarajishvili State Conservatoire, Tbilisi, Georgia, 2008 (English and Georgian).

19 While hundreds of chant transcriptions from the Gelati and Shemokmedi monastery schools display some degree of voice-crossing, suggesting that the technique was widespread at least among the most accomplished chanters in West Georgia, entirely inverted phrases are still quite rare in the archival record.

cal parameters assisted chanters in the performance of increasingly difficult ornamental forms?

Careful observation suggests two other factors that may be significant besides melody and harmony. First, the text is always sung by all three voices at the same time, so the rhythm of the chant --the long and short emphasis of individual syllables-- does not vary between simple and ornamental performances. Could the stability of the textual rhythm be an important factor in the real-time performance of ornamental variants? Second, the final pitches of each phrase are always the same, despite a high degree of ornamentation. See, for example, the cadence on the syllable *-m-lit*, and the final cadence on *-er-dit* (page 2, Examples 6a and 6b). Chanters appear to have relied on these subtler referential cues while improvising harmony.

2

Example 6a, Simple Mode (continued)

Mtkmeli Voice

Middle Voice

Bass Voice

ro - m - li - i - ta - gan - - vdzli - er - dit

Example 6b, Ornamental (continued)

Mtkmeli Voice

Middle Voice

Bass Voice

ro - m - li - i - ta - gan - - vdzli - er - dit

Malkhaz Erkvanidze, a teacher at the College for Chant Studies of the Georgian Patriarchate, agreed with these observations. "Chanters have to understand where they are going. The final chord or note is the canon and the rule of any chant. Each phrase has its own final ending note that cannot be changed."²⁰ So perhaps the rhythmic delivery of the text proscribes the length and timing of the chant phrase, while the cadence pitches determine a linear destination point for each of the three improvising voices. With these two parameters immutable, other parameters such as harmony, ornamentation, and even the referent melody could be changed according to the skill and inspiration of the chanters.

20 Malkhaz Erkvanidze, personal interview, June 1st, 2011

It still seems difficult to imagine performing such a complex chant as *movedit da vsvat* without notation, the referent melody, or familiar harmony. Even building up to such a skill level through the practice of simpler examples of *gadajvaredineba* (as seen in Examples 3, 4, & 5) presents problems. A lingering question remains. Having established that master chanters were able to guide themselves with a predetermined textual rhythm to each of the all-important phrase-ending cadences, how did they know what harmony to sing during the unstructured space of the extended *gadajvaredineba*? Clearly, the harmony may be changed to some degree, but this doesn't mean it could be completely improvised. How would the bass voice be able to, on the one hand, anticipate if the *mtkmeli* voice planned to go up or down at any given moment or, on the other hand, how could the middle voice avoid forming uncharacteristic chords while suddenly thrust into the most exposed and audible position in the highest register of the three-voice chant?

With these persistent questions in mind, it bears looking at the examples again for more clues into how these difficult ornamental forms were performed. It is hard to imagine that they didn't use other clues, signals, or structural references to guide the improvised realization of entire phrases. Indeed, under second scrutiny, we notice that there are several surprising and subtle concurrences between the melodies and harmonies of the simple and ornamental variants that did not come out in the previous analyses (Examples 6a and 6b). For example, on the opening two words of the ornamental variant, *kmni-li kris-tes*, the *mtkmeli* voice appears to sing the referent melody, only in a much lower range. To spell this out, notice how the contour of the pitches E-E-F-E-D (referent melody on the half beat rhythm, Example 6a) is identical to the contour of the *mtkmeli* voice pitches A-A-B-A-G in the ornamental variant (Example 6b). Both lines go up one pitch then down two pitches, though of course the ornamental variant is sung at the interval of a fifth lower, and therefore buried within the three-part harmony. With the choice to invert the whole phrase, the *mtkmeli* voice appears to have "quoted" the referent melody, even though it would not have been heard as such, being lost inside the new harmonic framework. Therefore, if it can be called a quotation, at most it seems to have been a personal reminder of the true referent melody and not necessarily intended to be recognizable for anyone but the chanters themselves.

The harmonic references, if indeed they are such, also seem more private than overt. The first occurs on the syllable *sa-* (boxed chord, Examples 6a and 6b), when all three voices arrive on the triad C-A-F in both the ornamental and simple variants. In both cases, the bass voice makes a definitive rise to F, essentially the highest bass note in the entire phrase, signaling an intentional preparation for that particular chord. Critics might be quick to point out that by the next beat, the melodic high point of the mini-phrase on the high E of the syllable *-pla-*, all three voices have moved on in their respective melodic and harmonic improvisations. Nonetheless the concurrence on the syllable *sa-* may be significant simply for the fact that it exists within the improvisational space of *gadajvaredineba*.

Another unusual harmonic concordance happens in the second half of the phrase on the syllable *-vit*. In this case, the F's sung in both the *mtkmeli* and middle voice parts of the ornamental variant match a medial cadence in the plain mode version (boxed chord, Examples 6a and 6b). At first this does not appear to be significant in any way, as the F's are disguised within passing tones and don't seem particularly harmonically strong in a sixth interval position above the bass drone on low A. Likewise to the ear, these F's seem insignificant as passing tones in the context of the larger voice-crossing event. But the visual comparison reveals a potentially significant referential relationship.

It could be argued that the F's sung in the upper voices at this moment were internal reference points for singers 'remembering' the medial cadence as a place to take stock of their positions within the phrase.

In the final cadence of the ornamental variant (on the syllable *gan-*) the prepared arrival of the second voice on the high C mimics the C in the referent melody of the simple variant (boxed chord, second page, Examples 6a and 6b). Even though the three-voiced harmony is not the same between the simple and ornamental variants, the stress on this particular note of the structural melody may well be another example of an internal cue or personal reminder of the structural importance of the melody in the preparation of the final cadence.

The moments of tension that result from improvising during *gadajvaredineba* often yield surprising results. In this space of limbo, each voice experiments outside the established harmonic framework. It is difficult to judge if, in this act of improvisation, harmonic references to the simple mode are merely coincidental, or whether they are specific, personal reminders of the original referent melody and its basic harmonization. Either way, it is clear that the improvisational space of *gadajvaredineba* allowed chanters to both test their knowledge and push the boundaries of the form.

* * * * *

Even with fixed textual rhythm and cadence pitches, it was very difficult to perform advanced *gadajvaredineba*. So there are references: singers clues to the referent melody and the familiar harmonization. Other times, there are unusual chords that occur as a result of three individuals improvising in undefined harmonic territory. We must imagine that at best, such improvisations, such improvisation succeeded marvelously, while occasionally it faltered or was less than satisfactory. On this point, the transcription record cannot offer a truly accurate picture. It is a faulty sample study of the performance reality because only a handful of masters-level chanters (not parish chanters or students) were prompters for the transcriptions made between 1880-1910. This is significant because the transcriptions therefore describe mostly advanced practice, and not the average practice of average performers. Even so, many manuscripts show evidence of being highly edited: certain passages, chords, or ornaments that didn't look good on the score were erased and rewritten, sometimes several times. In the oral tradition, such editing happened natural-

ly. If one variant didn't sound quite right, they could simply sing it a different way the next day.

The musical examples of the *gadajvaredineba* technique presented in this essay reflect its degrees of complexity, but not the full range of the forms extant in the transcriptions. Example 2 compares three variants of a melody, showing the basic mechanisms of ornamentation and the early stages of voice-crossing. Examples 3, 4, and 5 illustrate how voice-crossings of increasing complexity affect the three-voiced structure. Finally, Example 6 demonstrates how master chanters used the discrete parameters of textual rhythm and cadence pitch to improvise entire multi-voiced phrases without the referent melody or its familiar harmony. But they may have used private melodic and harmonic referencing to guide their way through the most complex inverted phrases.

Though there are many transcriptions of chants with difficult voice-crossings in the archival record of West Georgian traditional chant, it would be an error to assume that this level of ornamentation was common in practice. The techniques described would have been quite difficult for an average singer. Rather, the transcriptions reflect the repertory of advanced masters who thoroughly understood the various formal structures detailed in this paper. For them, *gadajvaredineba* offered an opportunity to display their harmonic intelligence, improvisatory virtuosity, and mastery of form.