Prosodic Rhythm in Jewish Sacred Music: Examples from the Persian-Speaking World

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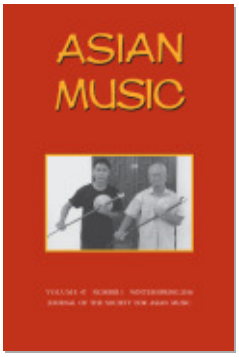

Asian Music, Volume 47, Number 1, Winter/Spring 2016, pp. 64-102 (Article)

Published by University of Texas Press

Prosodic Rhythm in Jewish Sacred Music: Examples from the Persian-Speaking World

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Abstract: *Musical rhythms are connected to prosodic principles in many Jewish sacred music practices. For Persian-speaking Jews of Iran and Central Asia, rhythms are especially informed by ingrained habits of interpreting Persian quantitative poetic meters, applied to both Hebrew- and Persian-language texts. For describing and analyzing Jewish sacred music in the Iranian and Central Asian traditions, the term "prosodic rhythm" usefully highlights the importance of syllable length and other rhythmic features of a text, with broader implications for the study of Jewish sacred music and music without a steady pulse in general.*

Introduction

Jewish sacred music is an ideal area for investigating the relationship between texts and musical practices. Jewish religious practice is heavily based on a wide-ranging collection of texts to be performed aloud, many of which have remained remarkably consistent over time and among disparate communities. Consideration of the nature of the heterogeneous corpus of sacred texts—such as whether the text is from the Torah or a hymn written a millennium later—is balanced with local performance traditions and the presentational options available to participants based on their linguistic competencies and musical experiences. The resultant variety of treatments of similar or identical texts throughout a worldwide diaspora provides unusual opportunities for comparison.

Jewish religious texts are sometimes accompanied by guides directing performers to certain melody types, ornaments, and cadential formulas, such as in the case of the biblical accents called *teʿamim* (Seroussi et al. 2001, 41–47; Flender 1992). However, some of the most salient aspects of sacred text performances are the rhythmic strategies suggested to worshippers according to local principles of prosody and versification. Performance styles are intrinsically linked to patterns discernible in a text, such as poetic meter and rhyme when they occur, with participants considering these aspects in relation to broader associations (e.g., Psalms are often designated in the text itself as *šīr*, "song") and the performance context (e.g., in Orthodox congregations, instrumental accompaniment is not permitted on the Sabbath). The rhythmic

aspects of texts are even at the core of many performance styles without a steady pulse heard in synagogue worship.

Continuing the path of A. Z. Idelsohn ([1929] 1967), scholars have leaned heavily toward discussing melodic formulas or modal principles at work in Jewish sacred music, while rhythm has been mostly neglected.[1] Judit Frigyesi's (1993) article on "flowing rhythm" is a notable exception, but her term reinforces an often overemphasized distinction between music with and without a steady pulse, missing the importance of prosody and textual rhythms for the full spectrum of sacred music. Furthermore, Frigyesi and others who have explicitly analyzed rhythms in Jewish sacred music (e.g., Flender 1992, 93–95) have not generally considered the relationship of local prosody to Hebrew texts (whereas, in studies of melodic modes, scholars have often considered the impact of local conventions and systems). The phrase "prosodic rhythm," as explained in this article, aims to highlight the philological qualities and poetic principles heard across many styles of Jewish religious music, in performances ranging from a very regular pulse to a highly elastic beat.[2]

Musical practices of Persian-speaking Jews are especially fertile ground for the study of rhythmic principles at play in Jewish sacred music. These communities are situated in Persianate environments, in which individuals hold deeply ingrained prosodic habits and practice music reflecting a wide variety of rhythmic approaches.[3] As prosodic rhythm is an essential underlying concern of both Jewish sacred and Persian musical traditions, the nexus of these two spheres in Judeo-Persian religious music brings to light some of the many ways that performers reconcile the demands of the sacred texts with their personal, locally developed interpretive habits and experiences.

Based on examples of sacred music from Persian-speaking Jews of Iran and Central Asia, I outline two related approaches to prosodic rhythm heard throughout liturgical and paraliturgical occasions: (1) identifying, approximating, or superimposing poetic meters in texts and articulating them along a continuum of rhythmic flexibility; and (2) emphasizing contrasting stresses and lengths of syllables, with a preference for iambic-type patterns, when singing texts without identifiable poetic meters.[4] The clear expressions of poetic meter in the first approach serve as important signposts in the general flow of a service and provide collective experiences at a participatory religious event. Individuals apply the second approach when performing nonmetrical texts that still suggest a melodic treatment, and it can even be found in some cases of recitation ("reading" rather than "singing," the Hebrew verb *qārā* implying reading aloud, calling, recitation, chant, or melodic performance, but not "music" or "song"), depending on the occasion and the performer's style.[5] Both approaches are based on principles of quantitative poetry (poems built on contrasting lengths of syllables), and both connect to treatments

of quantitative meters in canonical musical repertoires. However, the two approaches differ in the emphasis placed on patterns.

My hope is that with further investigation into these approaches among Persian-speaking Jews and other Jewish communities, more models for considering rhythm in Jewish sacred music will emerge, building on the strong existing research emphasizing melodic formulas and modes. I also believe that such studies will reveal the importance of prosodic rhythm beyond Jewish religious situations. For example, serious consideration of the rhythmic implications of texts blurs the undue emphasis on contrasting "oral" and "literate" practices, as texts can function as a sort of musical notation for properly trained interpreters. The concept of prosodic rhythm is also useful for broadly discussing music with an elastic pulse, sometimes called "nonmetrical" or "free rhythm" (Clayton 1996), terms that obscure the textual rhythms so often central to, and even linking, musical styles with a wide variety of approaches to pulse. For example, the opening of Rumi's *Masnavi* is frequently performed in styles with varying pulse consistency—set in *usûl devr-i revân* (14/8) in the first *selam* of Ismail Dede Efendi's *Ferahfezâ Âyîn-i Şerif* for a Mevlevi *sema* ritual (Mevlevi Ensemble of Turkey 1995) or without a steady pulse to the Iranian *gušeh* of "Masnavi" in the *dastgāh* of *Bayāt-e Tork* (Karimi [n.d.] 2006)—yet no setting of the *Masnavi* could accurately be called nonmetrical or free rhythm in that the text's consistent and very strict *poetic* meter is the same in each performance. Rather, the rhythm and meter of the words, conventions of genres, and local habits of performers suggest a range of acceptable musical interpretations. Finally, while the rhythmic properties of words are an obvious concern for vocal music, prosodic rhythm is an essential component of much instrumental music and can shed light on performance practices and compositional styles of instrumental music created by individuals from Beethoven to Coltrane.[6] Any comprehensive understanding of rhythm, even in instrumental styles, requires an investigation of the strong relationship between words and music, best approached with a combination of ethnographic, musicological, and theoretical tools.

Persian-Speaking Jews and Their Prosodic Habits

Persian-speaking Jewry includes the communities of Iran, Central Asia (Bukharian Jews), Afghanistan, and the Caucasus Mountains region.[7] Jewish people lived in Iran and territories of the Persian Empire for millennia, making Persian-speaking Jews one of the oldest Jewish diasporas. Despite living in quite divergent political situations, Persian-speaking Jews are united by an intense history of travel, migration, and communication along the trade routes connecting major cities of the region, including Baku, Bukhara,

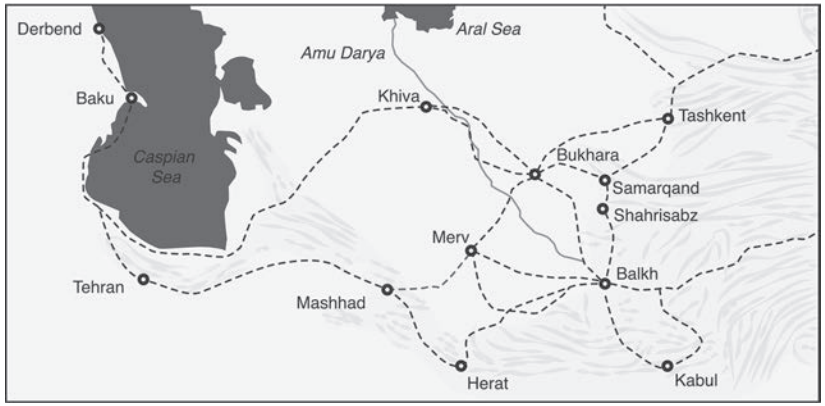

Figure 1. Map of selected Central Asian trade routes in the sixteenth and seventeenth centuries (Source: Rapport 2014, 8).

Derbend, Herat, Kabul, Kashan, Mashhad, Merv (Mary), Samarqand, Tashkent, and Tehran (fig. 1). Terms referring to contemporary nation-state boundaries, such as "Iran," "Afghanistan," and "Uzbekistan," can easily obscure the complex geopolitical history of the region and the itinerant paths of Jewish people, who regularly moved in response to discriminatory policies and political upheaval or to pursue economic opportunities.[8] In the present day, after mass migrations in the wake of the Iranian Revolution of 1979 and the fall of the Soviet Union in 1991, Persian-speaking Jews from all over the globe primarily reside in two countries, the United States (mostly in the cities of Los Angeles and New York) and Israel, where they have newfound occasions to reconsider their relationships to one another.

In this article I focus on the communities of Iran and Central Asia, which constitute the main hubs of Persian-speaking Jewry, historically linked through a shared Judeo-Persian literature.[9] As one major example, the writings of the fourteenth-century poet Mowlānā Shāhīn Shīrāzī (Master Shāhīn of Shīrāz)—the cornerstone of Judeo-Persian literature—were revitalized by the scholar Shimon Ḥakham from Bukhara (1843–1910) after he moved to Jerusalem. Ḥakham's edition was republished in 1999 by Ketab Corporation in Los Angeles for Iranian Jews (Khūbān 1999); similarly, Shāhīn's writings (via Ḥakham) were included in *Golčīnī az adabīāt-e yahudiān-e boxārī (az asr-e XIV tā vaqt-e hāzer)* (Anthology of Bukharian Jewish literature [from the 14th century to the present]), published in Tel Aviv in 1998 for a Bukharian Jewish readership (Shalamūyev and Tolmas 1998). Figures 2 and 3 show the two versions; note the reproduction of Ḥakham's title page (in the Hebrew alphabet) in both editions. Although today Bukharian Jews read and write

Figure 2. Pages from *Shāhīn Tōrāh* (Source: Khūbān 1999).

Persian with the Cyrillic alphabet as a result of Soviet language reform, and Iranian Jews use the Perso-Arabic script, all Persian-speaking Jews historically used the Hebrew alphabet for Persian, and this competency has survived to the present day.[10]

Comparisons of Iranian and Central Asian Jewish practices are especially interesting because members of both groups perform Jewish religious texts according to Persian prosodic habits, but in different ways. However, despite the contributions of Loeb (1970, 360–403; 1972; 1977, 155–63, 257–62; 2000), Netzer (1984, 2011b), Nettl and Shiloah (1986), Chaoulli (2006, 2012), and Sarshar (2011), research into Iranian Jewish music is still "a major desideratum" (Seroussi et al. 2001, 66), as "no thorough and comprehensive research on the subject has yet been conducted" (Netzer 2011b, 287).[11] And although Bukharian Jewish music has been the subject of slightly more scholarship (Slobin 1982; Levin 1992, 1996, 85–130, 260–87; Djumaev 2004, 2008; Matyakubov 2004, 2009; Reikher 2005–6; Rapport 2006, 2014; Jung 2010), it too is scarce.[12] With the exception of Seroussi and Davidoff's (1999) preliminary study, no research on Afghan Jewish music per se exists to my knowledge. Furthermore, following Idelsohn's (1922) groundbreaking and promising study (but only based on his work with a small sample of consul-

tants in Jerusalem and containing dated stereotypes and incorrect information since corrected), scholarship investigating Iranian and Bukharian Jewish music under one umbrella came to a halt during the twentieth century because of the schismatic repercussions of Central Asia's annexation into the Russian Empire and then the Soviet Union. This article is a small attempt at addressing this gap, with an eye toward more research and a larger sample of materials in the future.

Persian-speaking Jews in Iran and Central Asia, like their non-Jewish neighbors, have strongly developed habits for interpreting quantitative poetry stemming from the pervasive presence and cultural importance of classical Persian poetry composed in quantitative meters. Both communities are deeply attached to the great Sufi poets, including Hafez, Rumi, and Attar; "[p]oetry was, beyond any doubt, the favorite and most highly regarded mode of expression of Iranian Jews, as of Iranian Muslims" (Moreen 2000, 20). Many Judeo-Persian texts specific to these communities were also composed

Figure 3. Title page introducing a section of Shāhīn's writings in *Golčīnī az adabīāt-e yahudiān-e boxārī (az asr-e XIV tā vaqt-e hāzer)* (Source: Shalamūyev and Tolmas 1998).

in quantitative meters, such as Shāhīn's poems and other translations, paraphrases, and creative restatements of Hebrew texts.

Quantitative poetry in Hebrew is also important to Persian-speaking Jews. After Jews adopted the Arabic quantitative prosodic system known as *ʿaruz* for Hebrew in the tenth century, many poets wrote new Jewish religious texts in Hebrew and Aramaic in quantitative meters (Seroussi 2007, 13–16). Persian-speaking Jews sing Hebrew and Persian poetry separately or by alternating languages (usually verse by verse). Such practices among Jews have further reinforced particular habits of interpreting quantitative poetry, even resulting in the application of those habits to texts not originally composed according to quantitative meters.

Persian-speaking Jews have diverse levels of engagement with musical repertoires and genres attached to quantitative poetry, including Iranian *āvāz* (voice, song) and *tasnif* (composition, ballad) and the Central Asian *šašmaqām* (six modes). The vocal style known as *āvāz* is particularly useful for the purposes of this article, in that like Judeo-Persian sacred music, *āvāz* mostly relies on a flexible pulse and is performed without accompanying drum patterns. Furthermore, writers on Iranian *āvāz* frequently underscore the importance of underlying prosodic principles. Tsuge's (1970, 1974) work describing the prosodic basis of rhythms in *āvāz* is echoed in other scholarship: "Thus, the poem gives rise to a recurrent rhythmic structure in what initially appears to be a completely free performance" (Zonis 1965, 645); "all vocal art music in the Persian tradition derives metrically and structurally from the meters of poetry" (Feldman 1996, 496). Some *gušeh*s (divisions of the *radif*), including those in the instrumental repertoires, are linked to specific poetic meters; examples include *kerešmeh* and *mojtass-e mosamman-e maxbūn* (⏑ – ⏑ – ⏑ ⏑ – – ⏑ – ⏑ – ⏑ ⏑ – – ; also the 15- or 14-syllable versions), as well as *gušeh*s that share a name with a poetic meter or genre, such as *sāqināmeh* (⏑ – – ⏑ – – ⏑ – – ⏑ –) (Tsuge 1974, 31–34; Khazrā'ī 2006; Blum 2015).[13]

In Iranian traditions generally, the degree of correspondence between syllable length (i.e., according to quantitative prosody) and musical rhythmic duration is often related to the consistency of the underlying musical pulse. Blum described the rhythmic importance of quantitative meters in the Khorasani *baxši* repertoire in such terms: "in the absence of a pulse, or of a basic reference duration for short syllables . . . the quantitative poetic meter may serve as a framework for interpreting the temporal flow of a performance" (2006, 51). In music with a regular pulse, such as in the pre-composed song genre of *tasnif* (Caton 1983), quantitative poetic meters are usually present, but they need not determine the overall rhythmic approach. In Judeo-Persian sacred music as well, the intrinsic rhythmic aspects of the words tend

to be more explicit in the absence of a regular pulse and less defined as the pulse becomes clearer and more consistent.

In contrast to Iranian classical music, which is dominated by the drumless rubato *āvāz* style, Central Asian classical music relies almost entirely on the coordination of quantitative poetic meters to cyclical drum patterns. In the canonical repertoire most strongly associated with Jewish performers, the *šašmaqām* of Bukhara, the drum is never silent (however, *ašula-ye kalān*, "great song," is an example of a style performed a cappella or over a drum roll or instrumental drone). But as in Iranian music, in the *šašmaqām* the rhythmic properties of the text vary in importance. Singers highlight quantitative poetic meters in slow and flexible rhythmic modes, such as the very slow *saraxbār* and the limping *talqīn* pattern (which slows down and then resumes the original tempo with every repetition), and may take a freer approach to poetic meters in faster modes such as *sāqināmeh* and *ufār*.

These repertoires and their connections to Jewish religious music must be considered in relation to musical life. Although parallels can be made between the approaches of Iranian Jewish sacred singers and Iranian classical music performers, the two roles are typically separate. Jews were noted musicians in Iran, in the classical sphere (e.g., Morteza Ney-Davud [Chaoulli 2012, 195–205]) and especially in the sphere of popular entertainment (Loeb 2000, 30–34), but except in rare cases, these individuals were not also known as performers of Jewish religious music. The standout singer Yona Dardashti (1903–93) was a renowned master of *āvāz* as well as Jewish sacred music, but his dual competency was highly unusual (Sarshar 2011, 305–6; Chaoulli 2012, 201–2). Much more typical among Iranian Jews is the case of Yona's son Farid Dardashti, a cantor (accomplished in both Iranian and Ashkenazic styles), operatic tenor, and singer of light popular songs who learned Iranian sacred singing styles by ear but did not study or perform Iranian classical music. Rabbi David Shofet (b. 1939) and Ehsan Khubian, his associate at Nessah Synagogue in Los Angeles, are similarly expert performers of Iranian Jewish sacred music without training in Iranian classical music.

Among Bukharian Jews, the spheres of classical, popular, and religious music do regularly overlap. Ezro Malakov (b. 1938) is an accomplished performer of *šašmaqām* and light classical styles, as well as a cantor at Beth Gavriel Congregation in Queens, a major Bukharian synagogue. Ilyos Mallayev (1936–2010) was a *šašmaqām* expert and a well-known performer of *estrada* (light popular) music. He also composed numerous religious poems in Judeo-Persian that have since entered the Bukharian religious repertoire. Other Bukharian religious singers with experience as classical or popular performers include Roshel Rubinov, Ochil Ibragimov, and Roshel Amin.

The difference in attitude toward the roles of classical, religious, and popular singers in Iran and Central Asia seems to be related to their status in the respective societies. For the most part, Jews lived in an extremely repressive environment under Iranian interpretations of Shi'ism (Tsadik 2007; the rule of Reza Shah Pahlavi, however contentious, was a notable period of tolerance and liberty for Jews in stark contrast to their situation since the Safavids [Sahim 2003, 373–35]), with most Jews in Iran performing as popular musicians or entertainers, known as *motreb*s. The *motreb* generally had a very low social status and was not permitted to lead sung prayers in the synagogue (Netzer 1984, 169; also see Chaoulli 2012, 169; Sarshar 2011, 294–303; Tsadik 2007, 10–11). In contrast, no comparable stigma was attached to popular entertainers in Central Asia, and the Sunni societies there were much more tolerant toward Jews overall.

These details of musical life are variously reflected in Iranian and Bukharian religious performance styles. Certain features such as cyclical rhythms played on the frame drum have strong Sufi connotations in Iran, and the marginal situation of Jews in Iran may have resulted in an exclusion of those features in Jewish contexts (Houman Sarshar, pers. comm., 2013). The low status of popular musicians historically in Iran may account for the absence of familiar melodies in Iranian synagogues, as according to Netzer, Iranian cantors "cannot incorporate known melodies from the broad spectrum of those melodies (*gušas*) or *taṣnifs* known to the general public" (2011b, 290). This absence—corroborated so far by my research—is striking in that many Jewish communities (including Bukharian Jews) liberally use local melodies in their religious music.

In Central Asia, however, there was a great deal of self-conscious and explicit exchange between Jews and Muslims in the development of classical styles with sacred overtones, such as the *šašmaqām*, and also a proclivity toward adapting a variety of Central Asian styles to Jewish contexts. Bukharian religious singers, many of whom are adept in classical styles, overtly discuss the classical melodies they use in liturgical or paraliturgical contexts. Widespread general knowledge of the *šašmaqām*, especially its connection to paraliturgical music, means that Bukharian Jews can internally hear the repertoire's underlying rhythmic cycles and instrumental interludes even in the a cappella styles on the Sabbath and other holidays when instruments are forbidden. For example, during the singing of hymns after Saturday lunch, laypeople (i.e., not cantors or prominent religious singers) also sing *šašmaqām* melodies (often adjusted to accommodate less technical ability) with Jewish religious texts, tapping the underlying rhythmic modes on books, plates, or the table and singing instrumental interludes with vocables.

The differences in status and musical life also have a significant impact on ethnographic research: for example, Iranian Jews may be reluctant to discuss their lives or those of family members as *motreb*s and may overemphasize the exclusivity of religious music with respect to the popular repertoire, whereas Bukharian Jews often eagerly relate their careers as professional musicians and freely discuss connections between religious music and other spheres.[14] In addition, the wide range of musical life extends beyond prominent religious singers to laypeople, as in Iranian and Central Asian synagogues, all males over the age of bar mitzvah (13) participate in sacred singing.

Although issues of musical life, status, and varying levels of familiarity with canonical musical repertoires must be taken into consideration in this sort of comparative study, prosody and issues of quantitative poetic meters are applicable across the board. Sometimes the uses and understandings of prosody differ from rigid interpretations, and furthermore there are many Judeo-Persian dialects, each with linguistic and orthographical quirks (Moreen 2000, 10), requiring a flexible analytic approach. But in all cases, Persian-speaking Jews have developed habits that imitate, approximate, or reflect formal interpretations and scansion of quantitative poetry (all of the singers mentioned in this study are native Persian speakers), and that relate in various ways to the musical repertoires strongly associated with quantitative poetry.

Principles of Quantitative Poetry in Persian and Hebrew

Elwell-Sutton's explanation is still the most concise and useful discussion of Persian prosody, and the most basic points are rehearsed here. Arabic terms from *ʿarūz* theory have been used to describe the Persian meters for over a millennium, having been adopted soon after al-Khalil codified the system in the eighth century (1976, 57). However, Persian poets applied the Arabic system in different ways, and quantitative principles seem to have developed independently among Persian speakers before the adoption of al-Khalil's terms.[15]

The primary concept in quantitative prosody is the syllable. In Persian prosody, syllables can be scanned as short (consonant + short vowel, notated here as ◡) or long (consonant + short vowel + consonant, or consonant + long vowel, notated here as –) (Elwell-Sutton 1976, 84–85). Short vowels in Persian are those usually romanized as *a, e*, and *o*. Long vowels are *ā, ī*, and *ū*.[16] Within this basic system, poets have access to various options. In some cases, the poet can choose the syllable's duration, as in the connective *ezafe* and the conjunction *o*. Syllables consisting of a consonant + short vowel +

two or more consonants, or of a consonant + long vowel + one or more consonants, can also count as "overlong," or long+short (notated here as –◡, except in the final position). Poets also have flexibility by assimilating consonants to adjacent vowels.[17] Hāfez's famous line illustrates a common meter, *hazaj-e mosamman-e sālem*:

◡ – – – ◡– – – ◡ – – – ◡ – – –
A-gar ān tork-e šī-rā-zī be dast ā-rad del-e mā rā

Judeo-Persian poetry is composed according to these rules of Persian quantitative prosody as well. Quantitative meters in Hebrew are traceable to Dunash ben Labrat in the tenth century; some biblical texts retrospectively considered "poetry," especially the Psalms, demonstrate techniques redolent of poetry but do not reflect quantitative or even syllabic principles (number of syllables, with or without regard to stress—not length—depending on the system).[18] The origins and circumstances surrounding Hebrew adaptations of Arabic versification are still debated by scholars (Seroussi 2007, 10–16); however, the practice had an enormous impact on Hebrew poetry, and in the following centuries those writing new Hebrew poems for sacred contexts employed quantitative versification as a primary compositional mode.

The Hebrew poets in Spain directly adapted the Arabic meters by attributing short length (or both short and long length) to the vocalized or mobile vowel *šəva* (notated here as *ə*) and any other vowel shortened with it (*ḥataf* vowels). All other vowels were considered long (Weinberger 1998, 91; Hrushovski 1981, 63).[19] But unlike Persian prosody, the principles of which remained fairly consistent over time, poets writing in Hebrew continued to adjust the rules and conventions of quantitative poetry, as well as develop and employ various syllabic systems. The remarkable diversity of Hebrew prosodic systems is no doubt due to the global nature of the Jewish diaspora.[20] This flexibility also reflects the tremendous interplay between Jewish sacred music and local versification systems and their associated musical repertoires.

First Approach: Identifying and Articulating Metrical Patterns along a Continuum of Rhythmic Flexibility

The first approach to prosodic rhythm that I illustrate is the singer's articulation of recurring metrical patterns in a text. Singers treat the patterns along a continuum of greater or lesser rhythmic flexibility while remaining close to the rhythms identified in the text. In this approach, there is an extremely strong concordance of syllable length to musical duration—long syllables sung musically long and short syllables sung musically short. Comparable agreement between syllable length and rhythmic duration is also found in

Iranian classical music (Tsuge 1970; Hajarian 1999) and Central Asian classical music (Slobin 1971; Levin and Sultanova 2001). With strong concordance between syllable length and musical duration, the main rhythmic concern thus becomes the amount of variation that a long syllable can accommodate.

The clear vocalization of poetic meters provides important opportunities for collective singing in synagogue services and other religious ceremonies. In the synagogue one finds a wide range of familiarity with the liturgy, the Hebrew language, and the appropriate rules and gestures, and metrical texts unify the participants. At singing following Sabbath meals, collective singing is obligatory and metrical texts are common. Metrical texts also serve as markers in the flow of the synagogue service, even when not used for collective singing. In traditional synagogue environments, there are long stretches when prayer leaders (either the rabbi, cantor, or *šaliaḥ ṣibbur*, "emissary of the congregation") are reciting, chanting, or singing, and the congregation as a whole is participating at their own speed, separate from the leaders' place in the liturgy. (On occasion, an assistant will announce a page number—or numbers, depending on how many different prayer books members of the congregation use.) The metrical texts, with their audible patterns and consistency, orient the congregation and in a sense "snap" the group back together.

Two performances by Ezro Malakov of the Hebrew *piyyut* "Ləxā Ēlī" (Abraham ibn Ezra, ca. 1089/1092–1164/1167, from the Yom Kippur liturgy) demonstrate a strict treatment of poetic meter but with a flexible music approach.[21] In both treatments, Malakov clearly emphasizes the easily identifiable pattern of one short syllable followed by three long syllables (◡ – – –), called *hazaj* or *mafāʿīlūn* in the *ʿaruz* system and *marnin* or *mefoʿālīm* in its Hebrew version. He consistently sings the first of every four syllables very short, followed by two medium-length syllables and a much longer final syllable. The final foot of each hemistich has a more even distribution but still follows the same basic pattern. The melodic contour reinforces the rhythmic framework, as a half cadence concludes the first hemistich of each pair and a full cadence concludes the second.

As shown in figure 4, in the a cappella performance style that he uses while leading worship in a synagogue, Malakov can vary the lengths of the long syllables and add ornamentation within the overall scheme of the foot, resulting in a diversity of musical rhythms that complements the consistent, unchanging poetic meter. Typical of this approach, the *hazaj* foot serves as a template for the entire performance, establishing an overall pattern that creates expectations for the listeners, which Malakov then works with or against for aesthetic enjoyment and affect.

The second version of "Ləxā Ēlī," notated as figure 5, has a steady pulse. Malakov and his colleagues recorded this version, featuring instrumental

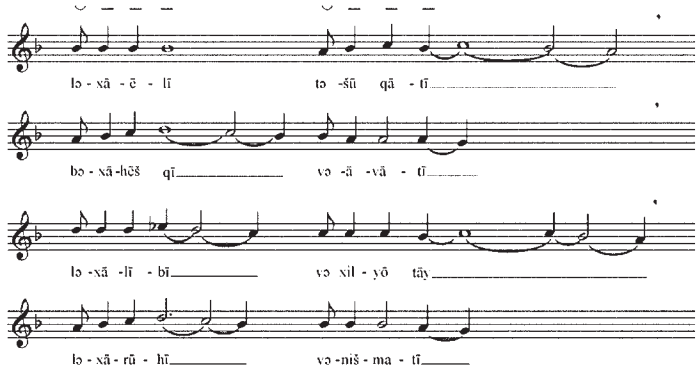

Figure 4. "Ləxā Ēlī" without a regular pulse. Approximate durations shown. Throughout this article, phrases are vertically aligned to indicate rhythmic and melodic consistencies.

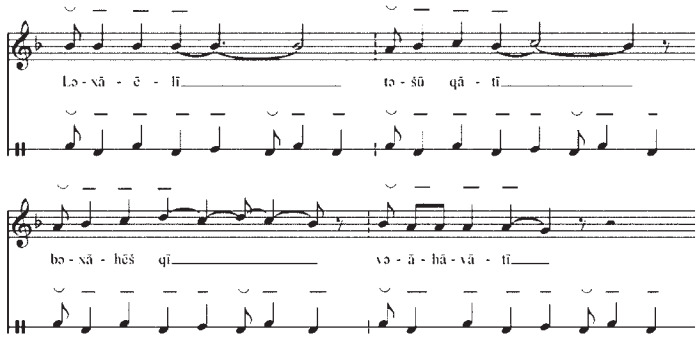

Figure 5. "Ləxā Ēlī" with a regular pulse.

accompaniment, for a CD. In this performance the short-long-long-long pattern becomes a regular 7/8 rhythmic cycle played by the instruments, the result of a common practice of creating musical rhythms out of poetic meters by treating short syllables as one duration and long syllables as twice that duration (Blum 2003, 181–82).[22] In this case, the resultant rhythm alternates with a rotation of long-short-long-long: the basic full 14-beat cycle played on the instruments is ◡ – – – | – ◡ – – (the instrumentalists add ornaments and extra attacks). This pulsed approach to poetic meters can be found in many contexts. In Sephardic and Mizraḥi synagogues a *ḥazzan* may perform lines with more rhythmic flexibility, with responses by the congregation in a more fixed pulse.

In singing "Ləxā Ēlī" to this regular pulse, Malakov sings the same melody as in the flexible a cappella version and with the same rhythmic relationships. The only difference is that here he treats the values of the long and short syllables consistently from line to line. By holding the last syllable for the length of the second measure rather than freely extending the syllable's duration, each foot regularly lasts 14 pulses. The common denominator in these two performances is the metrical scheme of the *hazaj* foot, embedded in the words of the *piyyut* itself.

Two Iranian versions of "Adōn Ōlām," another Hebrew *piyyut* composed in the *marnin* meter, demonstrate a looser approach to syllable length while still expressing the meter. The first example (fig. 6) is a version from Yazd for Rosh Hashanah, recorded by Laurence Loeb in 1968. The second (fig. 7) is by Yaghoub Banafsheh, originally from Esfahan, recorded in 1999.[23] In the Yazdi singer's performance, which repeats a melo-rhythmic formula throughout with only slight variations, the first syllable of every four is always sung short, the fourth syllable always long and ornamented, and the second and third syllables of varying length (but still generally longer than the first syllable). In

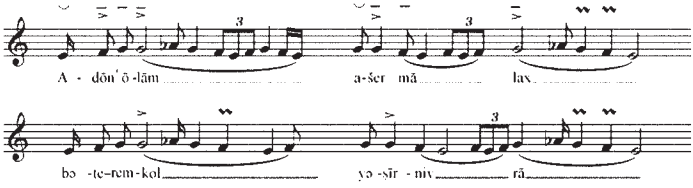

Figure 6. "Adōn Ōlām," unidentified singer from Yazd. Approximate durations shown, with mordents indicating melodic embellishments.

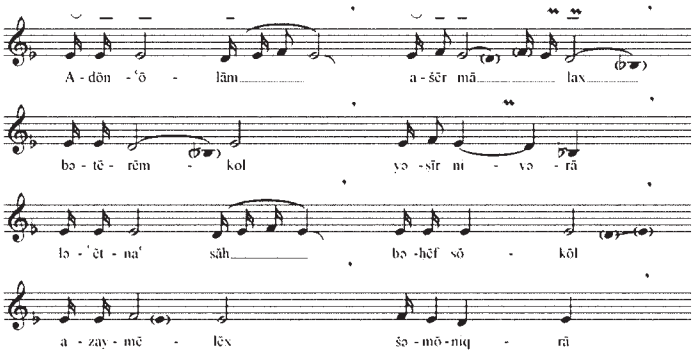

Figure 7. "Adōn Ōlām," Yaghoub Banafsheh, 1999. Approximate durations shown, with mordents indicating melodic embellishment.

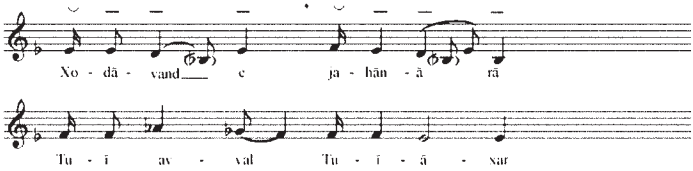

Figure 8. Persian paraphrase of "Adōn Ōlām,"
Yaghoub Banafsheh, 1999. Approximate durations shown.

Banafsheh's version, the formula likewise accommodates eight syllables, but the third and fourth syllable are both consistently long.

Banafsheh's performance also features a Judeo-Persian paraphrase that adheres to the same *hazaj/marnin* pattern as the Hebrew text.[24] The consistency of meter is established immediately with the first line of Persian: "Bozorg-o xāleqe ʿālam" (◡ – – – ◡ – – –). As shown in figure 8, Banafsheh continues the melo-rhythmic pattern of the Hebrew without any disruption. The seamless moving from Hebrew to Persian with a consistent use of one poetic meter underscores the importance of quantitative prosody in the performance styles of Persian-speaking Jews.

The repeated use of *hazaj* and *hazaj*-type patterns in these examples is not a coincidence. The *hazaj* meter found in "Ləxā Ēlī" and "Adōn Ōlām" is of great importance in Jewish sacred music, as it is the meter of many other popular Hebrew *piyyut*s, including "Dərōr Yīqrā" (Dunash b. Labrat, tenth century), "Yəhālēl Nīv" (Israel Najara, sixteenth century), and "Ləxā Dōdī" (Solomon haLevi Alkabez, sixteenth century) (Idelsohn [1929] 1967, 116–19). Its prominence among Persian-speaking Jews is underscored by the popularity of *hazaj* meters in Persian (considered an "especially Persian" pattern [Tsuge 1974, 144]) and the general emphasis of iambic patterns in Iranian singing (Tsuge 1974, 165–68; Yar-Shater 1974). For example, 11-syllable apocopated *hazaj* is a standard meter for the common *dobeytī* or *čahārbeytī* quatrain form (Tsuge 1970, 208–10; Blum 1974, 90–91; 1995).[25]

Persian-speaking Jews highlight sections in the liturgy that can be made to approximate the *hazaj* meter, even when the texts were not composed in it, such as the collectively recited section of the half-Qaddiš (in Aramaic):

◡ – – – ◡ – – – ◡ – – – ◡ – – –
və-yiš-ta-baḥ və-yit-pā-ʿar və-yit-rō-mam və-yit-na-sē
və-yit-ha-dar və-yit-ʿa-leh və-yit-ha-lal

At Bukharian and Iranian synagogues, worshippers emphasize the *hazaj* foot implicit in the text. The Iranian version notated here (fig. 9) is faster and recitational, while the Bukharian version (fig. 10) is slower with more melodic

characteristics, but both versions seek to highlight a *hazaj* pattern identifiable in the text.[26] The Bukharian example is an Ottoman melody in *makam hüsseyni* for the *piyyut* "Yetsuv ha-El" (Yehuda Halevi), also in the *hazaj* meter. The melody does not bear the imprint of specifically Bukharian song, but its strong *hazaj* qualities are easily understood and assimilated into the Bukharian style.

Another way of treating metrical texts is to set them to preexisting melodies, a common practice among many Jewish people.[27] Although this is a rare approach for Iranian Jews, it is common for Bukharian Jews, whose Central Asian classical tradition, exemplified by the *šašmaqām*, depends entirely on pre-composed melodies that join poetic meters and drummed rhythmic patterns (Karamatov and Radjabov 1981; Levin and Sultanova 2001).

In the following example, figure 11, the Bukharian performers Ezro Malakov (voice), Roshel Rubinov (*tanbur*), and Matat Barayev (*doira*) scan Najara's Hebrew hymn "Yōm lə yōm ōdeh ləšimxā ēl anī ʿavdexā" as a 14-syllable *ramal* meter (– ◡ – – | – ◡ – – | – ◡ – – | – –) and set it to a melody from the *šašmaqām* repertoire in the *mūġulčeh* rhythm.[28] The Persian version of the poem, "Rūz beh rūz gūyam šukūr man bandeh bar nām-e Xodā," is in the more common 15-syllable *ramal* (– ◡ – – | – ◡ – – | – ◡ – – | – ◡ –). There are well-established conventions for matching *mūġulčeh* and *ramal*, and the performers set "Yom lə yom" accordingly.

In these examples, the prosodic qualities of the words determine the rhythm, and recurring metrical patterns become the focal aesthetic point. Meter is essentially a quality of discernible patterns, creating expectations for the listeners and participants. Persian-speaking Jews invariably highlight metrical qualities in texts with a strong correlation of syllable length and rhythmic duration, usually reinforced with melodic formulas. In the many

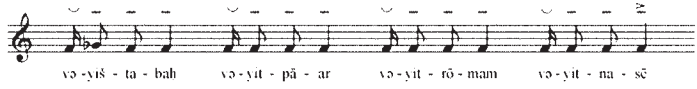

Figure 9. Iranian version of half-Qaddiš, recited at Nessah Synagogue, Los Angeles. Approximate durations shown.

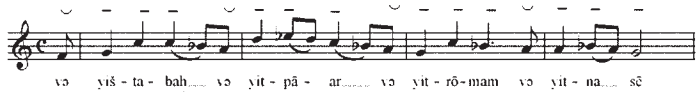

Figure 10. Bukharian version of half-Qaddiš sung at Beth Gavriel Congregation, New York.

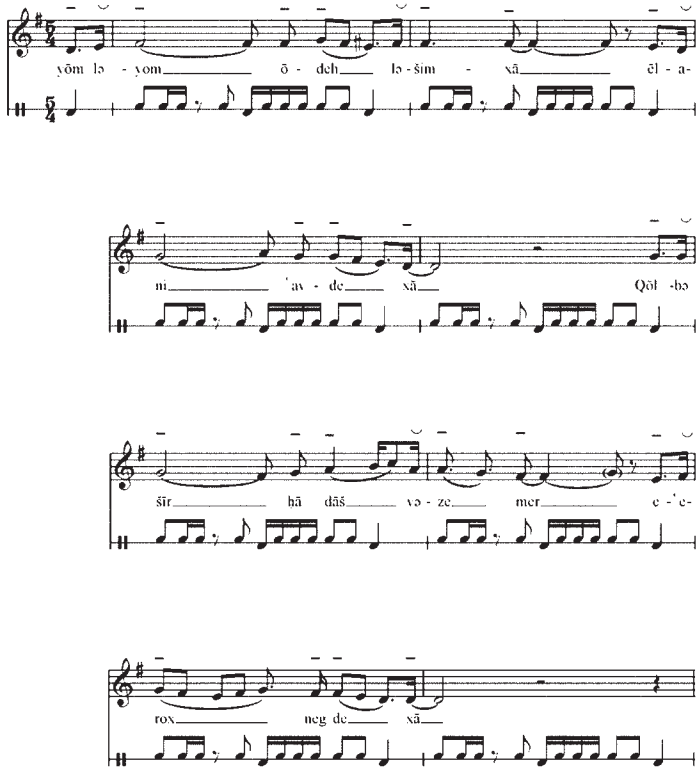

Figure 11. "Yōm lə yōm ōdeh ləšimxā ēl anī 'avdexā," Malakov, Rubinov, and Barayev, 2003.

performances of texts that are not clearly scanned in Persian quantitative meters, singers apply a slightly different approach.

Second Approach: Emphasizing Syllable Length and Producing Rhythms in Nonmetrical Texts

When a text lacks a recurring regular quantitative meter, syllable length still often plays a large part in determining the rhythms in a performance, especially when a text contains rhyme or other factors that suggest a melodic treatment. In these cases singers continue to correspond syllable length to duration and articulate familiar quantitative rhythmic patterns, although without the clear recurring patterns and accompanying rhythmic expectations of poetic meters.

This approach is the dominant mode in most synagogue services (with the exception of "silent" prayer and recitation, depending on the performer's per-

sonal style or the occasion), as metrical texts are relatively infrequent. Even many of the added *piyyut*s are nonmetrical or based on syllabic rather than quantitative meters, or their meter is obscure or unknown. This flexible approach to syllable length allows prayer leaders to perform any of these texts in an aesthetic in line with quantitative poetry when necessary, even when they are called upon to "read" texts on the spur of the moment.

As briefly noted previously, Persian-speaking Jews display a strong preference for metrical feet that begin with a short syllable. Persian-speaking Jews' preferences for feet that begin with short syllables is a natural union of the strong preference for iambic patterns in Persian traditions such as *āvāz* and the tendency of Hebrew poets to begin with short syllables, a likely consequence of the short mobile *šəva* vowel's frequent appearance at the beginning of Hebrew words. As with the approach to interpreting consistently metrical texts, individual variation comes from shortening short syllables and especially from lengthening and ornamenting the long syllables at the ends of feet and phrases.

Based on my research to date, in this approach Iranian Jews tend to use more short syllables than Bukharian Jews, favoring iambs and anapests combined into various configurations, while Bukharian Jews prefer feet with a greater proportion of long to short syllables and straightforward recurring patterns. This seems to match more general habits in Iran and Central Asia, analogous to different skills required to excel in other practices and especially overlapping with the absence or presence of a cyclical drum pattern. The dominant style in Iranian classical music lacks drum patterns, and Iranian classical singers often generate rhythmic interest through poetic rhythms alone. In contrast, Central Asian classical singers must nearly always align poetic meters with drum patterns, so a smaller stock of poetic meters is in many ways preferable. My comparisons between Jewish religious music and classical traditions are not meant to suggest causation but to raise thoughts and possibilities about the connections in competencies and habits that might explain some of the differences between Iranian and Central Asian singers' approaches.

The applications of *mojtass* meters provide an interesting comparison. A meter such as the *kerešmeh* pattern of *mojtass-e mosamman-e maxbun-e maḥzūf* (◡ – ◡ – ◡ ◡ – – | ◡ – ◡ – ◡ ◡ –) is frequently heard in Iranian performances, exploited for its iambic beginning, frequent alternation of short and long syllables, and long ornamented final syllable (Khazrā'ī 2006, 141). Central Asians also sing poems in *mojtass* meters but may set such poems as if they were in *hazaj* according to conventional treatments. For example, the Bukharian poet and singer Roshel Rubinov explained to me that Hilāli's *ġazal* "Biā biā ke del u jān-e man fidā-e to bād" was in *hazaj*, not *mojtass*:

hazaj scansion: ◡ – – – ◡ – – – ◡ – – – ◡ – –
mojtass scansion: ◡ – ◡ – ◡ ◡ – – ◡ – ◡ – ◡ ◡ –
Bi-ā bi-ā ke del-ū jān-e man fi-dā-e to bād

The hazaj scansion "works" just as well as the *mojtass*. In the *šašmaqām*, this poem is often sung to the *nasr* rhythm, which musicians associate with poems in the *hazaj* meter. Thus, scanning "Biā biā" as *hazaj* makes musical sense. It should be noted that this flexible approach to scansion, according to which "the same verse [may] be scanned in more than one meter . . . is unusual in Arabic, but it is common in Persian" (Hajarian 1999, 106).

Several performances by Iranian singers of the Hebrew *səlīḥōt* (penitential) hymn "Im Āfes" (Ephraim b. Isaac of Regensburg, twelfth century) show how rhythmic formulas and melody types can work together as flexible frameworks that evoke qualities of quantitative poetry without being fully dependent on metrical patterns. "Im Āfes" is immediately recognizable as a hymn because of its recurring rhyme pattern, with each half line ending on a rhymed syllable; the poem is also usually clearly laid out in half lines, underscoring the form. The rhyme scheme suggests aesthetics of quantitative poetry, but the text itself is too variable to reasonably approximate a quantitative meter, so singers use a versatile approach that can include an inconsistent number of syllables.[29] As shown in figure 12, David Shofet begins and ends each half line with an anapest or an iamb, with any additional syllables accommodated in between. The four half-line melodic contour repeats, serving as a melo-rhythmic type for the text.

As shown in figure 13, this melo-rhythmic type is shared among other Iranian singers. When Shofet's performance is compared with versions by Yaghoub Banafsheh and Yona Dardashti, the renditions are remarkably similar in melodic contour and rhythmic approach, although the singers are originally from different cities (Kashan, Esfahan, and Tehran, respectively).[30] The difference in each performance is largely heard in the length of the long syllables at the end of each phrase: Dardashti, the classical master, sings very long and ornamented endings with the *tahrir* yodeling technique associated

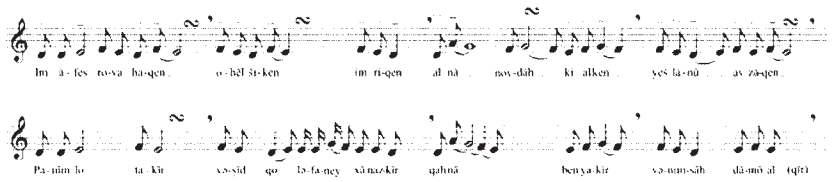

Figure 12. "Im Āfes," sung by David Shofet, 1998. Approximate durations shown, with turns indicating elaborate melodic embellishments. Transposed up m2 for comparison with other singers in figure 13.

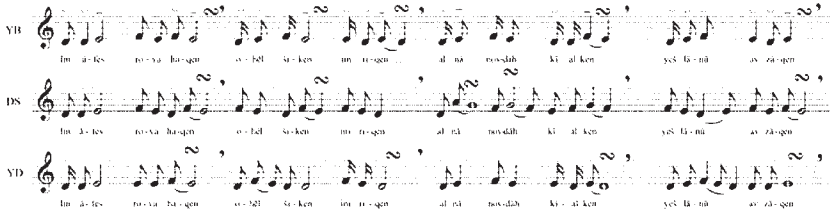

Figure 13. Three versions of "Im Āfes." YB = Banafsheh, DS = Shofet, YD = Dardashti. Approximate durations shown, with turns indicating elaborate melodic embellishment. DS and YB transposed up m2, and YD transposed down m6 to aid comparison.

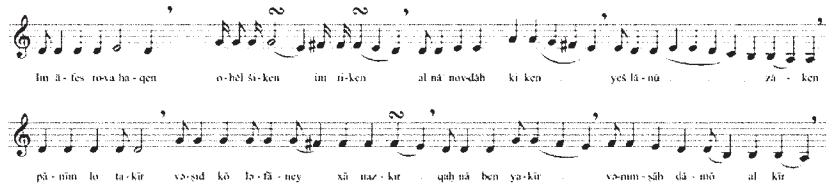

Figure 14. "Im Āfes," sung by Eliyahu Lodayev. Approximate durations shown, with turns indicating elaborate melodic embellishment. Transposed down m6 for comparison with other singers in figure 13.

with *āvāz*, while Yaghoub Banafsheh, in a simpler performance, lengthens the ending syllables only a little. David Shofet's performance is somewhere in between.[31]

As a point of comparison to the three Iranian singers, figure 14 shows the Bukharian singer Eliyahu Lodayev singing the same hymn with a preference for *hazaj* (⏑ – – –) and *motaqāreb* (⏑ – –) patterns.[32] However, there are many points of convergence with the Iranian performances. He, too, begins nearly every phrase with a short syllable and ends on a long ornamented syllable. In most cases, the only difference is in treating one or two of the middle syllables as long instead of short. The second phrase is rhythmically almost identical among all four singers.

In Banafsheh's performance, he moves from "Im Āfes" to a Judeo-Persian paraphrase of the *ʿAqēdāh* (Binding of Isaac) from Genesis.[33] This text, like many other Judeo-Persian paraphrases but in contrast to those discussed thus far, does *not* adhere to a poetic meter, suggesting that it may have been spontaneously delivered (Loeb 2000, 36). As shown in figure 15, following the approach to the Hebrew text, Banafsheh continues to correlate musical rhythm and prosodic syllable length, resulting mainly in iambs and anapests combined into longer phrases. In contrast to "Im Āfes," which lacks quantitative

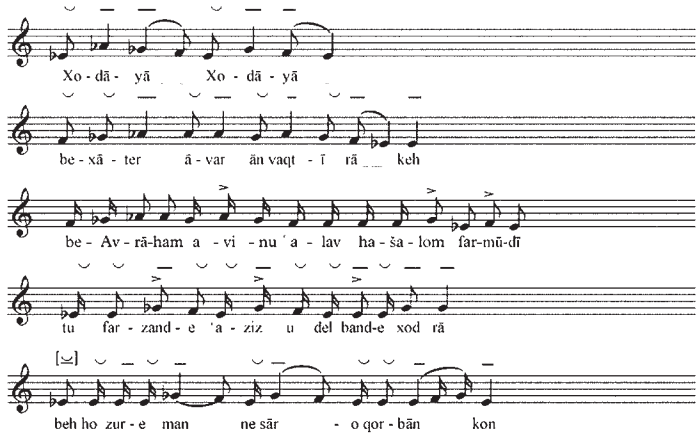

Figure 15. Judeo-Persian paraphrase of *ʿAqēdāh*, Yaghoub Banafsheh, 1999.

meter but contains rhyme, the Judeo-Persian *ʿAqēdāh* passage lacks both meter and rhyme, accompanying the shift to a more recitational style with less frequent articulations of familiar quantitative patterns. The melodic range is narrower, and long syllables are treated with a slight accent rather than with long ornamentation.

Each of these performances is certainly nonmetric in that there is no regular metric pattern discernible in the text (as, for example, there is in elastic sung performances of "Ləxā Ēlī" and "Adōn Ōlām"). However, singers still strongly base their performances on syllable length and the rhythmic principles of quantitative poetry. Singers engage in a sort of "spontaneous scansion" as they use the *šəva* and other short vowels to find familiar quantitative patterns in nonmetrical texts, which they apply to predetermined melody types. Each performance is subject to a range of variation but with a consistent focus on iambic beginnings and lengthening long syllables at the ends of phrases.

Flexibly Combining Approaches to Prosodic Rhythm

For Persian-speaking Jews, as explained previously, the approach to performance depends largely on how metrical the text is and to what extent the text has "musical" associations. Often these two qualities overlap, but sometimes they do not. For example, the Psalms can present a challenge to the Jewish sacred singer, in that they are explicitly marked as songs to be sung, yet the texts themselves do not contain any of the implicit features found in other song texts, such as quantitative meters, syllabic meters, or rhyme. Treatments of these thorny cases help us understand the flexible use of prosodic rhythm by Persian-speaking Jews.

In the Bukharian community, Ezro Malakov recently completed a project to newly set and record all of the Psalms to distinctly Central Asian melodies. To accomplish this aim, composers looked for prosodic patterns in the text that could be merged with familiar quantitative meters. In Roshel Rubinov's setting of Psalm 127, the *ramal* pattern (– ◡ – –) repeats with regularity, beginning with the opening words:

– ◡ – – –◡ – – – ◡ – –
šir ha-maʿ-lōt lišᵊ-lō-mōh ʾīm A-dō-nāy

Rubinov set the Psalm to the melody of "Nīm Čūpānī," which typically features poems written in some form of *ramal*. Rubinov himself usually sings the following *ġazal* by Bīdel to "Nīm Čūpānī":

– ◡ – – – ◡ – – – ◡ – – – – ◡ –
har ko-jā lʿal-e to rang-e xan-daʾ -i mast-ān- eh rīxt
az xe- jā-lat āb-e gav- har čūn may az pay- mān-eh rixt

Rubinov's setting is transcribed as figure 16.[34] Unlike Bīdel's *ġazal*, the Psalm follows no set meter, rhyme, or overall pattern, but Rubinov identifies the *ramal* patterns in the opening lines of the Psalm and sets the words by drawing on his habitual manner of matching 15-syllable apocopated *ramal* to "Nīm Čūpānī." Rubinov superimposes *ramal* in various other places, especially at the beginnings of phrases—*mə-ʾa-ḥa-rēy*, *oxᵊ-ley-le-ḥem* (127:2) and *lōʾ-yē-vō-šū* (127:5)—at which points he sets the text in a conventional way.

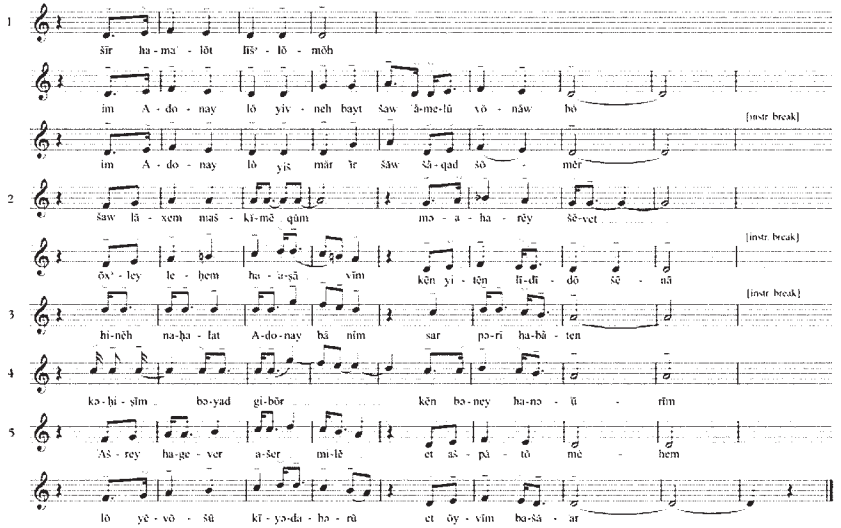

Figure 16. Roshel Rubinov setting of Psalm 127.
Number preceding staff indicates Psalm verse.

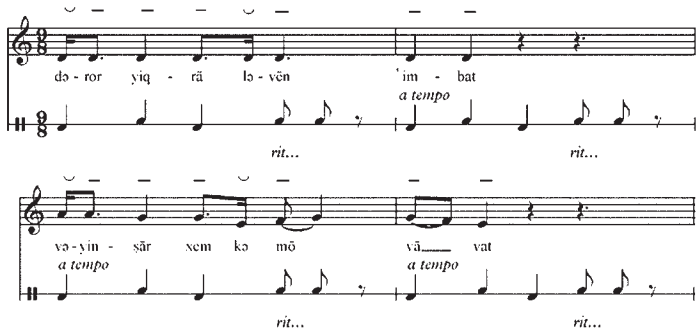

Figure 17. "Dərōr Yīqrā" set to "Čapandāz-e Golyār," Rubinov and Barayev, 2003.

These particular sequences illustrate the use of an overall *ramal* framework for the musical setting, as each of these passages could alternatively be scanned or treated as *hazaj*; for example, *mə-ʾa-ḥa-rēy* begins with the mobile *šəva*.[35]

In counterpoint with the dominant *ramal* framework, in other spots Rubinov faithfully treats short and long syllables throughout as in the second approach described, performing syllable length without a consistent metrical pattern. But since the listener expects the long-short-long-long sequences Rubinov established at the beginning of the setting, a treatment such as *hi-nēh na-ḥa-lat* (127:3), beginning short-long instead of long-short, is heard as a rhythmically interesting performance adjustment rather than as a shift in meter—the rhythmic change behaves as an accidental does in a melody, not as a tonicization or modulation does.

Rubinov made a notable adjustment by changing the usual drum pattern of "Nīm Čūpānī" from a limping *talqīn* (or *čapandāz*) rhythm to a shorter, evenly pulsed pattern of *bum-bakka*. As he explained to me, a simpler and more consistent pattern gives him more flexibility with vowel length and treatment (and the rhythmic shift also creatively disguises "Nīm Čūpānī" as a source melody, yielding a more original composition). *Piyyut*s such as "Dərōr Yīqrā," with their consistent quantitative meters and clear rhyme schemes, are easier to set to the *talqīn* or *čapandāz* rhythm—as in Malakov and Rubinov's setting of "Dərōr Yīqrā" to "Čapandāz-e Golyār" (fig. 17).[36] Malakov did successfully set Psalm 10 to Yunus Rajabi's "Čapandāz-e Bayāt," a piece in the *čapandāz* rhythm, but explained to me that it was extremely difficult to find a workable Psalm with "lots of breaks" in the text and "short words" that flowed correctly so that the Hebrew would not become mangled or distorted as a result of the musical demands of the setting. These examples and the explanations given by Rubinov and Malakov amply demonstrate the centrality of quantitative meters and prosodic patterns to musicians' choices.

In a rare Iranian example of setting a Psalm to a classical melody, Yona Dardashti's undated performance of Psalm 23 with accompaniment to a *tasnif* in the mode of Bayāt-e Esfahān (fig. 18), there is less correspondence between syllable length and rhythmic duration, although iambic starts typically remain important.[37] These qualities of Dardashti's performance conform to *tasnif* conventions, according to which quantitative feet are regularly treated with equal durations and consistent pulse (Caton 1983, 205–11). A similar approach can be found in Central Asian settings that draw on faster rhythmic modes such as *sāqināmeh* and *ufar* (see my analysis of Malakov and Rubinov's setting of "Eid-e Purim," a recent Judeo-Persian text by Ilyos Mallayev, to the *qašqarčeh* rhythm [Rapport 2006, 153–67]). The rhythmic regularity in the drums and the flexible approach to syllable length in the *tasnif* serve as a contrast to the dominant drumless classical performance style that depends so heavily on quantitative rhythm.

Settings of the Psalms, with their lack of consistent attributes of meter and rhyme, require a skillful combination of attention to syllable length and the use of quantitative metrical conventions. In his setting of Psalm 127, Rubinov drew upon the *ramal* foot he discerned in the text and the specific musical possibilities that the foot suggested, along with an adjustment to the drum pattern, which enabled even more options, to compose a successful musical rendition to the melody of "Nīm Čūpānī." Dardashti's performance of Psalm 23 featured less exact articulation of syllable length in favor of more consistent durations, in accordance with the musical options available with the *tasnif*.

Although these musical settings of Psalms are rare, they bring to the fore the many rhythmic strategies available to Persian-speaking Jews and the underlying importance of prosodic rhythm. The heterogeneous nature of the Jewish liturgy and paraliturgy demands that singers fluidly draw on various approaches, such as the two described in this article, moving back and forth

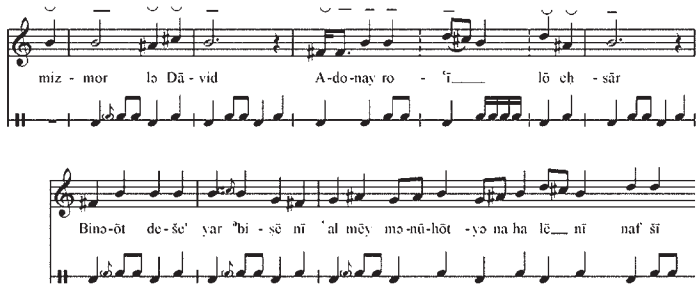

Figure 18. Psalm 23 in Bayāt-e Esfahān, Yona Dardashti, n.d.

in the course of performance. Throughout sacred musical performances, participants exploit different musical implications of syllable length, depending on the amount of consistency they identify, the familiar meters they recognize, and the established associations of the passages they are performing.

Conclusion and Suggestions for Further Research

As shown in the previous examples, prosodic principles based in quantitative poetry are central to Persian-speaking Jewish sacred music practices. Singers use familiar habits of interpreting syllable length and poetic meters as resources when approaching sacred texts, with emergent patterns suggesting certain kinds of musical treatments. These prosodic rhythm treatments range from a high level of concordance between syllable length and rhythmic duration to a more flexible approach in which singers work with, and in counterpoint to, prosodic elements.

Beyond this article's examples from Persian-speaking Jews, prosodic rhythm plays a similar role in other Jewish traditions and throughout the Middle East. The core Jewish *piyyut*s composed in quantitative meters are found the world over, and in Arabic- and Turkish-speaking countries where *ʾaruz* systems are the norm, singers identify the same poetic patterns and apply them according to their own habits. Prosodic conventions can also provide illuminating cross-cultural comparisons beyond the sphere of the Middle Eastern traditions in which *ʿaruz* systems are still studied and practiced. For example, practices of interpreting quantitative poetry also informed Central European settings of *piyyut*s. The nineteenth-century settings of "Ləxā Dōdī" by Solomon Sulzer (Vienna) and Louis Lewandowski (Berlin), ubiquitous in Reform synagogues, express a scansion of the text as iambic tetrameter (◡ – ◡ – ◡ – ◡ – rather than ◡ – – – ◡ – – –), every eight syllables consistently articulated over four measures of 3/4 time (see Slobin 1989, 199). Rhythmic approaches are as important to consider as intervals and modes when analyzing a melody's history, associations, and affect.

Prosodic rhythm also provides a specific way of analyzing those performance styles sometimes misleadingly called "free" or "nonmetric." In this article, the examples that could be called "free rhythm" do not constitute a completely separate phenomenon from the "metrical" (or "rhythmic") examples; instead, various approaches to pulse can be found along a continuum, each expressing quantitative poetic meters and syllable length but with different emphasis. This concept of prosodic rhythm can be extended from Judeo-Persian sacred music to the general dilemma of free rhythm, "a widespread and important phenomenon to which insufficient attention has been paid by ethnomusicologists. Both the relatively unimportant role free rhythm

plays in Western music, and the apparent lack of indigenous theories on free rhythm in the cultures where it is prominent, have contributed to this neglect" (Clayton 1996, 323). Prosody, unlike free rhythm, has generated a serious number of "indigenous theories" in the cultures where music without a steady pulse is prominent, as well as where it is less so.[38] The emerging issue for analysis thus becomes the specific ways in which local practices of approaching prosody and versification correspond with musical rhythm, with consistency of pulse being one important factor but not the only concern.

Reconsidering the musical implications of texts in general also has broader ramifications for blurring the overstated difference between "oral" and "literate" traditions. The Persian-speaking Jewish community has largely avoided Western music notation to prescribe or suggest specific interpretations, instead primarily relying on collections of poems or religious texts as notations. However, the musical information in these texts for the "reader" should not be overlooked. The texts themselves function in many ways as a sort of musical notation for properly trained interpreters, suggesting a range of musical performances based on community-specific conventions. Furthermore, the texts are frequently written in accordance with melodic and rhythmic considerations.

Finally, to return to the particular issue of Persian-speaking Jewry, I hope that this article sparks further research into the traditions of Iranian and Bukharian Jews, as well as the other Persian-speaking groups that I have been unable to include thus far. The study of music and poetry helps reveal the rich and deep connections between these communities, the complex relationships between Jews and their broader Muslim environment, and the importance of Persian-speaking Jewry with respect to the Jewish world in general. It seems to me that the emphasis on melody and mode in the analysis of Jewish sacred music has led to an inadvertent neglect of some practices, especially those that do not reinforce an imagined sound of the "Eastern" Jewish world as epitomized by the Arab-Turkic *maqām/makam* (Seroussi 2012), including the very different-sounding Iranian and Bukharian traditions. Turning our attention to rhythm encourages a fresh listen to the sacred music of Persian-speaking Jews, the complex treatments of prosody and quantitative meters holding great potential for the study of Jewish religious practices and beyond.

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Notes

This article is based primarily on research supported by a Harry Starr Fellowship (2012–13) at Harvard University's Center for Jewish Studies. I gratefully acknowledge the support of the fellowship and the constructive feedback I received throughout the year from Kay Kaufman Shelemay, Judah Cohen, Maureen Jackson, Daniel Jütte, Edwin Seroussi, Amy Wlodarski, Stacy Wolf, and the seminar students. I thank the members of the Iranian and Central Asian Jewish communities, especially Ezro Malakov, Roshel Rubinov, and Farid Dardashti, for their generosity with their time and knowledge. Houman Sarshar kindly provided me with recordings from the Center for Iranian Jewish Oral History archive and offered helpful comments on the project. Marie Paiva and her colleagues at the University of Utah library assisted me with access to Laurence Loeb's archived recordings. Thanks also to Stephen Blum, Alessandra Ciucci, and *Asian Music*'s anonymous reviewers for their remarks on versions of this article. Derek Baron, my student assistant, helped me prepare the music examples for publication.

[1] Idelsohn's large-scale attempt to compare examples of Jewish song from the whole diaspora almost entirely concerns mode and melody in "unrhythmical song," beginning with what he determined to be the oldest and most authentic style, the cantillation of *teʿamim* ([1929] 1967). Recent studies of mode include continued investigations of melodic formulas in chant (Randhofer 2004), analyses of Ashkenazic *shteyger* or *nusaḥ* (Summit 2000; Tarsi 2002), and explanations of Syrian Jews' application of Arab *maqām* in their liturgy (Shelemay 1998; Kligman 2009). Idelsohn himself did groundbreaking work on the importance of poetic meters, pointing the way for more analysis of prosodic rhythm by exploring such issues as "rhythmical music set to unmetrical texts" and "unrhythmical music set to metrical texts" ([1929] 1967, 110–28). However, he limited his discussion of quantitative poetic meters to "rhythmical" song, which he posed as essentially at odds with "unrhythmical" synagogue song, the former eventually "los[ing] out to its older sister" (126), supporting his overall historical narrative and agenda and perhaps partially accounting for the dearth of later research in this vein.

[2] Frigyesi mentions that "the rhythmic styles of most, and possibly all, the vocal genres are influenced by speech" (1993, 66). Loeb, specifically referring to the Iranian liturgy, similarly writes (following Sachs [1943, 41–42]), "logogenic (word born) chant will closely follow the speech pattern, whereas melogenic (melody born) music will be of free rhythm" (1970, 371). But prosody, it is important to underscore, is generally very different from speech and speech patterns (Tsuge 1974, 110–11), and prosodic rhythms such as quantitative poetic meters are clearly audible, formally determined, central characteristics of many aesthetic experiences. Furthermore, textual rhythms do not necessarily *precede* music (suggested by the terms "influence," "logogenic," and "word born"); rather, singers, musicians, and other participants consider the complex relationships of words and music in various ways depending on the situation.

[3] *Persianate* refers to the "civilization encompassing an area ranging from Iran to the Caucasus, India and Central Asia, where Persian and related languages have historically been dominant" (Arjomand 2008, 1). I favor the term "Persian-speaking" in this article to coincide with the primarily philological basis of my argument.

[4] In this article I have selected examples specific to the Iranian or Central Asian (Bukharian) communities, with the exception of the melody notated in figure 10. However, in my experiences at Iranian and Bukharian synagogues and religious events, an eclectic approach is typical; one finds general Sephardic and Ashkenazic styles as well, which Persian-speaking Jews have adopted to various degrees. Some Iranian and Bukharian Jews choose to regularly worship at synagogues geared toward a pan-Sephardic community (in the sense of non-Ashkenazic, not strictly referring to descendants of the expelled Iberian Jews), such as the Sephardic Jewish Center in Queens, where the widely accepted "Jerusalem-Sephardi" style (Seroussi 2012, 18–22) dominates and there are no features that are particularly recognizable as Iranian or Bukharian. Also, all of the examples in the article are from male singers. Typically, in Iranian and Bukharian Jewish musical life only men sing in synagogue and in mixed-gender religious ceremonies (with a few exceptions, such as female mourners, although this particular practice is now rare). Issues of prosodic rhythm seem to apply to women's religious repertoires as well, based on my experiences and the few recordings I have been able to study.

[5] Similarly, the verb for "to read" in Persian (*xʷāndan*) means to "read, to recite; to invite, invoke, convoke, call; to sing, to chaunt; to decipher, to explain; to study" (Steingass [1892] 2007). "Music" per se (*mūsīqī*) is associated with instrumental accompaniment and generally considered outside the purview of synagogue life. However, passages such as hymns and Psalms have more musical associations (in the English-language sense) than the "reading" of Torah and other parts of the liturgy (compare Reckord 1987, 1–12, 71–78), and occasions such as weddings and other religious celebrations normally feature music in this sense.

[6] Beethoven's annotations to Cramer's *Études* indicate prosodic interpretations of musical passages, including instrumental music, based on poetic feet (Goldschmidt 1971, 545–57; Newman 1971, 43–47); even if inauthentic, the annotations do reflect Beethoven's documented "interest in rhythmic groupings by way of prosody and poetic feet" (Newman 1984, 415; see also 407–9). Coltrane's "Psalm" (the last movement of his composition *A Love Supreme*) is an instrumental expression of a poem he wrote (Porter 1985, 614–19).

[7] The Tajik spoken in Central Asia and the Dari spoken in Afghanistan are essentially the same language as the Persian (Farsi) spoken in Iran, with minor dialectal variations; Tajik and Dari are also referred to as "Eastern Persian." Although Persian is the historic mother tongue of Central Asian Jews, they have typically been multilingual, fluent in Uzbek or other surrounding Turkic languages. Since the Russian conquest, they also speak Russian; for many born in the twentieth century, Russian replaced Persian as their mother tongue. These language issues certainly have implications for the prosodic issues discussed in this article and bear further investigation.

The related Iranian language spoken among the "Mountain" Jews of the Caucasus Mountains region, Judeo-Tat (Juhuri) (Zand 2002), seems to have significant differences from the Iran/Afghanistan/Central Asia language complex, and the Mountain Jewish community does not seem to generally share the same Judeo-Persian literary heritage of the Iranian, Afghan, and Bukharian Jews. More research is necessary to determine the mutual intelligibility of Judeo-Tat with Judeo-Persian, and the literary connections. On the music of the Mountain Jews, see Eliyahu (1999), which contains songs with transcribed Judeo-Tat texts.

[8] For example, Jews migrated from Iran to Central Asia following new restrictions and persecutions under the Safavids and the large-scale forced conversions of the Jews in Mashhad in 1839 (the so-called Allahdād) (Sahim 2003:369–70; Netzer 2007). Consider the life story of Arkadi Il'yasov's family (Loy 2008): His great-grandparents migrated from Mashhad to Herat in 1855, then to Mary (Turkmenistan) in 1905 and Kerki (also in Turkmenistan) in 1912, before half of the family moved on to Samarqand in 1937. Subsequently, some family members moved to Tashkent (Uzbekistan), Dushanbe (Tajikistan), and Israel.

[9] For some of the studies on Judeo-Persian literature with wide overviews or specific excerpts, see Adler (1898), Asmussen (1968, 1973), Bacher (1911), Lazard et al. (2007), Moreen (1987, 1990, 2000), Netzer (1973, 2011a), and Rypka (1968). Bukharian Jews have been more active than Iranian Jews in perpetuating Judeo-Persian literature over the past 100 years. While "[events of the twentieth century] put a virtual stop to the creation, dissemination, and study of JP texts by Iranian Jews in Iran" (Moreen 2000, 9), Central Asian writers such as Mordekhay Bachayev (known as Muhib, 1911–2007), continued to add to the corpus of Judeo-Persian literature. Ilyos Mallayev, Mikhoel Zavul, and Roshel Rubinov composed Judeo-Persian poems in the classical Persian meters into the twenty-first century.

[10] Iranian Persian (in Perso-Arabic script) and Tajik Persian (in Cyrillic) are usually romanized according to different standards. To encourage readers to make connections between the communities, I romanize all Persian words according to an Iranian standard (although I realize that such a decision may reinforce an unfair imbalance between the two localities—Iran as the home of "real" Persian, and Central Asia as the home of some of its dialects). Since the article deals with prosody, I avoid digraphs, as they can cause confusion, and instead apply a 1:1 transliteration system (using *š* for the more common *sh*, *x* for *kh*, *č* for *ch*, *ṣ* for *ts*, and *ġ* for *gh*). I make exceptions in the case of proper nouns, which I transliterate according to local conventions and with digraphs and respecting individuals' preferences, when known, for their own names.

[11] Loeb (1972, 2000), Nettl and Shiloah (1986), Netzer (2011b), Chaoulli (2006, 2012), and Sarshar (2011) wrote primarily on issues of musical life, and specifically the role of Jewish professional musicians in Iran. Netzer's useful overview in *Peʿamim* (1984) provides a sketch of liturgical and paraliturgical performance styles based on ethnographic methods and field recordings, some made in Iran and some in Israel. While revising this article, I learned of an unpublished master's thesis by Netanel Musai on Iranian Jewish liturgy in Israel, completed in 2013, but I was unable to obtain a copy for consultation. Chapter 13 of Loeb's dissertation (1970) is still the most

detailed study of Iranian Jewish sacred music (based on his field research conducted from 1967 to 1968, mostly in Shiraz). However, he discusses only liturgical synagogue music, excluding songs for celebrations and Shabbat meals. He also focuses entirely on pitch content, explicitly avoiding any rhythmic analysis (371), and does not include Persian texts in his transcriptions, making the chapter difficult to draw upon for the issues I explore in this article. His field recordings, four reels of which are currently held at the University of Utah library, document a wide variety of musical activity, and his full archive of 60 reels, yet to be annotated and archived, remains an exceptionally promising resource for scholars interested in Iranian Jewish music. My own research into the music and musical life of Iranian Jews in New York and Los Angeles is in the very early stages, the bulk of my ethnographic work (2002–present) conducted among the Bukharian Jewish community in New York.

[12] Like the research on Iranian Jewish music, the scholarship on Bukharian Jewish music deals almost exclusively with issues of musical life: specifically, the Jewish participation in the classical *šašmaqām* and wedding *sāzandeh* repertoires of Central Asia. Those studies focus on the classical and popular spheres; to the best of my knowledge my own work (Rapport 2006, 2014) is the only detailed research to date of Bukharian Jewish sacred music, besides Levin's brief discussions (Levin 1992; and Seroussi et al. 2001, sec. 8.iv).

[13] The *radif* is a collective pedagogical repertoire of melodies (called *gušeh*s), learned from a master and specific to the voice or a particular instrument, used primarily a basis for the singing of Persian poetry.

[14] While discussing the differences between Iranian and Central Asian musical life, we must remember historical interactions and migrations. Some Bukharian musicians' families are rooted in Iran, and vice versa, for instance. We can also surmise that repertoires or practices found in one area but not another, such as the lack of paraliturgical music or dance in some Iranian communities in the 1960s (Loeb 2000, 27–29) contrasted with the strong presence in the Bukharian sphere, may have been shared at one time, as musical life changes in response to both external restrictions and shifting cultural mores.

[15] Although the Arabic terms have been used to describe and analyze Persian meters "for more than one thousand years," there is no evidence to support an assumption that Persian versification is derived from Arabic (Elwell-Sutton 1976, vii). See also Yar-Shater (1974).

[16] In romanization from Tajik Persian (in Cyrillic), the same short vowels are usually *a, i*, and *u*; and the same long vowels are *o*, *e*, and *ū*. The ezafe (*-e*) and conjunction *o*, usually separated with a hyphen when romanizing from Perso-Arabic script, are attached to the preceding word from Cyrillic. So, for example, *nān-e boxārā* (bread of Bukhara) would be rendered as *noni buxoro*.

[17] Other options include the following: two short syllables may be scanned as one long syllable, except at the beginning of a line; a long syllable followed by a short may be replaced by one overlong; the first of two short syllables at the beginning of a line may be replaced by one long; the final syllable may be either long or overlong but never short (Elwell-Sutton 1976, 86).

[18] Scholars have long sought the rules or conventions of biblical "poetry" in particular, with varying results (Kugel 1981). The classic interpretation dating back to the eighteenth century (Robert Lowth's *De sacra poesi hebraeorum* [1753]) describes "parallelism," or semantically parallel units, and parallelism remains a widely accepted and researched area of Hebrew poetry (see Flender [1992, 82–93] and Randhofer [2004] for musicological analyses of parallelism in psalmody). Others theorized syllabic or accentual principles of ancient Hebrew meter, and Collins (1978) presented an intriguing grammatical basis for Hebrew poetry (see also Tsumura 2009).

[19] See Weinberger (2000, 5) and Gutmann-Grün (2008, 486–89) for a summary of the main Hebrew versions of the Arabic meters.

[20] It should be noted that location and time period cannot determine the particular compositional methods of a poet. For example, poets such as Jacob Tam (twelfth century) and his students adopted Spanish techniques in medieval France and Germany (Kanarfogel 2013).

[21] The first version is from an unpublished field recording I made on January 16, 2003. The second version can be heard on Malakov (2007), disc 6, track 8.

[22] The translation of poetic meters into rhythmic modes is a common procedure, found in practices beyond Iran and Central Asia (see, for example, Bektaş [2005, 6–7] on Turkish classical music).

[23] Loeb's (1968) recording is archived at the University of Utah library. Banafsheh's performance can be heard on CIJOH (1999), track 7.

[24] I was unable to locate the original Judeo-Persian text, so this is my own transcription.

[25] Compare also the notation of "Dərōr Yīqrā" in Seroussi and Davidoff (1999, 167–68), with the second tune's extremely strong *hazaj* pattern (the first syllable represented by a short grace note).

[26] Neither of these examples is available. Respecting the congregations' Orthodox Jewish laws during field research, I did not record religious services in the synagogue.

[27] Examples include the adoption of local popular melodies for Lubavitcher *nigun*s (Koskoff 2001, 72–79, 160–89) and Syrian *pizmon*s (Shelemay 1998, 182–87).

[28] This performance, recorded by me on January 16, 2003, can be heard on Malakov (2007), disc 1, track 17.

[29] Yehuda Halevi had explained a similar approach already in the twelfth century with respect to Psalm singing: "Halevi explicitly states that the same melodic unit (melody or phrase) can be applied to two verses of diverse length from the same Biblical text, such as in the case of '*Hodu l'Adonay ki tov*' (Psalm 136:1, seven syllables) and '*Le-'oseh nifla'ot gedolot levado*' (Psalm 136:4, twelve syllables). . . . This is early evidence of the singing of Psalms in the synagogue with flexible melodies that are adapted by the singers to the different lengths of the verses, as has been done in Sephardim synagogues until the present" (Seroussi 2007, 21).

[30] The examples can be heard on the following recordings: CIJOH (1998), track 5 (Shofet); CIJOH (1999), track 6 (Banafsheh); and Dardashti (n.d.), track 7. The similarity in the melody types might be due to the gathering of Iranian Jews from different cities in Los Angeles and in Israel. More information is needed, however, on the

particular details of these recordings and the biographies of these singers to make a conclusion.

[31] Idelsohn's transcription (1922, 16, Persian #39) presents a different melody. Rhythmically, the long final syllables are in the same places as in my example, although it is difficult to ascertain the level of similarity in the rest of the line due to the transcription, which may be heavily simplified or adjusted.

[32] Lodayev's performance can be heard on Malakov (2007), disc 5, track 30.

[33] This is my own transcription. The text here is neither a direct translation of the biblical story nor Shāhīn's version. The *ʿAqēdāh* is an important theme in the *səlīḥōt* liturgy.

[34] Rubinov's setting of Psalm 127 can be heard on Malakov (2013).

[35] Compare the rhythms discussed by Flender (1992, 93–95), such as the long-short-long-long sequencing occurring in several four-syllable words.

[36] This example can be heard on Malakov (2007), disc 1, track 7.

[37] This performance can be heard on Dardashti (n.d.), track 8.

[38] Ancient Greek theorists described musical rhythm and meter in terms of syllables (Mathiesen 1985), as did the later theorists continuing the tradition in West Asia, Central Asia, and North Africa, such as Safi al-Din in *Kitāb al-adwār fi al-musiqā*, and al-Fārābī in *Kitāb al-īqāʿāt* (Sawa 2001, 17; Azadehfar 2006, 67–113).

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