

Boaz Tarsi:

## Cross-Repertoire Motifs in Liturgical Music of the Ashkenazi Tradition: An Initial Lay of the Land.

### *Introductory comments and the conceptual and epistemological framework at hand*

Perhaps the best way to begin is by addressing some comments received following a presentation of an earlier version of this paper.<sup>1</sup> One person made the observation that the project discussed here is equivalent to “analyzing Gregorian chant.” Another commenter restated this notion and suggested that this seeming equivalency raises questions about the purpose and significance of the project. Although this point of view might seem peculiar to those who are very familiar with the traditional music discipline under investigation, I see it as emblematic of the need to explain precisely the purpose of the present discussion, and more important, to outline some of the considerations involved in the overall endeavor—uncovering the music theory behind Ashkenazi liturgical practice—to which this paper contributes.

The aforementioned remarks about the relationship between the study of Gregorian chant and the study of Ashkenazi liturgical music betray a commonly encountered ignorance or misunderstanding regarding the latter territory. There are three key features of the Ashkenazi tradition that clearly mark fundamental qualitative differences between it and Gregorian-chant practice. These features are obvious, well established, and presumably recognized facts; nevertheless, I am still surprised—more often than one might think—to learn that they are unclear or even unknown to many musicologists and scholars. I list these features here, as they are very pertinent to the present discussion.

1. Unlike plainchant, or other music of the church, the liturgical music of Ashkenazi tradition is an extemporized, semi-improvised discipline.
2. Until quite recently, and in keeping with its extemporized nature, this tradition has only been transmitted orally, and indeed to a significant degree it still is.

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<sup>1</sup>The earlier version, entitled “Cross-Repertoire Motifs in the Liturgical Music of Ashkenazi Tradition,” was presented at the *World Congress of Jewish Studies*, Jerusalem, 2013. This article is an expanded and elaborated version of that paper.

3. No theory accompanied this tradition as it was practiced and developed, nor has there been a theoretical dimension in its transmission, or in its evolution and change, if such occurred.<sup>2</sup>

For the purposes of the present discussion, these points may be summarized in the statement that there is an unarticulated system that has governed the Ashkenazi performance discipline. It follows then, that the oral transmission of this discipline included not only the dissemination of music, but also some level of instruction, whether explicit, implied, or derived from other information, concerning the framework that regulates the semi-improvisational process. Thus, on whatever level of awareness or conceptualization, the tradition has promulgated an underlying system that directs and organizes the musical performance as it unfolds in accord with its respective textual and ritual components. Although no formal theory followed the practice, the information beyond the music itself is what defines this system,<sup>3</sup> and at its base is something that can indeed be described in music-theory terms.<sup>4</sup> The practice, therefore, is in fact the implementation of un-conceptualized theory. Consequently, in order to understand it—to reveal its inner workings—we need to uncover the unarticulated, un-conceptualized music theory behind the practice, and articulate it in relevant, appropriate and meaningful music theory terms. In this

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<sup>2</sup>I cannot delve here into the many implications and consequences of these issues, nor provide references to the relevant literature. I will simply note that although a very few attempts to transcribe this practice and “create” a theory began to appear in the last quarter of the nineteenth century, they did not succeed in producing an authentic and accurately descriptive music-theory model. These attempts are best viewed from a historiographical perspective, as a commentary of sorts on how practitioners, semi-scholars, and educators viewed their tradition. While these efforts did yield some theoretical observations, they are for the most part not useful and tend to be by-products of other discussions; frequently they were advanced in the context of historical or comparative study and in the service of an agenda or ideology or pre-determined objective that extended beyond the identification of the Ashkenazi system itself.

<sup>3</sup>This reality is the manifestation of Ruth Hacoheh’s incisively articulated observation that this practice constitutes a *parole* with no *meta langue* (personal communication as well as a discussion at a meeting of a *Scholion* work group at the Hebrew University, 2010. In my take on the matter I see the reconstruction of the theory of this practice as uncovering and articulating the *langue* of this *parole*, thereby creating the missing *meta langue*.

<sup>4</sup>For more on previous attempts to create such a theory and how and why they did not achieve their ends, see mainly Tarsi (2013) and Tarsi (2001-02).

respect, the particular subject of the present discussion is one step in the overall endeavor of establishing a music-theory model.

The nature of the phenomenon explored here requires that the dominating methodology of unpacking this practice be a process of categorization and classification. Thus the overall product of this process is a taxonomy that identifies different “manners of conduct”—a term chosen to avoid the treacherous territory that surrounds such labels as “mode,” *Steiger*, *Nusah*, *Weise*, *Gust*, or *Gattung*, which I choose not to address here.<sup>5</sup> In light of this concern with categorization it is interesting that the comments mentioned at the outset of this paper raise the issue of comparison (i.e., *comparing* the study of Ashkenazi liturgical music to the analysis of plainchant).<sup>6</sup> Although comparison in and of itself may not be a primary concern in

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<sup>5</sup>While “mode” is a term frequently encountered in this territory, all of the terms in this incomplete list are used in various narratives in this field. The exact meaning, and especially the fuzzy, context-sensitive and inconsistent signification of these terms is outside the bounds of the current discussion; an article on this terminology is in preparation.

<sup>6</sup>It might not be by coincidence that of all musical traditions and repertoires, the commenters chose specifically a comparison of the Ashkenazi liturgical tradition with that of Gregorian chant. Indeed, one topos in previous discourse on the Ashkenazi tradition was the comparison of this repertoire to plainchant and the music of the church in general. The circumstances and consequences of this juxtaposition are involved, complex, and beyond the scope of this paper. Here it is important to note two things. First, the motivation for such comparison notwithstanding, we can only view it critically as a historical artifact.

To begin with, for at least the last twenty-five or thirty years, it has been conclusively demonstrated—from musicological, historical, and universal perspectives—that there is no reliable evidence that any similarities between the Jewish and Christian traditions can be explained by the derivation of the former from the latter. Moreover, the qualitative and substantive differences between these practices are so profound as to constitute two fundamentally different species of experience.

Second, a critical examination of past attempts at formulating a theory of Ashkenazi liturgical music reveals that the assumption that the Jewish tradition could be explained in terms of church music yielded music theory that not only did not match the practice, it was in fact incoherent and did not comprise a system. Thus, the alleged similarity between the two traditions is one of the primary hindrances that for close to a century stood in the way of a clear and coherent account of the system that governs the discipline of Ashkenazi liturgical music—an account that has yet to be accomplished.

A bibliographical treatment of these issues would be too cumbersome for this note. Here it is enough to observe that occasionally these errors are reiterated in new publications. In such cases the new literature overlooks all the evidence, research, insight, discussions, and conclusions that have emerged since that era, a body of literature that unambiguously demonstrates that the earlier speculations have no basis.

our discussion, it does touch upon the issue of sameness and difference.<sup>7</sup> The relevance of this topic stems from the fact that, as in any process of taxonomy, one still has to decide which properties are to be used to establish the boundaries of the categories in the first place. Thus in order to determine what fits into which category, the chief issue is determining what items are considered the same (and therefore belong in the same category, or taxon) and what makes items different (thus requiring different categories in which to place them).<sup>8</sup>

For the sake of brevity and efficiency let us assume that the best way to lay the groundwork for the taxonomy of this field is to identify the time and occasion of performance as the primary defining quality of each category.<sup>9</sup> For example, the music for Passover night (*Pesah Ma'ariv*) is a different musical category from that of the additional morning services during the High Holidays (*Yamim Nora'im Musaf*), which are yet different from the afternoon service for a signifier weekday (*Minha for Hol*).<sup>10</sup> These primary categories can also be subdivided according to other features such as text, liturgical unit within the service, and the like. Nevertheless, these features cannot be used as primary defining qualities of separate categories because by themselves they cannot be matched with musical renditions in exclusive one-to-

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<sup>7</sup>See also “lumping and splitting” below and footnote 11.

<sup>8</sup>In set theory (in mathematics and computer science) this is equivalent to defining a set. For an example of how this issue directly affects our specific concern, see the discussion of (0,2,5) and (0,2,7) sets below.

<sup>9</sup>Even this contextual marker, when used as a fundamental category in the classification system, does not yield a completely consistent system. In some cases a category is to be defined not by the time or occasion of performance but rather by a particular complex of musical characteristics utilized in multiple situations. For example, what we know in the field as the “adonai malach mode,” whatever its different descriptions and definitions may be, constitutes a separate category, defined primarily by musical characteristics, and includes parts of the services for different times and occasions, such as the first six psalms of *Kabbalat Shabbat*, some of the music for the High Holidays *Ma'ariv*, *Kdushah* for Shabbat *Musaf*, and the *Sheva B'rachot*, among others.

<sup>10</sup>I did not arbitrarily choose these qualities to be the defining properties. In my judgment, these are the most organically imbedded markers in the systematic makeup of this tradition, as well as the chief characteristics reflected in early insiders' views. Using these categories also results in the best taxonomical outcome because they yield a classification system that has the least amount of overlap between the different categories (i.e., in set theory terms, as few areas of overlap among the sets and no empty sets). As it so happens—and I believe this is not a coincidence—so far as we can discern from the evidence at hand, these are also the qualities that established the discipline in the first place and have remained paramount in its practice and transmission.

one pairings. For example, the text of the Kaddish, or the *Amidah*, and even sections of these texts (i.e. *Avot-Gvurot*, *K'dushah*, and *K'dushat Hayom*, all within the *Amidah*) in and of themselves do not define a musical category because the same texts or some of their variants are governed by fundamentally different manners of conduct (which include music) when they are performed at different times or on different occasions.

In almost every classification system, although the primary defining qualities of each separate category are different, many times they do have some characteristics in common. This is indeed the case in the classification of this repertoire as well. The “splitting” process that a classification mechanism requires does not always result in a clear-cut, neatly organized collection of particles, nor are the definitions and boundaries of these particles expressed in a binary framework.<sup>11</sup> In other words the different taxonomical units cannot be defined in completely “black and white” terms; rather, there are “gray areas” between the categories, with the result that some of their attributes may be associated with more than one taxon. This “impure” splitting is, in fact, but one expression of an important overall trait of the discipline under consideration—a dominating trait, which it is essential to take into account—namely, that this discipline constitutes a fuzzy system.<sup>12</sup> Identifying and taking into account the fuzzy element also allows us to overcome the weaknesses of the reductionism

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<sup>11</sup>One of the epistemological vehicles that I find very helpful is rooted in modalities identified as “lumping” versus “splitting.” Very briefly put, “lumping” takes an approach toward viewing as well as exploring a given phenomenon in its entirety as one “whole”—a complete entity whose characteristics and essence are one and can only be understood as a complete “gestalt.” “Splitting,” on the other hand, chooses to break down a phenomenon into its various constituents and to study, define, and understand each one of them separately. Splitting does not exclude the possibility of subsequently viewing the entire complex, although it often treats it as the total sum of the aggregate interrelationships among the “split” particles.

Lumping and splitting are related to sameness and difference: Lumping may bring things that are considered different or should be considered different under the “same” rubric. Splitting requires us to decide what is the same and what is different in order to split (or to lump, or to recognize what is still lumped within the same split portion).

<sup>12</sup>See Kosko (1993). That the system behind Ashkenazi liturgical music has a fuzzy nature is a claim that Ruth Hacoheh and I cautiously and gingerly attempted to advance at the 15<sup>th</sup> World Congress of Jewish Studies (Hacoheh and Tarsi [2009]). Since then I have become convinced that this is not just a buzzword or a de-rigueur stance. It is a crucial understanding we must incorporate, which affects and manifests itself at all levels of this system as well as in the concepts and tools involved in its exploration.

inherent in the splitting process. To begin with, the initial splitting is not the end and objective in and of itself and does not intend to present the ultimate picture of the discipline itself as a whole. The splitting process indeed breaks things down to their constituent parts in order to best understand them. Yet a splitting process that incorporates a fuzzy-system methodology makes it possible to account for elements that a purely reductionist approach would not be able to tolerate and would consider to be “noise.” Thus, by factoring in the fuzzy variable we make it possible to apply a splitting approach that acknowledges resistant or ambiguous elements. This flexibility in turn makes it possible to move beyond the initial splitting procedure toward a fuller overview of the entire practice, the system involved in its respective discipline, and the entire phenomenon it represents as a single whole.

This having been said, our immediate concern in this paper is one manifestation of the fuzzy nature of this system, which is that no matter how we choose to define the constituent categories, there is bound to be some overlap among them. Specifically, some musical characteristics belong in more than one time-occasion category. For the sake of simplicity we may call these characteristics “motifs” although on the level of motif they are fuzzily defined. These motifs cross boundaries between taxonomical categories and surface throughout the repertoire, hence my identifying them as “cross-repertoire” motifs. As I shall briefly demonstrate in a few examples, however, even the categorization of these motifs is somewhat fuzzy.<sup>13</sup> A detailed, deeper, and more thorough discussion of these motifs has yet to be pursued. In addition, there are many implications, consequences, and manifestations of this phenomenon (one sample of any possible direction is, for example, the various implications this phenomenon has on the praying individual or congregation, or the affect it may have on the practitioner and what it may mean for each of these parties, whether consciously or not.) At this initial point of the inquiry I limit the objective to simply identifying these motifs and making an initial foray into determining their possible functions and meanings.

### *The “sequence” and “neighbor notes” motifs*

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<sup>13</sup>See “a fuzzy element in the signifier of the classifying unit” section below and Example 28.)

I have already discussed and demonstrated one of these motifs in an old article.<sup>14</sup> Here it provides a useful starting place because it demonstrates clearly how a motif may appear across the repertoire in a variety of liturgical contexts. I have titled this motif a “sequence motif” for obvious reasons (see Example 1). This motif appears in several parts of the repertoire. What distinguishes its particular manifestations in the different time-occasion-text contexts where we may find it are its tetrachord structure, possible tonality or modality, tonal context, and *ambitus*. Thus as Example 1 illustrates, the motif spans a pentachord, which may comprise a minor, major, or an augmented second pentachord, and it may be placed on various degrees and *ambitus* locations as demonstrated. The examples given here present this motif as it appears in the music for *Tal-Geshem* (*Hatsi Kaddish*, *Avot*, *G’vurot*, and the special *Piyyut*), the High Holiday *Shaharit* (from “*hamelech*” onward), the *Kaddish-Avot-G’vurot* pattern for *Neilah*, and the High Holiday *Ma’ariv*.

A few additional contexts (in addition to the ones featured in Example 1) in which we can find this motif are *Kiddush Levana* (The New Moon Blessing), *Megilat Ester*, some versions of *Shaharit Shabbat* (particularly in some sub-traditions and versions, on “*el hahoda’ot adon hanifla’ot*”), and the High Holiday Kaddish for *Musaf*.<sup>15</sup> It also appears sporadically in individual renditions of a variety of texts without following any discernible principle or recognized pattern. Examples may be found in some cantorial books, in selected texts such as Solomon Rozumni’s *Kabbalat Shabbat* on “*yismehu hashamayim vetagel ha’arets*” or on Yom Kippur’s “*tavo lefanecho*” (Alter [1971, 105]), or in the *K’dushah* on “*adir adirenu*” (Lewandowski [1921/1871, 70]).

Another motif introduced in the same paper was the “neighbor notes motif,” (Example 2), which we can find at the beginning of the *Shaharit* service during the High Holidays and its Kaddish, after the *Bar’chu* (in “*yotser or*” on “*uvore et hakol*”)

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<sup>14</sup>Tarsi (1991, 21–24). In the same article I introduced the idea of cross-repertoire motifs under the term “universal motif,” which I no longer use. The motif described here is also mentioned in Werner (1957, 323). Werner uses the term “wandering motif,” but he defines it on grounds fundamentally different from the cross-repertoire qualities discussed here. Idelsohn (1923a, xxxvi) also features this motif in yet another, different context.

<sup>15</sup>A particular type of variant of this motif is notably apparent in many of the written sources for this Kaddish, particularly in the earlier ones. Among these sources are Joseph Goldstein, Idelsohn (*Thesaurus* Vol. VII), Samuel Naumbourg, Fabian Ogutsch, and Selig Scheuermann, and one of the versions transcribed by Avraham Baer to name a few.

in the special music formula for *Tal* and *Geshem*, in the *Hatsi Kaddish* for the Three Festivals evening service, and in others. Incidentally, this motif also appears as a cadence in the famous musical adaptation of Nathan Alterman's "*Me'afula*" ("*Hanaleh Hitbalbela*").

### ***The "pseudo-Russian" motif***

One of the most prominent and prevalent cross-repertoire motifs is a cadence or progression that consists of a descending fourth, preceded by some step progression—normally two steps—ascending or descending. In theory it may also be preceded by only one step, but this would be a rare exception. On the other hand, a more elaborate motion (i.e., more than just two ascending or descending steps) before the descending fourth is prevalent (Example 3). This motif has acquired formal status in Russian *Volksgeist* as a modal marker of a Russian folk (or perhaps national) trait, where it is termed a "plagal motif."<sup>16</sup> I am reluctant to call it a plagal motif in the Ashkenazi liturgical context, because of the scale-degree component this would denote, and because the term "plagal" in the discourse of Jewish music is problematic enough as it is.<sup>17</sup>

Indeed, examples of this motif flood Russian art, folk[?], and pseudo-folk music. In the "art music" repertoire we need only mention the beginning of Tchaikovsky's Second Symphony and a dominating motif from Liza's aria from *Pique Dame*. Michael Lukin reminded me also of the ever so ubiquitous "Nights of Moscow." Another example—one among the multitudes of cases in Russian folk and quasi-folk songs—is *Bezhit Reka* (The River Runs) by Yevgeny Aleksandrovich Yevtushenko and Eduard Kolmanovsky.<sup>18</sup>

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<sup>16</sup>Some years ago, when I approached Michael Lukin with the speculation that this might be a "Ukrainian motif" (the reason for which I do not specify here), he drew my attention to the fact that this motif was in fact Russian. After the current presentation he kindly provided me with the information given here regarding its status in Russian musical lore. He added that even in conservatory training, this motif is (or perhaps was) presented as a typical characteristic of Russian music and a "modal" marker ("modal" traits being a prevalent marker in the nineteenth-century *Volksgeist* approach to the music of the "folk"; *b.t.*), and identified as plagal. I am also grateful to Michael for some other references he suggested, which I do not specify here.

<sup>17</sup>See, for example, Levine (1989) and Tarsi (2002a) particularly pp. 180-83.

<sup>18</sup>The song was quite a hit in Israel in the 70's, as part of the show (and a recording) entitled "*Haloch Halcha Hahevraya*" by a group of the same name, which performed

This motif is also extremely prevalent in the Jewish secular repertoire: in “folk” songs and their arrangements, Hassidic and Kleizmer music, *Zmirot*, and art songs, as well as in congregational tunes used at the synagogue. Some examples include *A Din Toire mit Got* (*Kadish fun Reb Levi Itzhok Barditshev*, arranged by Leo Low), *Ata Echad Veshimacha Echad* (on “*goy ehad ba’arets*”), *Shomer Yisrael* (at the end of each verse), “*shebashamayim uva’arets*” in *Ehad mi Yodea* for Passover, Rothman’s “*Vekarev P’zurenny*,” Avraham Goldfarb’s *Roshinkes mit Mandeln*, and in *Dudule* (e.g., Idelsohn *Thesaurus* X, p. 35, No. 125). One among many manifestations of this motif in the modern Israeli repertoire is *Po Be’erets Hemdat Avot* on the ending cadences.

As a cross-repertoire motif in Ashkenazi liturgical music it occurs very frequently. I have yet to conduct a comprehensive search to assess the full extent of this motif’s presence as well as all its structural and functional aspects in the various contexts where it appears. The instances I account for here include what I believe to be the clearer, more typical and consistent cases. As an initial evaluation of the role, function, and structural context of this motif, I suggest that it may serve as a closing cadence, at times the closing of an entire section; as a cadence where a transition from one mode or tonality to another occurs; as a transition to a *Piyyut*; as a repetitive insertion within a “mosaic” structure of sorts, perhaps a set of interrelated texts; and it may have other functions that have yet to be explored.

Some examples of the “pseudo-Russian motif” include its use in closing a section of the psalms before *Lecha Dodi* (in the *Kabbalat Shabbat* service) and closing a section at the *B’racha* after *Hashkivenu* (Example 3, second line) on Friday night, which, depending on the tonalities involved, may also be considered a transition to the following “*Vesahmru*,” as well as, in some cases, a transition to a different tonality. An example in which the motif functions as a closing of a section and as a transition to the next section as well as to a different tonality is the final cadence of an “*Aliyyah*” in the reading of the Torah, which is also an anticipation of the final *B’rachot* (Example 4).<sup>19</sup>

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the song as “*Bedumiya*” (Hebrew translation by Yaakov Shabtai with Lior Yeyni as the soloist).

<sup>19</sup>For a discussion of anticipation in Ashkenazi liturgical music in general (although without addressing this specific case), see Schleifer (1986).

This motif has a different phrase structure and function in the Shabbat *Minha* service. One aspect of the Shabbat *Minha* pattern is the combination of motifs to construct a specific type of mosaic. In this configuration, the “pseudo Russian” motif can be inserted after any occurrence of any of the other motifs. In other words, it is an interim motif that can be inserted between any two motifs or between one of the motifs and some free “move.”<sup>20</sup> By default it often also functions as a closing cadence (Example 5).

So far as *piyyutim* are concerned, let us only mention the “*Shma Uvirchoteha*” section of the Three Festival evening (*Ma’ariv*). The function of the motif in that context is primarily as a transition from the regular text to the inserted occasion-specific *piyyutim*, primarily *Leil Shimurim* on Passover or its equivalents in other *Regalim*, some of which are no longer used, yet the transition remains (Example 3, line three). Another such transition is on “*or olam b’otsar haiyim*” in the High Holiday *Shaharit*. Also worth noting is the presence of this motif among the several motivic building blocks that constitute the motif-mosaic in *Kol Nindrei* (Example 6). In addition, we may find this motif practically anywhere on isolated occasions throughout the canon.

As a rule, there is not much connection between music for the prayer book and biblical cantillation (*ta’amey hamikra*).<sup>21</sup> Nevertheless some possible points of contact can be identified in a very specific and limited sample.<sup>22</sup> For example, the “pseudo-Russian motif” bears a resemblance to *Zakef Katon* in some versions of the cantillation for *Shir Hashirim* (The Song of Songs). Yet because the similarity concerns a rather minor cantillation feature, and not the primary cantillation texts (i.e., one of the *megillot*), this similarity could be chalked up to coincidence. On the other hand, in some traditions *Shir Hashirim* is read every Friday, thus giving this motif additional exposure in the synagogue, and, the motif by itself, outside of cantillation

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<sup>20</sup>A complete and precise explanation of “move” is beyond the scope of this discussion. Here it will suffice to describe it as similar to a motif, though not as rigidly defined—i.e., its constituent elements may be changed, varied, or flexibly applied. In some cases, what might be perceived as different motifs or motivic variants are in fact different expressions of the same “move.” See also “*melodische Bewegung*” in Lachmann (1978, 52) and “*tenu’ah*” in Mazor and Seroussi (1990–91, 140).

<sup>21</sup>This is an involved, complicated topic that may require a counter-intuitive approach. At present it is a sub-topic of a larger work currently in preparation.

<sup>22</sup>Again, for the sake of brevity, I will not speculate on the reasons that might underlie these exceptional cases, but I suspect they do exist.

context is extremely prevalent. Further research into the relationship between *te'amim* traditions and liturgical music may be called for in this particular case.

In Idelsohn's *Thesaurus* VIII p. xi, a variant of this motif appears as a concluding motif in what he identifies as "Psalm Mode" (*Psalmweise*). While volume VIII features what Idelsohn claims to be Eastern European practices, he states here that this motif is also part of the Western European tradition ("Germanic-Ashkenazic"), with a reference to volume VII (West European tradition), Nos. 2, 4, and 5. In keeping with this reference, according to Idelsohn, in Western European tradition this motif belongs to the liturgical sections of "*Birkot Hashahar*" and "*Psukey D'zimrah*." In *Thesaurus* X, in samples of Hassidic melodies, we can find variants of this motif, among many other examples, in p. 11, Nos. 41, 42, 43, p. 14, Nos. 52, and 53, p. 50, No. 181, and p. 52, in the opening of No. 187 as well as in the opening of the second part of the same example (No. 187, line 5 "Moderato").

In the *Thesaurus* Vol. VII p. xxvi (introduction), a variant of this motif is presented under a brief comment on "*Shabbat Minha* mode," followed by a reference to a few examples in the body of the volume. As is often the case in Idelsohn's work, he does not introduce this variant as a defined component within a model of music theory or analytic framework, but rather to make a historic-comparative point. In this case the variant is used to demonstrate the fact that this *Minha mode* "contains elements of the Pentateuchal mode."<sup>23</sup> Idelsohn also portrays this motif as a way to end a phrase in *Ahavah Rabbah* while avoiding the augmented second—a trait he attributes to Western European tendencies.<sup>24</sup> Among other irregularities, this procedure requires changing some of the notes in the *Ahavah Rabbah* scale itself (lowering the 3<sup>rd</sup> and raising the 2<sup>nd</sup>). Hence this alteration eliminates the augmented second by moving out of *Ahavah Rabbah* altogether, casting doubt on Idelsohn's explanation of this motif in this context (Example 7). At this stage in my research I have not found any examples of such usage of this motif in *Ahavah Rabbah*.

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<sup>23</sup>Idelsohn, *Thesaurus* Vol. VII, p. xxvi. Idelsohn's "Pentateuchal mode" is one of the rhetorical tools that he uses to construct the (erroneous) derivation of Ashkenazi prayer music, and especially the prayer modes, from roots in antiquity. In this respect, it is interesting that immediately after citing this motif, Idelsohn identifies a different motif as a constituent of "*Minha mode*" that descends from the "Mode of the Prophets"—yet another biblically resonant category that Idelsohn uses to establish the antiquity of liturgical music.

<sup>24</sup>Idelsohn, *Thesaurus* VII, p. xxiv.

***Fourth Plus Third (4<sup>th</sup>+3<sup>rd</sup>) motif***

Another important and extremely prevalent motif is what for the time being I call a “4<sup>th</sup> + 3<sup>rd</sup>” motif: two ascending skips—a third on top of a fourth. While the fourth is always perfect, the third may be major or minor depending on the context and the category in which the motif appears. Example 8 illustrates the motif in a few examples from the repertoire; it is extremely prevalent in all Jewish music (not only liturgical) as well as Slavic and Eastern European music (and by extension, many Israeli “folk songs.”) It may even cover a much larger territory, and I suspect it may also play a role in the “art music” of Western common practice. Such widespread distribution suggests the possibility that the motif is a universal of sorts, at least in Western common practice, perhaps introducing or suggesting harmonic considerations whether explicit or implied, and very likely involving a cognitive component.

This hypothesis notwithstanding, the function of this motif within Ashkenazi liturgical music is different, probably more case-specific than in other contexts. It is likely that in Western common practice the prevalence of this motif may stem from its inseparable ties to harmonic factors, for it is similar to the unfolding of a 6/4 chord. In the context of the Ashkenazi liturgical repertoire, however, I prefer not to address this dimension of the motif lest we project a perception from Western tonal practice onto a setting where it may not apply. More important perhaps, a 6/4 is primarily a harmonic concept and thus has no place in the monophonic, horizontally oriented, Ashkenazi musical system. Even if we suppose that some oblique harmonic implications might play a role here, the overall perception of this motif in the Ashkenazi system may be qualitatively different from the perception and function of the 6/4 relation in Western common practice.

The various functions and contexts of this motif have yet to be fully explored in detail. Some initial observations concerning the structural factors and functions of this motif are listed here. It may appear as an opening motif (last line of Example 8 from *Havdala*) both at the beginning of a section and, within a section, at the beginning of a new phrase or a new thought or a new passage of textual material (second item on the last line of Example 8, starting the next section after the *K'dushah* in the repetition of

the *Amidah* for the Three Festivals).<sup>25</sup> As such an opener, it is a prevalent dominating motif in the Polish-Lithuanian/American, minor-key version of the Friday night service (the section before the *Amidah*—the “*Sh’ma uvirchoteha*”—in *Ma’ariv* for Shabbat), as illustrated in the third line of Example 8.<sup>26</sup> It may also be one of the defining motif types of a “mode” (e.g., Adonai Malach; see motifs “E” and “H” in Example 9.) In other cases it functions as an interim, half-cadence, or final cadence, for example in the *Hatzi Kaddish* before *Musaf* for the High Holidays (the top line in Example 8; see also the last motif in Example 28.)

This motif may also constitute a characteristic time-occasion marker in a specific liturgical unit, or a defining motif of such a unit or textual section (e.g., in one of the primary versions of the music for the *Hatzi Kaddish* before the repetition of the *Amidah* when *Piyyutim* for *Tal* or *Geshem* are recited, as well as within the *Piyyutim* themselves (second line in Example 8). It is also used as a transition mechanism for a tonal or modal change. Specifically, within an “*Ahavah Rabbah*” environment, it is used in shifts from the *Ahavah Rabbah* “tonic” to the “equivalent minor,” or to the parallel or relative major of the equivalent minor (in *Ahavah Rabbah* based on E, this would be a transition to A minor, A major, or C major, Example 10).<sup>27</sup> It also has a word-motif connection in some time-occasion contexts. The most common examples of this connection are, in some traditions, in *Shabbat Shaharit* and *Musaf* on the words “*matai timloch betsion*,” “*titgadal vetitkadah betoch yerushalayim ircha*,” “*az bekol ra’ash gadol*,” “*ve’einenu tir’ena*,” “*az misinai nitstavu aleha*,” and “*beini uvein b’nei yisrael*,” among others. In these cases, too, the motif may serve as a transition to, or sometimes just a brief detour through a temporary new tonality or mode.

### “Step and skip” motifs group

The last motif I discuss in some detail here is in fact a group of motifs that may be classed under a more inclusive rubric. The defining feature of the motifs in this larger group is a “one-direction step and skip” progression; each motif constitutes a

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<sup>25</sup>This may be the musical equivalent of the textual construct for which Debra Reed Blank coined the term “liturgical seam,” which she uses in her classes at Hebrew College (Newton, MA.)

<sup>26</sup>For a discussion of this particular version and its possible Polish/Lithuanian origins see Tarsi (2002b, 180-84).

<sup>27</sup>For a full explanation of these terms and concepts, see Tarsi (1991, 6-9).

step followed by a skip, which varies in size, in the same direction, either ascending or descending. Thus the individual motifs differ according to the size of the interval covered by the skip, as well as other characteristics. As I elaborate upon later, the relationship between these motifs is yet another expression of the fuzzy aspect of the system. I identify these motifs according to their properties in terms of music set theory as (0,2,5) and (0,2,7).<sup>28</sup>

A minimal manifestation of (0,2,5) contains three notes, which may form an ascending or descending melodic line. In either case the highest note is located a minor third above the middle note, and the middle note is located a whole step above the lowest note (Example 11).<sup>29</sup> Whether ascending and descending forms of (0,2,5) should be regarded as two different motifs (“a” and “b” versus “c” and “d” in Example 11) is a taxonomical choice. It would also be possible to differentiate motifs on the basis of pitch, in which case “a” and “c” would be considered the same motif and “b” and “d” another, different one. The bottom line is that all of these options are yet another expression of fuzzy aspects (see the last section of this paper – “discussion”). The contexts and functions of this motif are many. It may serve as the opening element of a phrase, particularly a continuing phrase (i.e., “*hagadol vehanora*” on *Shaharit* for the Three Festivals or in “*asher bahar banu*” in the Three Festivals *Kiddush*), or a continuation or restatement of a phrase, or as a characteristic defining motif in an “occasion-specific phrase” (e.g., the Three Festivals *Akdamut* phrase, Example 12).<sup>30</sup> As a descending line it may function as a half cadence or an interim closing motif; as a congregational response (“refrain”) in a *piyyut* (“*adonai melech, adonai malach, adonai yimloch leolam vaed*” during the High Holidays—a case in which both (0,2,5) and (0,2,7) appear in succession one after the other in an ascending variant followed by a descending one – the first two lines in Example 13);

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<sup>28</sup>Forte (1973). See also Hanson (1960).

<sup>29</sup>We have yet to explore whether the case in Example 13, line 5, where the “step” element of the motif is actually a half step, is a unique exception that nevertheless remains within the (0,2,5) category; alternatively, the description of that category could be altered to include this example, or this example could be assigned to a separate (0,1,5) category.

<sup>30</sup>I suggest that this motif is not, in fact, exclusively an *Akdamut* motif but rather the overall seasonal tune for the Three Festivals (primarily for *Ma’ariv*), which is also used for *Akdamut* in some traditions. The actual seasonal tune specific to *Shavuot*, and thus the one used for all the other texts that implement a seasonal tune (i.e., *mi chamocho* or *hodu ladonai* in the *Hallel*, some congregational responses, and the like), is the tune (considered to be a “*missinai*” tune) featured in Example 20.

as a cadence marker in a designated liturgical section (“*Psukey D’zimrah*” for Shabbat, particularly as an ending cadence as featured in Example 14); as a characteristic within a motif type in a “mode” (e.g., *Adonai Malach*—see all the variants of motif “J” in Example 9), and in many other situations.<sup>31</sup> In Example 15 we can observe this motif right after “*Hamelech*” for the High Holidays *Shaharit* service, and in Example 16 it appears in the equivalent liturgical spot in the Three Festivals (“*ha’el beta’atsumot uzecha*”). Example 13 also illustrates this motif in two other texts from the Yom Kippur *Ma’ariv* service.

The second motif, (0,2,7), manifests itself as three notes, the second note located a step from the first, and the third note, a perfect fourth from the second. As in the case of (0,2,5), this motif comes in four different permutations (Example 18). One of the most frequently encountered roles of one of these permutations (“c” in Example 18) is as a primary and fundamental signifier of a specific function on a specific occasion—the ending motif typical of the Three Festival morning services, particularly the *hatimot* (the last three notes of the bottom line of Example 19, the ending of Example 21, and the last motif in Idelsohn’s “*Amidah Mode*’ for the Three Festivals” in Example 23.) Related to this function are two permutations (ascending and descending) of this motif in the melodic pattern for the *reshut* that begins with “*misod hachamim unevinim*” during the High Holidays, which is also applied to its related liturgical equivalents throughout the liturgy (marked in the top two lines of Example 21.)

In *Thesaurus VIII*, p. xiv, Idelsohn presents the melody for *misod hachamim*, identifying it as “*Kerova Mode*.”<sup>32</sup> Idelsohn mechanically transforms this one-phrase melody into a “mode” by dividing this line into six segments which he identifies as discrete motifs (Example 22). The last motif in this collection consists of six notes, the last three of which constitute a descending (0,2,7). Idelsohn acknowledges that this motif is also the closing motif in the Three Festivals, noting that it is similar to what he calls the “*Amidah Mode*” for the Three Festivals (p. xiii, “mode 12,” Example 23). The same exact motif is also identified separately, later on the same

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<sup>31</sup>In a clever play on this use of this motif, Leib Glantz deploys it before an atypical note (5 below the tonic) in his setting for *Birkat Hahodesh* (Example 17). See also Tarsi (2008, 180).

<sup>32</sup>Clearly Idelsohn’s use of the word *K’rova* here derives from the fact that *Misod Hachamim* belongs to the category of *Piyyut* (in this case a *Reshut*) identified as *K’rovot* (*Piyyutim* that take place during the repetition of the *Amidah*).

page, as the closing of what Idelsohn terms “*Sliha mode*” (*Selichawaise*, Example 24). We should note, however, that whereas in Idelsohn’s “*Kerova Mode*” this motif ends on the tonic, the Three Festivals ending is on 4 below the tonic (compare Example 22 with Example 23, as well as with the cadence in Examples 19 and 21).<sup>33</sup> On the other hand, the last three notes of the second motif in his table depicting the “*Kerova mode*” do constitute the same motif, except here they are on the same scale degree as the Three Festivals ending (8-5-4).

It may have been this combination of a “*Sliha mode*” and “*Kerova mode*” (Example 22) that prompted Charles Davidson to use the term “*Krova motif*” in reference to yet another, different manifestation of (0,2,7) in his classes at the Jewish Theological Seminary. Davidson’s term does not apply to this motif as it appears in Idelsohn’s “*Krova Mode*,” however. Davidson’s “*Krova motif*” names a particular variant of (0,2,7)—in which this motif in its descending form is preceded by an ascending perfect-fourth skip—that appears mainly during the middle section of the Cantor’s Repetition (*Hazarat Hashats*) for the High Holidays, but this variant is based on the tonic of the relative major within a section that is primarily in a minor key (Example 25).<sup>34</sup> The same variant also appears in some High Holiday *Piyyutim*, especially in those that feature what is commonly called in the field “*S’liha Mode*” (Example 26).<sup>35</sup> (We should note, however, that in this specific context this motif is not the signal for a congregational “insert.”)

There are many more configurations of this group as well as liturgical uses for it. I have focused here only on a very few examples of both (0,2,5) and (0,2,7) as a case

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<sup>33</sup>See Tarsi (1991) and Tarsi (2002a).

<sup>34</sup>Davidson’s term “*Krova motif*” has been replaced by Joel Kaplan’s more befitting term “insert motif.” Traditionally, the use of this motif comes before (and in fact may have been a signal to the congregation for) the “insertion” of a congregational recitation of the following text.

<sup>35</sup>Different from Idelsohn’s “*Slichawaise*,” this semi-insider/practitioner term refers to the symmetrical two-part responsorial that is used for texts such as “*Avinu Malkeinu*,” “*Le’el Orech Din*,” “*Sh’mah Kolenu*,” “*Or Zarua Latsadik*” before *Kol Nidrey*, “*Al Het*,” the preliminary verses before blowing the *Shofar* on Rosh Hashanah (“*min hametsar karati yah*”), and others (see Example 26). The use of other terms and different paradigms to apprehend this pattern (e.g., Eli Schleifer’s identification of this mode as a Psalmody) is a subject on which no agreement has been reached. The clearest exposition of this territory occurred in a panel meeting devoted to this topic during *Performing Psalms: Practices and Perspectives*, The French Research Center in Jerusalem International Workshop (Jerusalem, October 29, 2009), with papers and presentations by Eliyahu Schleifer, Judit Frigyesi, Amalia Kedem, and Boaz Tarsi.

study. One final expression of a motif from this group is worth noting (Example 20). According to the definitions of set theory, it is an example of (0,2,5), although at first glance it may not appear as such. But according to Forte, (0,2,5) can also appear melodically as a progression of a whole step followed by a fifth. I recognize a single example of (0,2,5) expressed as a step followed by a skip of a fifth (ascending) in the seasonal tune for Shavuot, which some circles consider a “Western European version” particularly in its usage for *Akdamut* (see also footnote 30 above). The uniqueness of this example raises the taxonomical question of whether it merits a separate motif category. Of course, that depends on how broadly one construes the intrinsic fuzziness of the (0,2,5) category. Yet this particular configuration of (0,2,5) is also unique in the sense that—so far as I know—it appears only once in the entire repertoire. Thus we may either include it in the (0,2,5) category or view it as a singular anomaly, or at least a rare exception. In any case, its connection to (0,2,5) is clear and thus it certainly belongs in the overarching group of “step and a skip” motifs.

***A fuzzy element in the signifier of the classifying unit***

Fuzziness can operate at more than one level of a classification scheme. For the most part, the classification of the motifs discussed thus far is fuzzy insofar as each motif can be featured in more than one time-and-occasion category. This fuzziness is compounded by the occurrence of variations on a defined motif, or cases of overlap where the same group of notes can be described in more than one way and can thus be slotted into multiple categories. Thus, in addition to fuzziness with respect to the assignment of motifs to time-and-occasion categories, we must also grapple with fuzziness of what the definition of the motif is with respect to its variants (i.e., when something can be considered a variant of the motif and when we can no longer perceive it as such), and finally, with how we define the category of motifs itself.

As we briefly noted in the previous section, the very grouping of all of the “one direction step and skip” motifs ([0,2,5] and [0,2,7]) under the same heading may create issues of taxonomy and classification. Specifically, it raises the question of how to distinguish between note-patterns that are variants of the same motif and note patterns that belong to distinct motifs. Other facets of motif-level fuzziness include the attribution of the same group of notes to different motifs, or cases where a single group of notes can be regarded as two variants of the same motif or as two separate motifs. Alternatively, a single group of notes may display two traits, maybe even

three, each one a defining feature of a different motif. Thus the fuzziness intrinsic to the assignment of motifs to time-and-occasion categories is repeated, and even multiplied, at the level of the motif.

The “one direction step and skip” motif defined above can be used to illustrate some of these issues. That motif includes two groups of notes, (0,2,5) and (0,2,7), and the notes in each group may occur in multiple permutations (Examples 11 and 18). Yet each group of notes could also be treated as a distinct motif and assigned to its own category. But each group of notes may occur in an ascending or descending sequence. Thus, not only these two categories may also be considered one, but each one of them by itself may be considered one category or four distinctly separate categories. We may pose the question whether the descending option constitutes a marker of a different class from the ascending, thereby suggestion two different categories. Conversely, we may also establish a distinction between cases in which the skip follows the step and vice versa (i.e., one is an inversion of the other) and even cases where the skip is both preceded as well as followed by a step. Would any of these possibilities render these different variants of the “same” motif, and the same taxon? Could each one of them constitute a separate class in and of itself or still yet, some in-between combination? The answers to those questions could be yes or no, and each option would result in a different taxonomical unit; the validity of both of them is the manifestation—and/or the cause—of the fuzzy nature of the system, and in this case, the fuzzy element in the taxonomical typology itself. Admittedly, this is a different class of fuzziness, which concerns the issue of the level at which we “split” a category, i.e., adding more and more subcategories. The fuzziness involved here is with the idea that we do not necessarily have to make a distinct decision as to this level of categorization. In other words, we do not have to view it as a matter of either/or (e.g., either one category that includes all of its potential sub-categories, or consider each one of these as a separate category in and of itself) but rather leave both options as one, yet fuzzy,

Another fuzzy element in the classification system itself appears among the step and skip, or motifs ([0,2,5) and (0,2,7]), the 4<sup>th</sup>+3<sup>rd</sup> motif, and the “plagal Russian” motif. To begin with, the core of the “quasi Russian motif,” or at least the minimum that all of its variants share, is a step and a skip of a fourth. Although, as Example 3 demonstrates, the “quasi Russian motif” normally presents itself as part of a more involved progression, in its most basic form it is indistinguishable from one of the

permutations of (0,2,7)—the last motif in Example 18 (see the first motif in Example 28). Granted, when it is not the most basic form, there are also other differences; the question is whether these differences are significant enough to render it a separate category, and more important, what choice of viewing the matter contributes to a better understanding of the overall system.<sup>36</sup> The last fuzzy element in the criteria for categorization of the cross-repertoire motifs I presented here stems from a particular manifestation of (0,2,5). One of the expressions of (0,2,5) is in the motif types of the *magen avot* mode.<sup>37</sup> Motif-type J in Example 27 represents different idiomatic approaches to the mode's *finalis* on 5. As we can see many of them constitute some combination of a step and a skip of a fourth. A related element in this table is motif-type D1. It is identical to one of the variants of motif-type J, but here it represents one of the more common and specific variants of an approach to a pausal tone on 5 (motif-type D). It too consists of a skip of a fourth followed by a step. Yet this is also a common variant of an approach to the *finalis* in *Ahavah Rabbah* (particularly in a cadence, and as such, one that “bypasses” *Ahavah Rabbah*'s constitutional augmented 2<sup>nd</sup>.<sup>38</sup> Hence, when this motif is used in *Ahavah Rabbah*, it is not clear whether it is functioning as a variant of a (0,2,7) motif or whether it is functioning as a variant of a 4<sup>th</sup>+3<sup>rd</sup> motif, creating a fuzzy area between the two (Example 28). The nature of a fuzzy system allows us to keep these options open without having to decide on one of them.<sup>39</sup>

For example, as discussed above, it is equally possible to establish only one overall category under which all the motifs that consist of a step and a skip belong, or to subdivide them into two separate sets (0,2,5) and (0,2,7), or to subdivide them even further into descending versus ascending motions within each set. Alternatively, it would be possible to divide the step and a skip motifs into ascending versus

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<sup>36</sup>The answer in this specific case is, in my view, yes. Nevertheless, within the framework of this discussion I do not set out to provide the answers to these questions but only to point out to the fuzzy areas they create.

<sup>37</sup>Tarsi (2001-02, 61-62 and Example 2).

<sup>38</sup>It is significant that in *Magen Avot* the approach is to the 5 of the scale, while in *Ahavah Rabbah* it is to 1, because of the unique symbiosis of *Ahavah Rabbah* and the minor scales based on its fourth degree (“the Equivalent minor”), which renders the 1 of *Ahavah Rabbah* (to which this motif leads) identical to the 5 of the minor. See Tarsi (1991, 6-9).

<sup>39</sup>Of course, in a particular specific context an ambiguous variant might very well be functioning as one option or the other, in which case it would be possible to decide which motif it effectively represents.

descending motions without dividing them into a (0,2,5) set and a (0,2,7) set, among several other classification options. Eventually in this case, as well as all other cases where several options exist, it is necessary to determine which similarity (and by extension which differences) should govern the classification system at the highest level. Nevertheless, even this consideration may change depending on the specific topic we seek to explore. Thus the default guideline overall is to let all options remain in place, which in itself is just another aspect of dealing with the fuzzy nature of this system.

### *Other possible motifs*

In addition to the cross-repertoire motifs discussed above, there are five other candidates that have yet to be explored. The first is the above-mentioned motif-type D1. Specifically, what is at issue here is whether the presence and function of D1 in *Ahavah Rabbah* and *Magen Avot* as opposed to its presence and function elsewhere justifies designating it as a separate cross-repertoire motif. A second possible cross-repertoire motif is an ascending skip from scale degrees 5 to 8 (e.g., motif G in Example 27). The descending version of this motif may be treated as a variant or as a separate category. Other variants of this move may present fuzzy categorization criteria that may or may not require a decision. A third possibility is what is now commonly referred to as either “*revia*” or “*darga*” motif, a typical example of which is the first measure of Example 19.<sup>40</sup> In defining this motif we also need to take into account a few tonal or modal considerations, its specific context, and *ambitus* and scalar factors.<sup>41</sup> A fourth possible motif to explore is a descending tetrachord, perhaps specifically from scale degree 8 to 5 or from 5 to 2. The fifth possibility consists of a

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<sup>40</sup>When he taught at the Jewish Theological Seminary, Brian Mayer called this pattern “*Revia* motif” due to its similarity to the musical rendition of a High Holiday cantillation motif named *Revia*. Charles Davidson refers to this motif as “*Zarka* motif” for similar reasons. The same motif also appears in Lachmann’s cantillation table for Lamentations (*Eicha*) as the cantillation motif for *Zakef Katan*. As noted above with respect to the possible connection between (0,2,7) and a cantillation sign in *Shir Hashirim*, there is a serious methodological flaw in identifying cantillation patterns from scripture music in the context of liturgical or prayer music. Nevertheless, in the two specific cases noted here, there are legitimate grounds for speculating on a possible influence or dependence (see also comment above to which footnotes 21, 22 relate).

<sup>41</sup>For a detailed discussion of this motif in different contexts and as part of a larger tonal, modal, and scalar construct, see Tarsi (2002a, 172-75).

descending 1/2-1½-1/2-1 pentachord (“Ukrainian Dorian”) from 5-1 (either within a minor tonality or in *adonai Malach* mode) and from 8-4 in minor, which may also be construed as a non-structural but typical ornamentation in *Magen Avot* mode, as well as a structural element and a marker in some versions of the evening service for the Three Festivals (*Shalosh Regalim Ma’ariv*.)

### ***Discussion***

The very nature of fuzzy classifying systems is that they contain elements whose properties align them with more than one category. The advantage of identifying these systems as fuzzy is that there is no critical need to choose between these categories. The element at issue can thus belong to some degree in one category and to another degree in the other. Moreover, some properties in and of themselves are ambiguous enough to be associated with two different categories.

As mentioned at the outset of this discussion, unpacking the repertoire at hand involves a process of taxonomy and classification. The cross-repertoire motifs identified above are simply an outcome of the typology and the properties chosen to define the taxonomical units. The choice of defining properties, however, is not arbitrary. The underlying objective is to create a working taxonomy whose typology is meaningful in the context of the practice it represents. As it so happens, the definitional choices made here yield a very efficient classification system that contains little overlap between categories and, at least hypothetically, the fewest or no empty sets. Given the classificatory feature chosen as the principle one (primarily time-occasion-calendar), which I believe is the most befitting to this discipline, the motifs that belong in more than one taxon may carry further significance than we currently recognize, which opens up another, new direction to explore. Clearly, we must first identify them and place them in their respective location in the overall mapping process. We also have to include their fuzzy aspects in order to keep the taxonomy intact and in place.

Addressing cross-repertoire motifs, this paper touched on only one dimension of the fuzzy nature of the system that underlines the liturgical music of Ashkenazi tradition. Yet, as such, it can serve as a case-study of how any fuzzy aspects may come into play within this system. The initial procedure here serves to map these motifs within the overall system. Yet it also demonstrates how handling cross-

repertoire motifs as a fuzzy aspect enables us to incorporate this component into a working definition that is consistent as well as coherent and cohesive.

In view of how we handle an ambiguous item in such a classification system, we can assign it to one category or the other, as well as letting it remain a fuzzy variable. Ultimately, however, categorization of the elements of a system should contribute to a clearer understanding of the system in its entirety. In our case, the goal of classification is to ascertain what properties or features of musical motifs best allow us to determine how the Ashkenazi system functions as a whole. Yet this can only be achieved if we begin by accepting the fuzzy factor inherent in the system and seek ways to incorporate it into our understanding.

Beyond finding and identifying cross-repertoire motifs, we can look forward to many possible further developments, such as refining the definitions of these motifs as well as further exploring their function and interrelationships with extra-musical factors. We should also strive to recognize the specific cases in which the fuzzy element is absent and a clear category of a given motif is in place. Identifying cross-repertoire motifs is also necessary to avoid mistakenly misinterpreting merely the *presence* of a cross-repertoire motif as an indication of the wrong taxon or at times mode category because it is *also* present there, and thus be able to settle what might seem to be an undermining factor. Another step would be to use this “conceptual territory” as one of the constituents in the overall mapping of the entire system, including its other constituent building blocks (e.g., motifs that are associated with certain “modes”, the different “manners of conduct,” or norms of performance that constitute this discipline.) Moreover, not only may cross-repertoire motifs be one of the key elements of the system, their nature and function may also point the way to a conceptual approach and a methodology useful in the overall process of defining, describing, and articulating the system.

In turn, incorporating the concepts of cross-repertoire motifs can shed light on overall general observations and questions about how this practice and discipline “works”: how it is experienced by both the performer and those participating in the liturgy, or how the insider finds his way through it (for example, what happens as the insider participant identifies a cross-repertoire motif on two different occasions, some of which may not even be closely related), and on what level of consciousness, and how this affects the performance of the liturgy and the liturgical experience. On the other hand, perhaps there is a built-in utility to “cross-repertoire-ness” that we do not

yet recognize and which we may explore either historically if there is evidence, or socially, or ethnomusicologically by interviewing participants, practitioners, lay people, and professionals. Together all of this material gets us closer and closer to understanding and conceptualizing what we may intuitively recognize as the unique sound of prayer music of the Ashkenazi tradition.

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