# Uncovering the Music Theory of the Ashkenazi Liturgical Music: "*Adonai Malach*" as a Case Study[1]

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## The Conceptual Territory and a Call for a New Paradigm

ONE of the persistent challenges in the research of Ashkenazi liturgical music has been the quality of the relationship between theory and practice in this discipline. In the Jewish tradition, liturgical text has always been performed as music, in the form of singing or chanting. In this sense the Ashkenazi tradition is no exception. Moreover, so far as we know, the musical setting of the text, although not strictly prescribed, is not the random outcome of the individual performer's whim. Rather, an underlying system directs and organizes the musical performance as it unfolds along with its respective text and ritual. Nevertheless, unlike other similar traditions and disciplines where some kind of explicit music theory—whether rudimentary or well developed—was transmitted from generation to generation, there is no evidence that this was ever the case in the Ashkenazi tradition until some attempts to reconstruct the conventions that governed this tradition begin to appear. Yet even with these discussions, which began close to a millennium after the community that practiced it had come into existence, the question of how to articulate the theory that underlies the practice has provided an ongoing challenge.

Three primary factors hinder any attempt at a comprehensive description of the theoretical underpinnings of synagogue music. First, for most of its history the tradition of Ashkenazi liturgical music has been transmitted orally, and to a significant degree it still is. Second, as mentioned above, no body of theory was transmitted along with the music. Third, the practice of Ashkenazi liturgical music constitutes an extemporized, semi-improvised musical discipline.[2] Thus, the orally transmitted tradition included not only music, but also, on some level of articulation, guidelines for improvisation: a framework of reference by which the practitioner could accommodate a variety of musical and extra-musical factors in a particular performance. This set of guidelines that govern performance, if conceptualized, would in fact constitute some kind of music theory.[3] In other words, the practice *is* an applied

1. An early seed of this article was read as a paper entitled "The *Adonai Malach* Mode in Ashkenazi Prayer Music: The Problem Stated and a Proposed Outlook based on Musical Characteristics," presented at the World Congress for Jewish Studies, Jerusalem, 2001.

2. The specific type of improvisation or, more accurately, identifying the parameters of the extemporized elements in this practice is an involved and multifaceted topic worth investigating in and of itself; see also footnote 23 below.

3. To clarify, these "guidelines," developed in earlier centuries, did not constitute a music-theory discourse or a set of explicit rules. Rather, they were implicitly communicated during the transmission of this discipline, mainly by way of apprenticeship but also by the imitation of models that practitioners deduced from their synagogue experience, which began in early childhood. Although we do not know exactly what these guidelines were, we may hypothesize that apprentices were instructed as to how they might improvise their own version/variant

version of an unarticulated, unconceptualized theory. Yet, for whatever reason—perhaps because it was never committed to writing—this framework of reference was not explicitly codified as an overall complete system of music theory.

Indeed, even in the earliest surviving attempts to formulate a theoretical view of this music, which date to the last quarter of the nineteenth century, there is no representation of this kind of framework. Rather, the product of these efforts was a system of scales. Of these scales, some are vaguely defined in some discussions and not completely consistent in others.[4] The system included scales corresponding to "pseudo-Greek" modes,[5] sometimes slightly adjusted to match the scales used in particular musical settings; scales corresponding to the minor and major modes of Western common practice; and scales identified by their traditional Hebrew or Yiddish names. Some of these scales were unique to the Ashkenazi liturgical repertoire, while others had been incorporated into the repertoire and given Hebrew or Yiddish names. The imposition of this scale system on the tradition exercised a lasting influence on the way Ashkenazi liturgical music was conceived, an influence that to a great degree has persisted to this day.

The first fundamental change in this assessment of Ashkenazi synagogue music came about with the work of Avraham Zvi Idelsohn (1882–1938). So far as we know, Idelsohn was the first to introduce the notion that the Ashkenazi prayer modes are defined not only by their scale structure but also by some motivic considerations.[6] Idelsohn indeed introduced a motivic factor in his description of "prayer modes." Nevertheless, a programmatic review of these descriptions reveals that due to several unresolved conundrums and some fundamental contradictions and paradoxes, Idelsohn's definition of the modes remains, *de facto*, a system of scales.[7]

Although I do believe that a review and analysis of the historiography of this topic is an essential step in the process of attempting to clarify the practice and create an applicable music-theory model, this paper does not engage in that undertaking.[8] One can observe,

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while remaining within the degree of freedom that was considered correct according to this discipline.

4. Numerous factors contributed to the origins of this (exclusively scalar) perception and the shape it took. For an analysis of these considerations, as well as references to other sources that cover each factor separately, see Tarsi (2013b).

5. I borrow this term from Powers (1998a, 337n19).

6. Earlier sources did engage in music analysis that addressed motivic and thematic content, but they did not establish a connection of this analysis to the unpacking of the system, or conceptualize their observations—even if the results included the identification of motifs—as an integrated and defining component of this framework, or as a constitutional component in their discipline.

7. The conceptual, methodological, and epistemological factors behind the discrepancy between a declared motivic approach and a *de facto* scale-derived definition are complex and involved. For a review of some of these factors, see Tarsi (2017). For some of the background on the circumstances that shaped Idelsohn's approach and work, see, for example, the essays in Adler et al. (1986), Burstyn (2008), Frigyesi (2003), Seroussi (2004) and the sources it mentions, and Tamir (2005). Loeffler (2010) offers the context for specific concerns, and touches on issues of specific milieu, zeitgeist, and influencing factors.

8. For an attempt to fulfill this need at least partially, see Wohlberg (1954) and Tarsi (2013b, 2001–02). This discussion does not set out to offer a detailed critique of previous literature. Consequentially, I am not accounting for other problems and difficulties inherited in these sources that are also worth examining (and that

however, that there are several fundamental deficiencies even in the minuscule number of discussions devoted specifically to the prayer modes in the repertoire. In addition, following Idelsohn's work, a few other models do mention motivic factors, usually as a tangent to a discussion of other subjects.[9] This paper does not offer a review of these attempts either. Yet for our purpose here, we should briefly note the main difficulties they present so far as motivic content alone is concerned.

The main shortcomings of the models that have taken motivic elements into account is that often they do not agree on what these motifs are: each model misses some or much of the motivic content, some models include motifs that current research shows are not among the defining features of a mode, and each model includes a number of items that are not independent motifs but rather variants of the same motivic element. Furthermore, these models still rely too much on the scalar component, and all but one (Avenary) still rely on an Idelsohnian paradigm that renders them heirs of the same factors that limited Idelsohn's work. All these models offer a portrayal that is incomplete or lacking in one aspect or another. They either refrain from presenting an overview of the discipline as a whole, or they try to squeeze it into a preconceived mold, attempting to subordinate it to the "one governing principle" that this repertoire cannot accommodate.[10]

A further circumstance complicating the evaluation of these models is that they fail to adduce sufficient evidence for their claims. Either they include no concrete examples to ground their analysis, or they present at best a single example, and with one exception, they do not name their sources.[11] This is especially significant in cases where these motivic descriptions do not match the musical material; in the absence of source citations there is no way to explicate these discrepancies (which are invisible to the reader who does not know the musical material or does not examine it).[12] Finally, perhaps the most important element missing from all previous models is an account of the extemporized, semi-improvised aspect

to some degree have been examined elsewhere). I only mention this particular aspect here because it directly concerns the very premise of my model.

9. See, for example, Cohon (1950), Idelsohn (1932, 1933, 1929), Levine (1989), Werner (1959, 1976), and Wohlberg (1954).

10. The quotation marks here signify a reference to Judit Frigyesi's (2008, 1223) observation that this repertoire "does not allow itself to be systematized according to any one governing principle."

11. In Cohon (1950), the author occasionally notes that he is basing his conclusions on the work of Idelsohn. Yet, Idelsohn himself, despite his vast body of collected material, does not mention which sources, if any, he was relying on when he formulated his own motivic description. This is slightly different in Idelsohn's *Thesaurus*, but the same difficulty is still in place; the motivic analysis that he provides in descriptions of the modes is parceled out in the introductions to the *Thesaurus*'s volumes. Thus, presumably his descriptions are drawn from the sources these volumes present. Yet in the introductions' analyses, musical examples, and motif or phrases tables, Idelsohn does not cite specific musical examples from the body of the thesauruses themselves so there is no evidence that the motifs in the introductions can be supported by the material these volumes contain (see, for example, Idelsohn 1932, 1933).

12. See one demonstration of this phenomenon related to a motivic table of "*Mogen-Ovos-Steiger* (MOS)" in Idelsohn (1933, xxiii) as discussed in Tarsi (2001–02, 55–56).

fundamental to this discipline, which I discuss further below.[13]

Given the failure of previous models to address motivic factors and extemporization in Ashkenazi liturgical music, I propose that a new paradigm can provide a better starting point for recovering the theoretical underpinnings of this discipline. Such an approach takes into consideration a wider range of evidence—phenomenological, cognitive, and experiential—to establish a typology of the various prayer "modes." Indeed, one of the difficulties in this constitutive process stems from what appears to be a matter of terminology. Generally speaking, the deficiency of "mode" as a conceptual base unit in a music-theory model that incorporates vast and diverse systems in different repertories is a recognized and discussed conundrum in musicology and ethnomusicology.[14] In our case, too, the unique essence of the liturgical "modes" calls for a term that on the one hand would be flexible enough to include the different "species" of such "modes," and on the other hand, specific enough to capture their uniqueness.[15] Moreover, the constituent "modes" in the Ashkenazi system comprise such fundamentally different species of musical procedure (not to mention the variety of extra-musical considerations attached to each species) that calling them modes may undermine the taxonomical objective.

I propose that the "modes" in this discipline can be better understood as the varying manners by which music (and other phenomena with which it interacts) "conducts itself."

13. There are other factors that further complicated the matter, and one of them deserves comment here. The unpacking of the mode—as well as the entire system—in earlier models was based on phrases rather than separate motivic variants, which must be identified as separate constituents. The failure to recognize motifs—let alone motif-types—as the smallest melodic unit prevented researchers from considering the question of how modular motifs were assembled to create a large variety of possible phrases. In fact, once we realize that motif-types are the basic unit, as discussed below, and that it is possible to create a large number of phrases consisting of different permutations of motivic variants, two things become apparent: first, in this particular system a mode is not defined by a fixed number of specific unchangeable phrases; and second, phrases that appear in the practice and in written sources but were ignored in past studies because they did not fit the author's definition of "mode" are now accounted for under the rubric of the mode (see also the discussion of the various ways of joining motif-types together below).

Another difficulty, particularity in Boruch Cohon's (1950) article, is the inclusion of the musical rendering of parts of the liturgy whose music does not belong to the *Adonai Malach* mode under that rubric. For a discussion and demonstration of the "over-inclusion" of different musics within the same mode category and its consequences, see Tarsi (2017, 20–23, passim). Not only does the music for these sections of the liturgy comprise completely different motifs and musical material in general, these sections are not even based on the same note-collection or scale of *Adonai Malach*. For a more detailed and clear discussion of one example of this phenomenon in *Akdamut*, see Tarsi (1991, 10–15; 2002a, 155–56).

14. See, for example, Powers (1998b), or the exploration of this conceptual territory in Powers (1981), particularly "Introduction: Mode and Modality" (1981, 501–503) and the concluding discussion (1981, 544–49); for a discussion of specific examples, see Powers (1988).

15. Early practitioners and some of the earlier music-theory discussions, as well as current practitioners and educational circles, use the term *Steiger* in contexts in which it seems like a possible alternative to "mode" (see "manner of conduct" below). This term is prevalent in a significant portion of the literature in this field. Some selected sources that treat *Steiger* as the primary equivalent of "mode" in Ashkenazi synagogue music include Avenary (1960, 190–91, 194; primarily an attempt to "translate" the term from its insider's usage), Avenary (1971, 11–21), Levine (1980–1981, 13–15), and Tarsi (2013b, 2001–02, 2002b). For related discussions, which can only be read critically and understood within their context and era, see, for example, Cohon (1950), Glantz (1952), Idelsohn (1933, xx–xxvi), Levine (1989, 79–106; discussed as "the principal prayer modes"), Werner (1976, 46–64), and Wohlberg (1954).

Consequently, I suggest that the phenomenon behind what the term "mode" needs to cover in our case is precisely these different "manners of conduct." This term—"manner of conduct"—therefore, better characterizes the "modes" in this specific discipline.[16] One way of apprehending, at least partially, a manner of conduct that is particularly relevant to the model presented here is to construe it as the total sum of the interconnections among the musical factors and the aggregate relationships among musical and extra-musical factors.

Most important, a new paradigm must accommodate the semi-improvised quality of Ashkenazi liturgical music: to characterize the "manners of conduct." This in turn requires the introduction of another concept, "degrees of freedom," which affects practically every aspect of how we conceptualize the way in which this system operates. The new paradigm thus postulates an alternative way of thinking about the identification and use of liturgical music's primary constituent components. These components are not really a set of fixed motifs associated with each manner of conduct. Rather, as I shall describe below, the basic units in this musical discipline are sets of proto-motifs, or motif-types. From these motif-types the practitioner fashions different motifs and motivic variants; together they constitute the architectural plan for this musical-liturgical performance.

## Fuzzy Systems, Degrees of Freedom, and Motif-Types

Among its main fundamental qualities, the new paradigm proposed here accommodates a salient feature of the traditional performance practice, namely its extemporized nature, which can best be articulated in terms of music theory if it is approached as a "fuzzy system."[17] As noted above, the practice of Ashkenazi liturgical music has been (until recently, and often still is) orally transmitted, and is characterized by extemporized, semi-improvised performance.[18] Even the material preserved in written sources represents, in essence, improvised performances that have been selected and notated by their respective practitioners/authors.[19] An immediate consequence of this extemporized quality is that the

16. "Manner of conduct" is an initial attempt to express in English the articulate and pointedly precise Hebrew term *ofen hitnahalut*, offered to me by Ruth HaCohen (introduced in HaCohen and Tarsi [2009]). There are several indications that the use of the word *Steiger* (see the previous note) reflects an intuition or awareness that the modes in this system are closer to what HaCohen identifies as "manners of conduct." Indeed, I maintain that a reframed and adjusted definition of this insider term is the appropriate designation for these "manners of conduct"; for the purpose of this discussion, however, and especially in view of the specific repertoire sample it examines, I sometimes still employ the somewhat unsatisfactory "mode."

17. Literature on fuzzy systems and how to work with them abounds. For an accessible introduction to the concept see, for example, Kosko (1993). An initial exploration of Ashkenazi liturgical music as a fuzzy system, as well as examples of how this quality expresses itself and how it affects our understanding of this system, was presented in Hacohen and Tarsi (2009), and in Tarsi (2013a).

18. Indeed, Powers (1998b, 140, 143–45) notes that different types of improvisation constitute one defining characteristic in his classification of different subcategories of modal practices.

19. We should note that the information gleaned from these written documents is also limited. For example, they shed little light on metrical and rhythmic aspects. In most cases, however, we can fill in these blanks with information gathered from fieldwork. Some of the specific limitations of these factors can be inferred from observations in Frigyesi (1993) and Frigyesi (2005). Also note an attempt at different rhythmic notations in Ne'eman (1968–69, 1972–73).

system includes a variety of "degrees of freedom."[20] The practitioner confronts a range of options at each level on which the system of liturgical music operates—from the fundamental level of motif choice, or even the choice of notes within a motif, extending up through the application of a pre-set phrase and the degree to which the practitioner can vary it, or the selection of tonality within a given tune, all the way to the uppermost level at which the musical choices govern an entire liturgical section.

Crucial to our discussion is the recognition that the fuzzy nature of the system extends all the way down to the level of the motif. The motifs at the core of a given manner of conduct are not rigidly defined but flexible and variable, and performers have the freedom to mold, shape, and in essence create them in different ways so long as they adhere to the "guidelines" inferred from the motif-types and their respective degrees of freedom. In this sense, the extent to which practitioners may indeed vary these motifs, and how they may do so, is part of the description of each motif-type specifically, and in general a factor in defining the overall system. In light of this fluidity, "motif" is not the best term to describe the fundamental building blocks of this system, and therefore not the most conducive term for this music-theory model.

Discussions of motivic content in Ashkenazi prayer modes published prior to the last quarter of the twentieth century provide examples of motifs or "characteristic phrases."[21] The examples include small musical "cells," short mini-phrases and music fragments whose constituent parameters (pitch, rhythm, intervals, size, number of notes, etc.) are precisely indicated and notated in concrete detail. What is missing, however, is any attempt to construct a rigorous, theoretical account of the ways in which such cells as well as other possible variants could be generated by the practitioner or, in other words, any attempt to articulate, in music-theory terms, the degrees of freedom with which such "cells" can be implemented in performance.[22]

To be sure, earlier researchers knew that practitioners, as well as insider semi-scholars and teachers, considered each precisely articulated motif only as an example, a sample of sorts—an approximation of one possible option out of many other, tacitly implied, variants. Because earlier scholarly representations of the musical system lack a theoretical account of the performer's freedom to adapt a given set of motifs, however, they reflect a fundamentally different paradigm that overlooks one of the most essential dimensions of this particular

20. I borrow "degree of freedom" from disciplines such as physics, chemistry, biology, mechanics, and statistics. The closest analogy might be chess, in which the "degree of freedom" is the total set of possible moves available to each piece on the board at any given moment. Accordingly, in our case it refers to the performance options available to the practitioner at any particular moment during the performance.
21. "Phrases" is used primarily in Avenary (1971) and Cohon (1950), although implied at times in Idelsohn's work. See also discussion of motifs' being imbedded within phrases below.
22. In fact, the motif-types I discuss and demonstrate below are in part the outcome of a meta-analysis of the studies that identified motifs or "characteristics phrases." See also Example 3, and footnote 32 and its related discussion.

discipline, in which the performer is also the creator, the on-the-spot quasi-composer.[23] The practitioner's semi-improvised performance is conditioned by a set of fuzzily defined musical elements. Thus, any articulation of the theory behind this practice must acknowledge and conceptualize the extemporized factor as it is determined by well-defined, fixed elements within the defining parameters.[24]

In view of the above, rather than "motif," I suggest that a better term for such musical elements would be "motif-type." The motif-type is an abstraction that represents a family of variants that are perceived to constitute the same building block—a proto-motif from which motifs, motivic variants, and other musical characteristics are constructed. It is a way to describe elements—whether notes, phrase fragments, different "cells" of notes, "moves" (see below), or other musical characteristics—that manifest in many different ways according to their respective degrees of freedom, yet in practice they are regarded as "the same."[25] Together, these motif-types form a schema from which the different motivic variants are extracted and the musical characteristics of the "mode" are derived.[26] By default, this definition also marks the degree of freedom of each of the derived motivic variants: each constituent of this blueprint indicates the minimal requirements that define a motif, motivic variant, or musical characteristic. In other words, a motivic variant may incorporate any free musical elements so long as it retains the minimally essential ingredients specified by the motif-type. A musical gesture that deviates from the essential features of one motif-type is not a variant of that type but rather a free melodic fragment or an expression of a different motif-type.

In concrete terms, each motif-type, when realized in a specific musical expression, may

23. This type of extemporized performance is thus comparable to the genre of oral performance examined in Albert Lord's (1960) classic study.

24. At this stage I resist the obvious comparison to jazz. It may be worth noting, however, that different traits of this system have their equivalents or parallels in numerous other disciplines and traditions. At present, however, I am simply concerned with mapping out the Ashkenazi system in its own terms, a procedure that may indeed form the basis for a variety of comparative studies.

25. Similar phenomena have been noted by other researchers of Jewish music. In Robert Lachmann's (1978, 52) study the description of *melodische Bewegung* refers to cases in which a variety of note-groups (consisting of different tones) or tone-sequences are considered to be the same "Gestalt" by the insider. Lachmann notes that "the question is how far may diverse renderings of the same melodic movement deviate from each other without losing their claim to identity." Closer to the field at hand, Mazor and Seroussi (1990–91, 140) recorded an insider's expression found mainly among practitioners of Ashkenazi secular *Klezmer* music, *tenu'ah* (Hebrew for "movement" or "motion"), which they acknowledge is vague and can only loosely be described as "a short musical unit or fragment of . . . characteristics" that remain "undefinable" after attempts to clarify by interviewing informants.

26. My use of "motif-type" is somewhat comparable to some uses of the term "melody type," except that where the latter refers to an entire melodic line or pattern, "motif-type" refers to a single motif or some components of a motif. In this respect, although it is somewhat different from its use in Juhász (2009), the general idea is the same. The difference between the typological principle of "melody type" and that which is behind my use of "motif-type" here is worth discussion, but it goes beyond the scope of this paper and has no implications for the current stage of the investigation. Nevertheless, we should note Frigyesi's use of "melody type" as a primary component in her melody-based model for this discipline (especially in Frigyesi and Laki [1979–80]). Note, also, that what I term "motif-type" is fundamentally different from Powers's "motivic type," as used, for example in Powers (1998b, 140, 142–43).

constitute a different type of musical building block. Thus, so far as the musical component is concerned, the overall outcome of this conceptualization is a model that represents a musical performance as an event in which, at any moment, different parameters of the music become determinant. These parameters may be of several different types. For example, one moment this may be a governing tonal characteristic, and in the next moment the free use of a given tetrachord or pentachord (e.g., "I" in Example 5 below). At a different moment the dominant factor may be almost a fixed motif, yet later it may be any musical motion contained within a given *ambitus* ("D")—a fragment of melody, a miniature musical phrase, or part of a phrase. Other possible parameters include a musical gesture, a given group of notes, an interval or a set of intervals, or only a characteristic contour.[27] At times, the determining factor may be a single musical variable: a note on a specific scale degree, reciting or pausal tones (some on specific scale degrees), and so on.

The manner in which these motivic variants are organized into larger units such as phrases varies significantly from one motif-type to another and depends on a variety of circumstances. These may include various factors, such as the preceding or succeeding motifs, the connection of the music to the text, or the structure of the paragraph or liturgical unit. Other considerations may be calendrical factors, such as the hour, day of the week or month, or season of the performance, or the specific occasion for the performance—a holiday or life-cycle event. Thus, the location of a particular motivic variant within a phrase may be prescribed in one set of circumstances but left up to the performer (who may choose to omit it entirely) in another. Alternatively, although this is uncommon, a motivic variant may even be specifically prescribed for different parts of the same phrase depending on the liturgical text or occasion. For example, when the *Hatzi Kaddish* is performed on the evening services of the High Holidays, the third variant in motif-type J (Example 5) may not be placed at the end of a phrase but at the beginning.

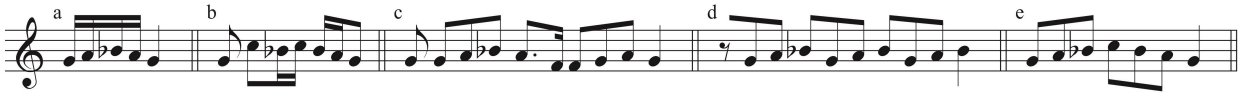
## Motif-Types and Their Derived Motivic Variants: Motif-Type as a Marker of Degrees of Freedom

Before we examine the specific details of the motif-types in *Adonai Malach*, a concrete demonstration of the concept of motif-types and the variants that can be derived from them may be helpful. In addition, as mentioned above, the identification of the defining constituents of the "prayer modes" in the Ashkenazi tradition as motif-types *ipso facto* also delineates their built-in defining degrees of freedom to a significant extent. Thus, by examining one of the *Adonai Malach* motif-types as a case study, we can understand how different motivic variations are extracted from a motif-type, as well as how these variations determine the degree of freedom of the given motif-type. As explained in more detail below, motif-type D (in Example 5) is defined by the use of two notes ("scale degrees" 5 and 7) as structural notes. The degree of freedom established by this definition is fairly broad: so long as

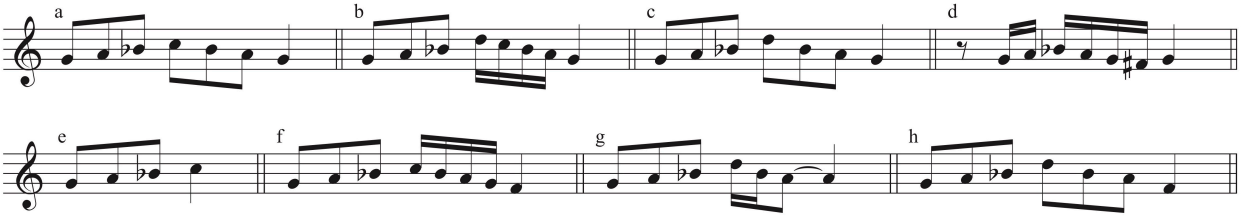
27. *Adonai Malach* itself does not include such a defining characteristic. For an example of a contour-defined motif-type, see "musical characteristic H" in Tarsi (2001–02, 61, 63–64, 66).

the motifs derived from this motif-type feature these two notes as structural, they are considered variants of motif-type D.[28] Moreover, so far as the defining parameters of this mode are concerned, the derived motifs are considered to be "the same as" the motif-type from which they are derived.[29] Consider, for example, the different variants in Example 1; all of them may be explained as a realization of motif-type D. In comparison, the variants featured in Example 2 serve to illustrate how some motifs or musical fragments extend beyond the degree of freedom that defines the motif-type, as well as some "fuzzy" in-between cases.

To illustrate the spectrum of divergence we may begin with a motif that can still be considered an expression of motif-type D (Example 2a). The structural notes here are scale degrees 5 and 7 (G and B♭) while scale degree 8 is perceived as an upper neighbor. The variant in Example 1c is also within the defining degree of freedom, with a lower neighbor note (F).[30] Example 2b, however, pushes the envelope a bit and therefore might enter a fuzzy realm, between a variant that may be still related to motif-type D yet may also be perceived as a free




**Example 1.** Several realizations of motif-type D.




**Example 2.** Melodic patterns that diverge increasingly from motif-type D.

28. The range of factors that determine whether a note is "structural" is too involved to elaborate on in this paper, but a few examples may be given here. Some of these factors concern the relation between text and music. A note that coincides with an accented syllable is likely to be perceived as structural, as is a note that coincides with a word or phrase that is emphasized due to its significance in the liturgical context. On a larger scale, the rhythmic and metrical considerations of the text as a whole determine whether notes are structural. Notes may also acquire structural value in cases where it is possible to imagine the presence of a beat, such as the first and third notes of a series of four sixteenth notes (Example 1a).

29. This observation derives from the larger issue of "sameness and difference" in any ontological discourse. Ruth Katz briefly touches on this topic specifically in the work of Idelsohn in Katz (1986, 366). See also "*melodische Bewegung*", and "*tenu'ah*" in footnote 25 above.

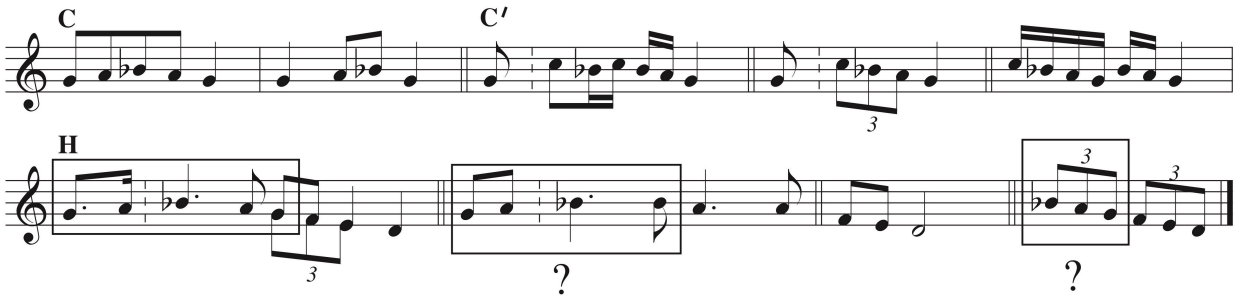
30. This particular variant is used exactly as spelled here and always in the same way on the same specific parts of the texts in Jewish youth camps of North America (such as Camp Rama), and is often heard at American synagogues (particularly those of the Conservative movement) when led by lay people. On the influence of Jewish youth camps on the musical practices in the American synagogue, see Rothstein (1980), Tarsi (2002c, 66; 2002b, 179), and Spiro (1998).

musical move. What might give the impression that it is a valid realization of motif-type D (and not a free melodic fragment) is that the D and C can be clumped together as two upper neighbors of B♭ (in which case G and B♭ are still the structural notes), in conjunction with the fact that this variant completes a circle from G back to G and contains two occurrences of B♭ (the A that appears twice is clearly passing; see also footnote 28). Example 2c is even further removed because it is very unlikely that the note D should be perceived as an upper neighbor of B♭ in the complete absence of C, while the two B♭ notes, in all likelihood, would not be recognized as structural for metrical reasons. Moreover, the B♭ cannot be perceived as including D as an upper neighbor; another feature of this motif is that it begins to render G as its own tonic of G minor. Another step in this obfuscating direction is taken by Example 2d, which, because of the F♯, further tonicizes the G, and seems to be "borrowing" from Ukrainian-Dorian (see discussion below and footnote 64).

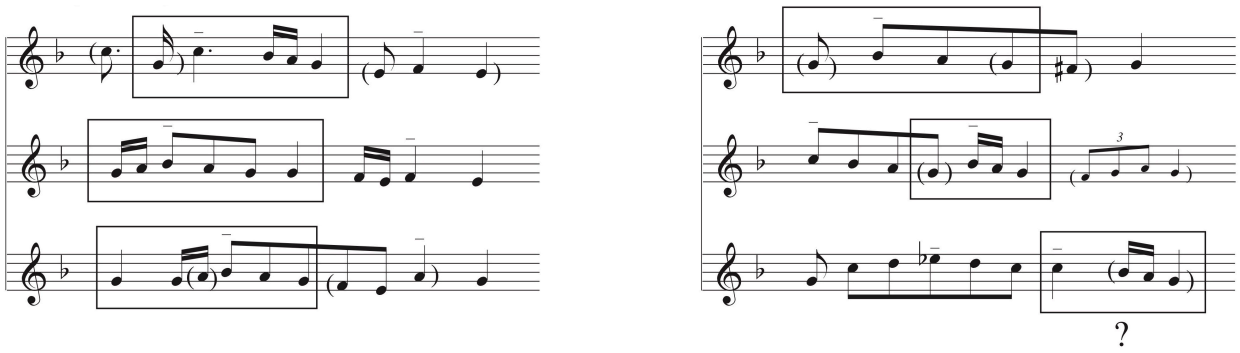
On the other hand, if we take the liberty of landing on F in Example 2f, then—even though this motif does not extend to D like the ones in Examples 2b and 2c—this motif can no longer be considered an expression of motif-type D, and in context it would be perceived as a "free move." Granted, it can still be used within the mode, but it is not a motif-type, and therefore its presence is not one of the diagnostic factors indicating that the mode used here is indeed *Adonai Malach*.[31] A similar consideration applies to Examples 2g and 2h. Variants c and e through h in Example 2, on the other hand, constitute a set of artificially constructed examples I am presenting to make a point, in which variants that are similar to motif-type D are not perceived as variants of this motif-type because of different aspects of their structural notes. It may not be a coincidence that although it is technically possible to include these moves in the chant, I have not actually found moves in the sources (or in Examples 7 to 9 for that matter) that depict motifs that are close to motif-type D, yet constitute simple free moves within the overall use of the mode. Rather than resembling a motif-type, free moves tend to be significantly different from the defining motifs (as demonstrated particularly in Example 9). By the same token, Example 2d may appear in the sources but would normally not be perceived as an *Adonai Malach* motif but rather as a minor key (in this case G minor) or as part of motif-type I (if the entire move includes an E♭).

31. As we can observe in Examples 7 to 9, the music does not consist of motif-types only but also includes fragments and phrase parts that are "free." In fact within the use of the various prayer modes in this system we can observe sections in which the defining motif-types are closely put together (such as the six psalms in *Kabbalat Shabbat* in *Adonai Malach*) and some in which the motifs are farther spaced in between, as in Example 9. Even more notable cases are, for example, the extended section of "*Ata Nigleta*" in *Rosh Hashanah*, as featured in settings by Joseph Heller, Meyer Wodak, and Joshua Weisser (see also footnote 66). As a rule, it seems that for shorter, more sectional, or strophic texts, or in the text that first introduces the mode, defining motifs are more closely put together, and as the liturgy unfolds, or in cases where the textual section is long and "through-composed," there is a freer use of the mode and the defining motifs are farther spread apart. For a discussion and demonstration of this phenomenon in a different mode, see Tarsi (2001–02, 70–71), particularly Example 9. We may also note that in the case of *Adonai Malach* specifically, this increase in "free material" between motifs may be a manifestation of the fuzzy distinction between the use of the mode and either a mixture of the mode with free use of the major key, or the cases in which the overall sense of the section chanted is a major key with an occasional insertions of a single *Adonai Malach* motif or the use of characteristic chromatic alteration (see discussion below and footnote 77).

Example 3 features a sample of other variants of motif-type D as they appear in three sources that were included in the meta-analysis I conducted, from which some of the motif-types in Example 5 are drawn.[32] The variety of ways in which motif-type D appears in them also illustrates one of the adverse effects of attaching phraseological functions to all of the motifs, as well as using phrases as the defining units. In some of these examples we need to "extract" the motif-type D variant from a phrase or a phrase fragment. I mark those instances by putting the motif-type D variant inside a square frame. They also include some good examples of "borderline cases" in which it is not entirely possible to discern the boundaries of the degree of freedom that defines a variant as derived from motif-type D. I mark those examples with a question mark under the frame in which they appear. These units are almost always identified as phrases, but in fact they comprise several different "moves," some of

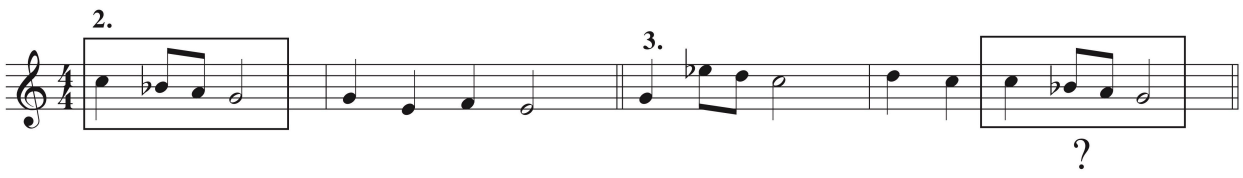



**Example 3a.** Variants of motif-type D from Avenary (1971, 14–15).




**Example 3b.** Variants of motif-type D (pausal phrases) from Cohon (1950, 20–21).

32. Cohon (1950, 20–21), Avenary, (1971, 14–15), and Idelsohn (1933, xx) respectively. In addition to those featured in Example 3, the other sources that were examined in this meta-analysis are Idelsohn (1929) Werner (1959, 1976), Levine (1980–81, 1989), and Wohlberg (1954). It should be noted that this meta-analysis was only one step in the process that resulted in the assemblage of motif-types in example 5. Primary sources were also examined, such as the ones mention in footnotes 32 and 42 and featured in examples 6a–c and 7–9. As discussed earlier in this article, one of the deficits of the late nineteenth- and early twentieth-century discussions on which the meta-analysis is based is that they did not include all of the motifs that are in fact constitutive of this mode.




**Example 3c.** Variants of motif-type D from Idelsohn (1933, xx).

which are variants of several different motif-types, and some of which are combinations of these variants with free "moves."[33]

### *Adonai Malach* as a Test Case

The preceding observations on the problematic term "mode" notwithstanding, the case study that follows concentrates on an item in the Ashkenazi repertoire that is indeed closer to the accepted and the more inclusive ethnomusicological concept of mode, *Adonai Malach* (or *Ha-Shem Malach*).[34] What I propose in this initial exploration is to identify this mode's musical elements, most of which are presented as motif-types below, and to describe their interconnections with the primary extra-musical factors—text, ritual, and norms of performance.[35] Eventually, this initial exploration should lead to a clearer picture of *Adonai Malach* as a manner of conduct.

Let me reemphasize that a motif-type approach is not merely a matter of semantics, a technical device, or a correction of an oversight in previous models. It is an essential feature of a revised paradigm that is a crucial step toward understanding how this performance practice operates. As an analytical tool compatible with a fuzzy system, the concept of the motif-type makes it possible to distinguish between the essential features that define constituent motifs and the accidental features that represent the practitioner's improvisational choices, thereby revealing the dynamic between defining constraints and specific degrees of freedom. Along with the motif-types, the specific indications of these freedoms are also a primary constitutional component of this discipline. Thus, the exact parameters and extent of these

33. We can also observe in Example 3 one of the most important desiderata overlooked by previous studies: the need for the system (and its descriptive theory) to incorporate the extemporized aspect of this discipline. In these examples we can see that instead of marking the boundaries of the degrees of freedom of possible motivic variants (which my model represents by motif-types), each one of these studies presents what is in fact only a slightly different motivic variant in each source as the actual defining building block.
34. Literally meaning "The Lord reigns," or "God reigns," the title clearly derives from Psalm 93 (which as we note later, appears in one of the services that use this mode). In many observant Jewish circles (perhaps all of them, before more liberal practices were established) several words that mean God are not uttered out loud and therefore are replaced by the word *ha-shem*, literally "the name," or by the hybrid word *adoshem*.
35. In the present context I define "norm of performance" as relating to the agent or agents who deliver a specific prayer/ritual and the manner of vocal expression by which they carry it through. Types of norms of performance in this repertoire include cantorial rhapsody, heterophonic chant mumbling (see footnote 70), congregational responses, a congregation's unison singing of metrical tunes, and a simple cantor's recitation, among others. For a detailed accounting and explaining of the various norms of performance in this repertoire, see Tarsi (2005, 66–71).

freedoms in each case, as well as their boundaries, are yet another defining factor of the model at hand.

### A Comment on the Validity of the Methodological Choice to Privilege Similarity over Difference When Constructing the Basic Model

As a rule of thumb, when it comes to identifying the overall framework of reference that governs the Ashkenazi liturgical tradition, almost all sources, regardless of geographic origin, sub-traditions or diachronic factors, are treated as witnesses to the same common practice. Surely, almost any source, whether written, in recordings, or interviewed informants (present and past) may feature some unique versions to some liturgical sections, and of course, each individual presents their own variants and individual stylistic markers. Although there are a few sections in the liturgy where we can identify two versions (in all likelihood a matter of East vs. West Europe; see further below), and there are some liturgical sections in which it is difficult to find one dominating version, all sources "converse" in one way or another with the same musical framework of reference.

Although musical practices of the synagogue change over time, all past and current practices, be they in Europe, America, or Israel, are based on the same overall musical discipline. They may vary in how they apply some of its conventions, when they depart from its standard repertoire, and how and to what extent they do so. Most importantly, these departures vary from one instance to another and therefore do not undermine its overall constitution. This does not mean, however, that an alternative tradition may not emerge at some point, or that its seeds are not already sown. Even at present (and in all likelihood in the past as well), there are some practices that in different parts of the liturgy employ a completely different musical rendering or introduce significant alterations. Nevertheless, all of these are within the category of "divergence," and each one departs from the definitive standards either in different parts of the liturgy or in a different manner or both, or they do so in cases in which the tradition denotes complete freedom to begin with.

Thus, so far, all practices in the Ashkenazi synagogue, wherever and whenever they are situated, maintain a close relationship to this overall regulation and cannot be fully understood or examined outside of its context. Moreover, the methodical study of this repertoire, particularly as a musical system, and especially its music-theory underpinnings, is a step that needs to be taken before addressing sub-traditions and differences in practices, and not the other way around. This insight may seem counterintuitive and therefore, at times, a source of confusion or misunderstanding. People who are unfamiliar with the specifics of Ashkenazi liturgical music are inclined to raise questions about the origins and sources of the musical evidence at hand. They may express concerns about the provenance of the sources, the kinds of information they can provide, and the traditions or sub-traditions they may represent. In particular, newcomers to the studies of Ashkenazi tradition may question the methodological propriety of treating the various sources as witnesses to a single tradition, rather than grouping the sources according to chronology or geography or multiple traditions

or sub-traditions. The implication of this perception is that scholars of Ashkenazi liturgical music would do better to focus on difference and diversity rather than eliding it.[36]

The fact of the matter is that whether in terms of origin, geography, or synchronic or diachronic perspectives, there is still only one overall framework that governs Ashkenazi practice in all of its various sub-traditions, geographical origins, and time periods.[37] This is not to deny that differences between sub-traditions or spatially or temporally separated communities exist. Rather, such differences are relatively invisible when the tradition as a whole is brought under the lens. If we zoom in on practices in different places or periods within *Ashkenaz*, or even on different sources, we will observe many distinctive features that can be used to characterize individual sub-traditions. But these distinctions are only perceptible under high magnification. And in many cases, it would be difficult to use these distinctions to label two somewhat different examples as distinct variants, because the built-in degrees of freedom of their constituent "moves" or motif-types allow them to be considered as "the same" at this level of "resolution."[38]

To be sure, some studies draw a distinction between "West European" and "East European" traditions or sources. Yet the details on which this distinction rests are not sufficient to identify two distinct parallel traditions, or a divergence of one overall tradition into two or more derivative traditions. In the overwhelming majority of the repertoire, these differences do not amount to different versions but are rather variants or reflections of personal traits of the individual source or of different stylistic approaches. Only in a minute number of cases in the repertoire do we find two distinct musical versions for the same liturgical section, in East and West European sources, and it would even be difficult to determine what the "pure" form of each one is.[39]

Consequently, when it comes to observing and abstracting the structure of each of the

36. Such methodological objections have actually hindered progress in this particular field. For reasons whose details are beyond the scope of this article, Jewish music has been treated almost exclusively within the realm of ethnomusicology. There have been cases in which valid studies were rejected by leading ethnomusicology journals because the failure to differentiate between sources from different geographical locations and sub-traditions was considered a methodological error. Other findings were rejected because they were based on, among other sources, informant interviews not conducted by the researchers themselves (and therefore not considered ethnomusicological)—an essential source of information for this endeavor.

37. For a few examples of such departures see Tarsi (2002b).

38. See the comment on sameness and difference above and footnotes 25 and 29.

39. One of the clearer examples is the existence of two distinct versions for the *Hatzi Kaddish* and the first few paragraphs of the section that follows it (the *Amidah*) in the closing service of Yom Kippur (*Ne'ilah*). A different case is the *Hatzi Kaddish* and its following paragraph during the seasonal prayers for rain or dewfall (*Tal* and *Geshem*) where it seems there are indeed two versions but it is not clear how—if at all—they can be identified as East vs. West European (see Tarsi 2002b, 190–92). Even identifying what constitutes East and West Europe in Ashkenazi music is not so clear cut. Diachronic factors, particularly late nineteenth- to early twentieth-century waves of mass emigration to the US and pre-and post-Holocaust changes in the population, as well as postwar immigration to the US and Israel, further obscure the boundary. Moreover, establishing whether a source may be considered West or East European must take into account a variety of factors, such as the person's place of birth, where he was raised, the practice in his family and community, and the training he received and from whom he received it—in addition, of course, to the congregations (with their customs and demands) that he served as cantor and many other factors, all of which significantly complicate and blur the landscape.

"modes" in the Ashkenazi system, defining their building blocks, and examining only the "behavior"—the manner of conduct of the music—characteristic of a given mode, differences among sub-traditions and practices do not apply; thus, for example, there is only one *Adonai Malach* mode, and as such it is found in all Ashkenazi sources. With respect to specific performances or documented liturgical settings that use this mode, however, we can find differences in the time and occasion when different sources use it, or differences in the texts or liturgical sections to which it is applied, or differences in the frequency or "density" of its defining building blocks, based on how many of them are interspersed in between free music.[40] Sources may also differ in the kinds of specific variants they use for the (same) motif-types, i.e., the way they extract motivic variants from the (same) motif-types, choosing some and omitting others; in the degrees of freedom implemented; or in the density with which motif-types appear in a given section.[41]

Other differences may be found with respect to the instances in which a performer introduces *Adonai Malach* traits in a section that actually does not use this mode; the performer "injects" some *Adonai Malach* traits into a different mode, scale, or a section of free improvisation.[42] But the very distinction between the overall mode or scale and the *Adonai Malach* motifs that are incorporated in them emphasizes the same *Adonai Malach* mode rather than suggesting that these cases, as well as the differences among the cases mentioned in the previous paragraph, may somehow affect our understanding of this mode or its definition. Thus any differences among sources—whether they pertain to the individual informant, written document, or recording (whether made for research or commercial purposes), or whether they pertain to difference in geographical origin, time-period, or sub-tradition—are irrelevant to the definition of the mode itself, and their appearance, in fact, reaffirms it.

To repeat, when it comes to identifying the overall system of the Ashkenazi tradition, the similarities outweigh the differences, but more importantly, such distinctions between putative sub-traditions, geographical dispersions, and changes in practice over time are irrelevant to the point at issue. Furthermore, addressing these differences at the same time as unpacking this system would constitute an obstacle in the way of achieving this objective. The goal is to define this overall system and to articulate music theory of the field, including the terms and concepts that will in turn enable us to study the Ashkenazi tradition.[43]

40. One of the defining traits of a different mode (*Magen Avot*) is precisely the tendency to take more and more freedom as the liturgical section unfolds, which results in a gradual "spacing out" of the motifs; consequently, as the performance of the liturgical section unfolds we find fewer and fewer motifs interspersed with more sections of "free music."

41. One issue that needs to be considered is that some sources may contain recurring motifs that seem to be significant or structural. Yet, these motifs are not themselves building blocks or markers of the mode; rather, they are characteristic of one specific source. An example of such a personal motif is a pre-concluding half phrase in Adolf Katchko's setting for *Kabbalt Shabbat* (Katchko 1952, 1–4).

42. This mainly concerns the use of *Adonai Malach* as an idiomatic alteration within music in major; see below.

43. Establishing these concepts and terms is what Ruth HaCohen meant when she proposed that this practice is a "parole" without a conceptualized "langue" (see HaCohen and Tarsi 2009), and I would extrapolate from her

The need to privilege similarity over difference in such contexts was not lost on Hanoch Avenary, whom I consider to be the first scholar of the "current era" of research in this field.[44] Avenary was aware of the existence of sub-traditions within *Ashkenaz*, but he only raised the issue when it was relevant. When composing a comparative and historical narrative (on aspects of time and environment in Ashkenazi music), Avenary (1987) explicitly discussed sub-traditions (although primarily as a matter of thoroughness rather than to show that they are fundamentally different). Yet it is precisely when he is exploring the overall structure of the modal system in *Ashkenaz* (Avenary 1971, 1986–87) that he does not consider the existence of sub-traditions at all. Another example of the same approach, beyond the realm of modes, is provided in Israel Adler's (1982) presentation on problems in the study of Jewish music in connection with his assessment of biblical cantillation.

### A Comment on Scale Structure

Scales and their function within the framework of Ashkenazi prayer music have yet to be thoroughly explored. What is already clear is that a scale is never the sole defining factor of any of the varied manners of musical conduct in this tradition. From my observations thus far, it is evident that many times, if there is a scalar aspect at play, it is in fact only a secondary outcome of other factors. *Adonai Malach* is such a case. We can produce a scale of sorts if we put the notes used in a sequential order. The total note collection, however, is actually a secondary "side effect" of musical characteristics and *ambitus* considerations (e.g., different musical characteristics—like motif-types, as we shall see below—are attached to different parts of the *ambitus*). This "scale," however, would extend beyond the octave and would not involve the periodic repetition of the octave,[45] nor would it constitute an octave species.[46]

formulation the conclusion that articulating the music theory of this tradition is in fact establishing its "meta langue" (see also Tarsi 2017, 3).

44. In broad brush strokes I divide the chronology of Ashkenazi liturgical music studies into three primary "eras." The first is from around the middle of the nineteenth century, which is the earliest time period from which we have any written evidence of attempts at engaging in scholarly discourse (see, for example, Tarsi 2013b). The second is the work of Avraham Zvi Idelsohn between ca. 1906 to 1938 and his successors up until around the work of Hanoch Avenary, ca. 1970, and from his work to the present. The works in the first two time periods can now only be read critically and understood within historical context, their built-in limitations, and their being highly influenced by ideology, agenda, and zeitgeist. In this respect, however, there is some overlap as some work that chronologically belongs in the latest periods is in essence the same as the preceding either because of the lack of awareness of developments in our understanding of the field or the failure to incorporate them.

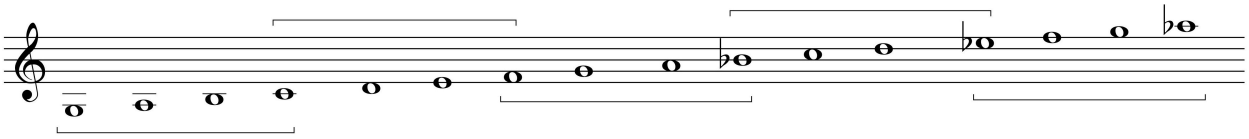
45. For an example of a different quality in a modal scalar system with no periodic repetition of the octave, see "non-duplicating at the octave" in Marcus (1989, particularly p. 512). In the case of *Adonai Malach* the lack of periodic repetition of the octave, along with the absence of data on what the notes are above or below a certain range, as well as the alternative low pentachord with an augmented second (motif-type I in Example 5, also see discussion of the scale aspect below, footnotes 49 to 51, "Ukrainian-Dorian," and footnote 64), further complicates the meaning of the concept of scale altogether in this case.

46. In all likelihood, issues of *ambitus*-derived traits are related to the given range (at times from the tonic up, and at times with a *tonus finalis* inside the range) that parallels the comfort-level capabilities of the human voice (primarily male). In some samples of the repertoire (mainly "composed" material, concert-stage pieces, or material designated for professional or even "star" cantors) this range is extended. Issues such as range and tonic/*finalis* location naturally lead to related topics and terminology, and to the difficulties involved in borrowing terms form church music (e.g., in addition to *ambitus* and *finalis*, we can also add "plagal" and

Moreover, the way scalar components appear and function in this system may, in fact, push the envelope of what we may still consider as a scale. Indeed, it poses some questions about the ontology of "scale," to what extent scales even exist, and to what degree they actually help us understand any repertoire in which they have been identified.[47] In the case of *Adonai Malach*, even Avenary's (1971, 1986–87) breakthroughs did not free him from the need to include a scalar explanation and to address scales as an essential, fundamental, and primary ingredient in what he considered as modes.

What a scale does provide in our particular case is mainly an *ambitus* reference point for the "areas" in which these musical occurrences take place. For example, the reason the lower E in Example 4 is natural and the one an octave above it is flat, is the difference in *ambitus* between the location of motif-types A and F in Example 5 and that of motif-type E (in itself another contributing factor for the lack of periodic repetition of the octave). This *ambitus*-derived difference is yet another manifestation of the actuality that all of the motif-types, as well as any other musical characteristics of this mode, are *ambitus*-sensitive.

Unlike the many manners of conduct whose scale is identical to pre-existing scales, including modal scales, the scale structure of *Adonai Malach* may be considered unique. Thus, despite the fact that *Adonai Malach* still cannot be defined or even recognized without its non-scalar components, a touch of the mode's particular flavor can be detected by the scale alone, particularly its middle-octave upper tetrachord.[48] Example 4 offers an initial illustration of what could be considered an *Adonai Malach* scale.[49] Three sources provide a notated example for such a scale: Avenary (1986–87), Glantz (1965), and Yasser (1956).[50] We may note that in



**Example 4.** *Adonai Malach* scale, as proposed in historical sources.

"authentic"). For an initial discussion of the issues involved in this association and the difficulties it presents, see Tarsi (2002a).

47. The definition, essence, and function of scales in this repertoire deserve an entirely separate discussion. No less important is the examination of the implications of such a discussion vis-à-vis the fuzzy margins of what we may consider to be a scale, along with its function, constituent factors, and the epistemological aspects of our perceiving it as such, all of which have yet to be pursued.

48. This is especially apparent in this tetrachord's descending form because that form renders it one of the mode's motif-types ("C" and "D" in Example 5 below).

49. As I qualify below, there are some simplifications, as well as overlooking some constituent elements in this scale proposal. For example, it does not address the use of an augmented second pentachord ("I" in Example 5), or the question about what the notes really are in the top tetrachord (see comment on Rosenblatt's setting below and footnote 51). This itself, again, touches upon the fuzzy edges of the definition of scale here, as well as an expression of the fuzzy aspect of the general role of scale as a constituent component of this system.

50. Yasser's presentation occurs within a puzzling context, in which the notated example of the mode (here as well as in Yasser's discussion and examples of *Magen Avot* and *Ahavah Rabbah*) is distorted, perhaps because Yasser has adjusted it in order to fit into his "new theory of triple-key modes" (Yasser 1956, 34).

Avenary's (1986–87) case, the scale is presented only to be

> discarded [because it is merely the product of] the inquiry of a young composer from the contemporary avant-garde [who is ignorant of the points at issue] . . . as a stimulus for a creative process. (14)

I have yet to find an example within the literature or the practicum that uses the top tetrachord as portrayed in this scale proposal. I found only one setting in which this part of the range is actually reached, in a hand-written transcription of Joseph Rosenblatt's "*Omar Rabi Elozor*" (Toronto Council of *Hazzanim*, n.d., 22). But at the corresponding part of the *ambitus* Rosenblatt uses other permutations, none of which are the tetrachord illustrated in Example 4; and at least some of them might not really constitute tetrachords. More likely, however, Rosenblatt's setting simply demonstrates that the portrayal of the top tetrachord in Example 4 has no support in the practice. It may, in fact, be an expression of a hypothesized trait of this system that has yet to be systematically explored: the higher in the range of a mode or scale or even a free musical rendering performers sing, the more freedom they have in the choice of notes.[51]

As stated above, viewing *Adonai Malach* as a scale contributes little to its definition. Nevertheless, a quick look at the expression of the musical characteristics as a sequential order of notes may help to illustrate graphically two notable traits. First, within this succession of notes we can observe a symmetrical periodic repetition of the lower tetrachord of a major scale, i.e., the "long scale" comprises a chain of tetrachords superimposed one on top of the other, each with the interval pattern [1, 1, 1/2] where 1 is a whole tone.[52] We also should note that this tetrachordal structure does not take into account other permutations that *Adonai Malach* incorporates, such as a tetrachord for scale degrees 5 to 8 with a half step between 7 and 8, or the "Ukrainian-Dorian" tetrachord (or pentachord) as depicted in motif-type I as well as other options.[53]

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51. This raises an interesting question regarding whether the system itself includes this kind of freedom. Further, it may also be that the system simply does not address this option in one way or another. In other words, the system does not take into account the upper reaches of this *ambitus* or perhaps it does not even acknowledge that this range exists, in which case the performer simply goes beyond the definition of the system. Virtuosity may be a factor in this lack of regulation in the higher octaves: it is precisely the more skillful cantors who can access this high register and who can make the best use of an opportunity to show off their talent. There is clearly a question of cause and effect here (is freedom granted to the talented, or do the talented take advantage of an unregulated zone?) that probably cannot be settled. What is important here, nevertheless, are the topics it brings onto the table.

52. The mechanical portrayal of this scale structure may explain why depictions of the scale's top tetrachord do not match how the mode is used in reality.

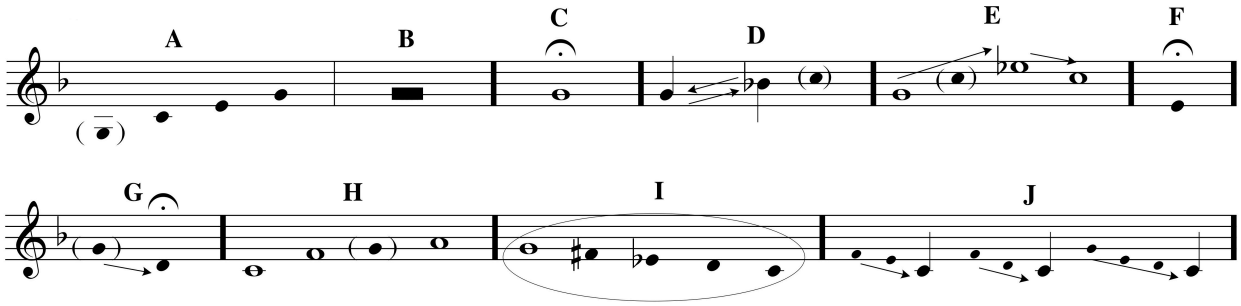
53. In this scalar paradigm, these other options are considered "foreign notes" or even a modulation. Although this point requires further elaboration, I propose that the whole matter is a reflection of a blind spot of sorts resulting from a fundamental paradigm shift regarding the idea of a "scale" (let alone a "mode") in a music-theory model. For example, it is possible to imagine a model in which a scale plays a fundamentally different role, or a model in which what may be considered a "scale" is significantly and fundamentally different from the conventional perception of what constitutes a scale, or a model that does not include scales at all. All of this apparently requires an intellectual and paradigmatic or conceptual leap that even Avenary could not summon.

Second, considering that the tonic is the fourth note in this scale description, the lowest nine notes comprise a note collection identical to that of the major key and the top seven notes, a pure minor. Most of the occurrences in the mode take place somewhere in the middle and therefore induce a mix of major and minor "feel," but it also follows that, in terms of *scale alone*, there is no distinction between *Adonai Malach* and major in the lower part of the scale. The primary implication of this property is that in the lower tetrachords the mode relies heavily on motifs and other musical characteristics to clearly induce a recognizable "flavor" of the mode. Conversely, expressing the mode's note collection in this scale format serves to illustrate that the higher the *ambitus* of the mode the more it verges on a minor tonality.[54]

## The Defining Motif-Types

At this stage of my study I have come up with the following descriptions of the mode's constituent motif-types (see Example 5), their function, the degree of freedom involved in each one, and the type of connection to textual structure, time, and occasion.

**Motif-type A.** An opening motif of a textual phrase or a paragraph, outlining the melodic unfolding of a triad on scale degrees 1-3-5, with or without starting from 5 below the tonic. As a rule, these are not structural notes that can be used as a skeleton for other variants with passing tones, additional or decorative notes, or elaborations. In the overwhelming majority of cases this motif-type consists of these notes only. In quasi-Schenkerian terms we can say that they are not the background of a variety of possible phrases but the actual and



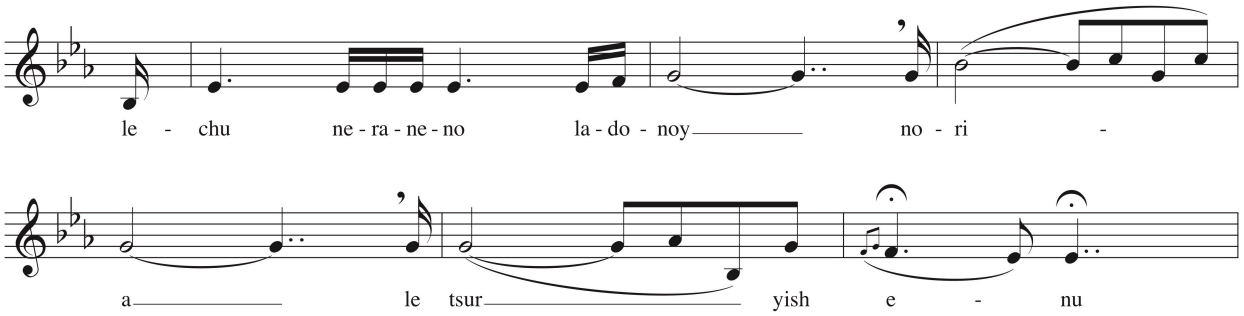

**Example 5.** Constituent motif-types of *Adonai Malach*.[55]

54. Indeed, Avigdor Herzog's rendition of *Kabbalat Shabbat* (not transcribed here, see reference in footnote 69) makes use of this trait in two ways. On one occasion Herzog uses the higher part of the *ambitus* as a "pivot area" to modulate to a minor key. In another instance, in a fragment that traditionally allows the option of using a minor key, he does not do so but rather hints to this custom by using the upper part of the *ambitus*. An example of the sensual-emotional effect of this particular musical behavior appears in Ruth HaCohen's analysis of the impression a Friday night service in mid-nineteenth-century Frankfurt made on an outsider. The outsider is the author George Eliot, who transferred her experience to her fictional character Daniel Deronda in her eponymous novel of 1876, see HaCohen (2011, 265–67).

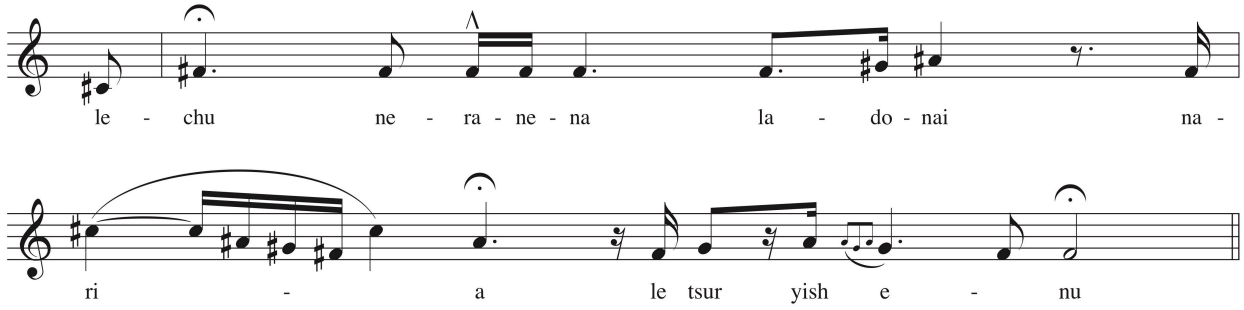
55. The uppercase letters (A through J) in the following pages refer to the corresponding motifs in Example 5. The Arabic numerals indicate scale degrees.

only foreground possible (when it functions as an opening of a phrase).[56] The current stage of research may suggest that the variant that includes the 5 below the tonic is more typical of the opening of a continuing phrase, or any opening of a phrase that is not the first one in the musical or liturgical section. Whether this is indeed the case has yet to be determined.

A different idiomatic opener is found in a unique and specific instance—the opening phrase of the entire *Kabbalat Shabbat* service, on the words "*lechu neranena*" (see Example 6).[57] This special opening constitutes a complete phrase rather than a musical characteristic or a motif. The overall structural gesture of the phrase is a move from 5 below the tonic to the tonic. It is then followed by some approach to the 5 above the tonic. It is therefore different



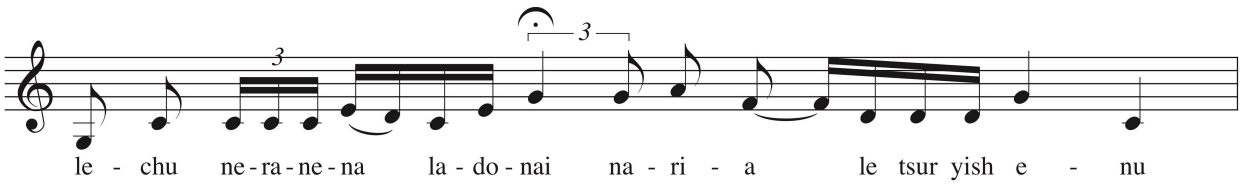

**Example 6a.** "Lechu Naranena" opening in Glantz (1965, 31).




**Example 6b.** "Lechu Naranena" opening in Katchko (1952, 1).

56. I am not suggesting an actual Schenkerian analysis of this material. I am only using these terms as a clarifying metaphor of sorts. For the idea of implementing Schenkerian tools in an ethnomusicological context, see Stock (1993).

57. *Kabbalat Shabbat* is a service that originated in the sixteenth century, primarily as a mystical ritual of "receiving the Sabbath." It consists mainly of certain psalms and a liturgical poem (*piyyut*) entitled "*Lecha dodi*" (Silverman 1946, 11–12). It is conducted on Friday after the afternoon service (*Minha*), just before sunset. For considerations of brevity I simply translate the Hebrew titles and names of liturgical sections or services into English without further explanation. I do not consider such explanations necessary for understanding the points discussed here. I do, however, provide prayer-book page references for them. A basic definition of each one of these titles can be found in various sources, primarily *Encyclopedia Judaica* or other reference tools of Jewish studies.




**Example 6c.** "Lechu Naranena" opening in common American practice.

from motif-type A. I suggest that the connection of this "*lechu neranena*" phrase to the opening motif-type (A) and the similarity between them lies in discerning that the former uses the foreground notes of the latter (motif-type A) as structural middle-ground notes. In this sense it is identical to other sections of the liturgy that are not using the mode, e.g., the idiomatic opening of the Cantor's Repetition—*Hazarat Hashats*—on the Saturday morning services—*Shaharit* and *Musaf*.

**Motif-type B**. Recitation tone on 5. In general, I observed that the use and function of recitation tones in Jewish Ashkenazi prayer music is not as clear and set as it is in church music, even if we take into account its blurry definitions and function in plainchant, specifically the seeming discrepancy between old theories and observed practice. A significant portion of Ashkenazi prayer music does not control recitation tones at all; another part includes them on a variety of scale degrees, and some prayer modes feature them on an assigned scale degree. In no case does the recitation tone have a role in defining the mode itself or being affected by a change in *ambitus* (such as its role in making the distinction between authentic and plagal modes—debatable as it may be—in Gregorian chant). Yet because of this lack of clear formal role and definition of recitation tones in this repertoire, and the lack of consistency in their use, identifying them and their function needs to be re-established in each case.[58]

Many times the presence of a recitation tone is obvious and can be clearly identified. Yet at times there is only a suggestion of it. This is in part due to the fact that Hebrew words and especially Hebrew phrases contain significantly fewer syllables than their equivalents in Greek, Romance, or Germanic languages. In the latter cases, and only when a recitation tone would be expected, I choose to identify it as such if it covers at least one word and another syllable of either the previous or the next word, or the combined parts of two adjacent words. Avenary's approach was to consider four or more consecutive Hebrew syllables on the same pitch as "*tonus currens*" (Avenary 1986–87, 99). This is also a somewhat fuzzy area, although to a much lesser degree, and eventually identifying a tone's function as a recitation depends on our hearing and perception.

58. There is almost no formal discussion of recitation tones and their function in this repertoire. In addition to the comment in Avenary (1986–87) below, there are indications for it that might be deduced from musical examples in Cohon (1950) and in the choice of notation in Ne'eman (1968–69, 1972–73). I also address the matter in Tarsi (2002a).

**Motif-type C.** Pausal tone on 5. The pausal tone is primarily a function of the text, connecting with a period, a comma, or some kind of textual pause. Most of the time this function coincides with a pause or semi- or half-cadence in the music, as well as the end of a musical period or half period or the end of a middle or pre-concluding phrase (see motif-type G). Other resting points in the music or the text may mark a pausal tone but, regardless of the musical phrasing, the dominant determining factor is primarily the text. Although sometimes expressed as a longer time-value in written notation, the pausal tone does not primarily depend on the duration of the note. The same applies to fermata markings in the written sources. At times a pausal tone may coincide with them, but the literature includes many cases where fermata markings appear in a variety of places in no particular connection with the text or with the function of a pausal tone.[59]

Initial exploration suggests a correlation between pausal tones in prayer music and pausal words in scripture reading, especially those identified by the cantillation markings of *etnachta* and *sof pasuk*. This connection has yet to be thoroughly explored. Needless to say, it may only be established clearly in cases where the liturgical text is a biblical quotation. When it comes to psalm texts, the connection to biblical cantillation might be more involved, primarily in view of the lack of clarity that still surrounds the musical execution of the Psalms, specifically the cantillations for the books of Proverbs, Job, and Psalms ("*ta'amey emet*").[60] Poetical phrasing, psalm punctuation, parallelism, and other factors connected to psalmody may also come into play.

**Motif-type D.** "Motivic interval area." As explained and demonstrated in detail above, this motif-type allows a higher degree of freedom. It represents any kind of musical occurrence, motif, phrase fragment, or other melodic cells that takes place between scale degrees 5 and 7. This is, in essence, an *ambitus* characteristic and the minor third between 5 and 7 is only a structural marker.[61] The motifs extracted from this motif-type may include upper or lower neighbors as well as various passing tones and may therefore cover an *ambitus* larger than that indicated by the interval. So long as the structural notes within such a motif are 5 and 7, it can be considered as this motif-type.[62] A specific formation that includes an upper neighbor to form a descending tetrachord is a frequently occurring variant. See, for example, the first motif in the last line of Example 7 (motif-type D), or when the first motif-type D appears in the first line of Example 9. Whether this constitutes a subcategory of this motif-type, a separate characteristic, or a variant is a question which I consider insignificant.

**Motif-type E.** Expansion. Avenary (1986-87, 14) observes three range-related layers within the mode. The third layer, being the minor third above scale degree 8, is where the

59. In written sources fermata markings can sometimes be quite prevalent. I think that in many cases this is an attempt to partially compensate for the fact that standard notation cannot reflect the rhythmic aspect of this musical discipline—a substantial topic in and of itself (for an initial addressing of this topic, see Frigyesi (1993).
60. For a most illuminating discussion of this topic, see Flender (1992). Also see Wickes (1881).
61. This is somewhat similar to Powers's (1998b, 142) "registral span" in his discussion of *jins* as a component in his definition of *maqam*.
62. For details, see Examples 1 and 2 above.

music "expands" as the musical section unfolds and develops. I find that in the overwhelming majority of cases in which the music reaches the higher parts of the range, it does so idiomatically by way of this motif-type.[63] The many possible motifs and variants derived from this motif-type all circle around three structural scale degrees—5, 8, and 10. In most cases the motion would be from 5 to 10 (with or without touching 8 in between) and ending on 8 (see, for example, the last motif [E] on the first line of Example 8). At times this is followed by motif-type D, which concludes the entire phrase on a pausal tone on 5 (motif-type C). The examined sources occasionally include an idiomatic pattern that consists of a descending scale from 10 to 5. Because this is merely a descending scale, and as such occurs only sporadically, I hesitate to assign it structural motivic significance as a musical characteristic in and of itself, or identify it as a separate, additional motif-type. I therefore choose to view it as a combination of motif-types E, D, and C.

**Motif-type F.** Secondary pausal tone. Occasionally, and significantly less frequently than on 5, we may observe a pausal tone on scale degree 3.

**Motif-type G.** Pre-concluding pausal tone. A pausal tone on 2 is found only at endings of pre-concluding phrases. Typically—but not necessarily—it is approached from 5 directly, as a skip, or through some ornamental configuration and/or in step-progression.

**Motif-type H.** *Kabbalat Shabbat* opening for a pre-concluding phrase. Penultimate phrases of the psalms in the *Kabbalat Shabbat* service and at times other penultimate phrases in this service idiomatically open with motivic variants based on the structural notes that constitute a 1-4-6 motion, typically including some passing tones or ornamentations. Sometimes this "move" may expand to include scale degree 8. Unlike the other motif-types, this one is typically found only in the *Kabbalat Shabbat* service and not in other sections of the repertoire that use *Adonai Malach*.

**Motif-type I.** Ukrainian-Dorian pentachord. Ukrainian-Dorian is one of several titles referring to a scale whose lower pentachord includes a lowered scale degree 3 and a raised 4, creating the interval succession [1, 1/2, 1 1/2, 1/2] (in the upper tetrachord it is identical to "natural minor").[64] The use of Ukrainian-Dorian in Ashkenazi prayer music is in almost all cases within the context of other tonalities or modes. As such it may appear as a chromatic alteration, "detour," part of a motif, or an idiomatic phrase. Within the context of *Adonai Malach*, replacing the low, major pentachord with a Ukrainian-Dorian pentachord and a free use of its constituent notes constitutes an idiomatic "move." Since the motifs or fragments of

63. Avenary was likely aware of this characteristic but did not formally conceptualize or define it. Avenary (1971, 14) presents a few motif variants ("K")—which I view as derived from this motif-type—and calls them (without explaining, but clearly as part of the "phraseological model") a "continuative phrase." As in all past descriptions this is only demonstrated by a few specific phrase variants without the abstracting process of narrowing it down to its defining characteristics as a structural constituent. Over a decade and a half later, when Avenary (1986–87) addressed this layer, he did so without recalling this motif or any other motivic considerations.
64. Other names, in varying contexts, include "altered Dorian" with a "raised fourth scale," "*Av horakhamim*" or "*av horahamim-shteyger*," "*Mi Sheberach-Shteyger*," "Gypsy scale," and "Dorian #4."

phrases that use this note collection are not defined by or limited to anything but the choice of notes itself, the definition of this musical characteristic is only the use of this pentachord. This motif-type is an example of a variable with a large degree of freedom; any possible combinations and permutations of these notes of any length and size stand to constitute a possible variant, so long as the note-collection itself is kept. In most cases, especially in *Kabbalat Shabbat*, this appears as an elaboration or ornamentation whose primary structural note is the fifth scale degree, either beginning with this note or ending on it, and in most cases both.

In some settings, however, Ukrainian-Dorian can be used in and of itself as a target for modulations, or at times, as a pivot of sorts for other modulations (e.g., to minor 5 as featured in Weisser [1943, 134]). This is more likely to occur in larger-scope pieces (cantorial concert pieces or cantorial settings that emulate this style, and "cantorial rhapsodies," compositions, and the like).[65] In those cases it is no longer considered a motif-type but rather can be counted as one among several possible tonalities or "modal centers" to which the piece may modulate. Three good examples are the settings for "*Ata Nigleita*" in Heller (1905, 177–78), Weisser (1943, 132–35), and Wodak (1898, 254–55).[66] Even as such, I suggest that in the context of the *Adonai Malach* mode, a modulation to Ukrainian-Dorian may be perceived as related to motif-type I. An initial exploration suggests that there are aspects of connection of Ukrainian-Dorian to text on a variety of levels that have yet to be thoroughly examined.

**Motif-type J.** Recurring motivic variant for an ending cadence. Thus far in my study of the modal system of Ashkenazi prayer music I observed that in some cases there are notable indications for the presence of both a *finalis* and a tonic.[67] The predominating tonal nature of *Adonai Malach* as well as its symbiosis with the major scale induce a strong sense of tonic. In many cases throughout this repertoire the *finalis* and the tonic are on different notes. In *Adonai Malach* the *finalis* is on the first scale degree. We should note, however, that this location does not render the *finalis* and the tonic identical. The *finalis* has to do with a function given to a specific tone; the lack of pitch class, the *ambitus* considerations, and the fact that within the scale structure there is no periodic repetition of the octave also affect the distinct difference between the functions of the two notes that represent the tonic (1 and 8). Thus in an *Adonai Malach* scale whose tonic is C, the lower C functions as a *finalis* while the upper C may

65. What I term a "cantorial rhapsody" is one of the most characteristic norms of performance of cantorial music in the nineteenth- and early twentieth-century synagogue and is still the dominating norm on the concert stage. The signifying traits of this norm of performance sound like an elaborate aria, with some virtuoso elements and bravura, including cadenza-like sections, coloratura gestures, extended range, many melismas some of which are extensive, and much embellishment. Insider parlance and some written sources call it a "recitative." I choose here to coin a term instead of using the insider title because in scholarly discourse (as in the general western music literature and context) the latter indicates the exact opposite of the definition and traits of this type of performance. See also Wohlberg (1982, 1987–88) and Ephros (1976).

66. *Ata Nigleita* is part of the section of "*Shofarot*" performed during the Rosh Hashanah additional morning service. It comprises a large amount of text and traditionally took the cantorial rhapsody norm of performance, see item vii in the list of occasion-connections below.

67. For a thorough discussion of *finalis* versus tonic in this liturgical repertoire and related topics see Tarsi (2002a, 154–59 and *passim*).

function as a structural note within a given musical characteristic (as in motif-type E in Example 5), or an ornamental, passing, or neighbor note (such as an upper neighbor in motif-type D). In fact, a final cadence on the upper tonic is almost always a clear indication of the use of major scale rather than *Adonai Malach* (see also comment on *Adonai Malach* and major below).

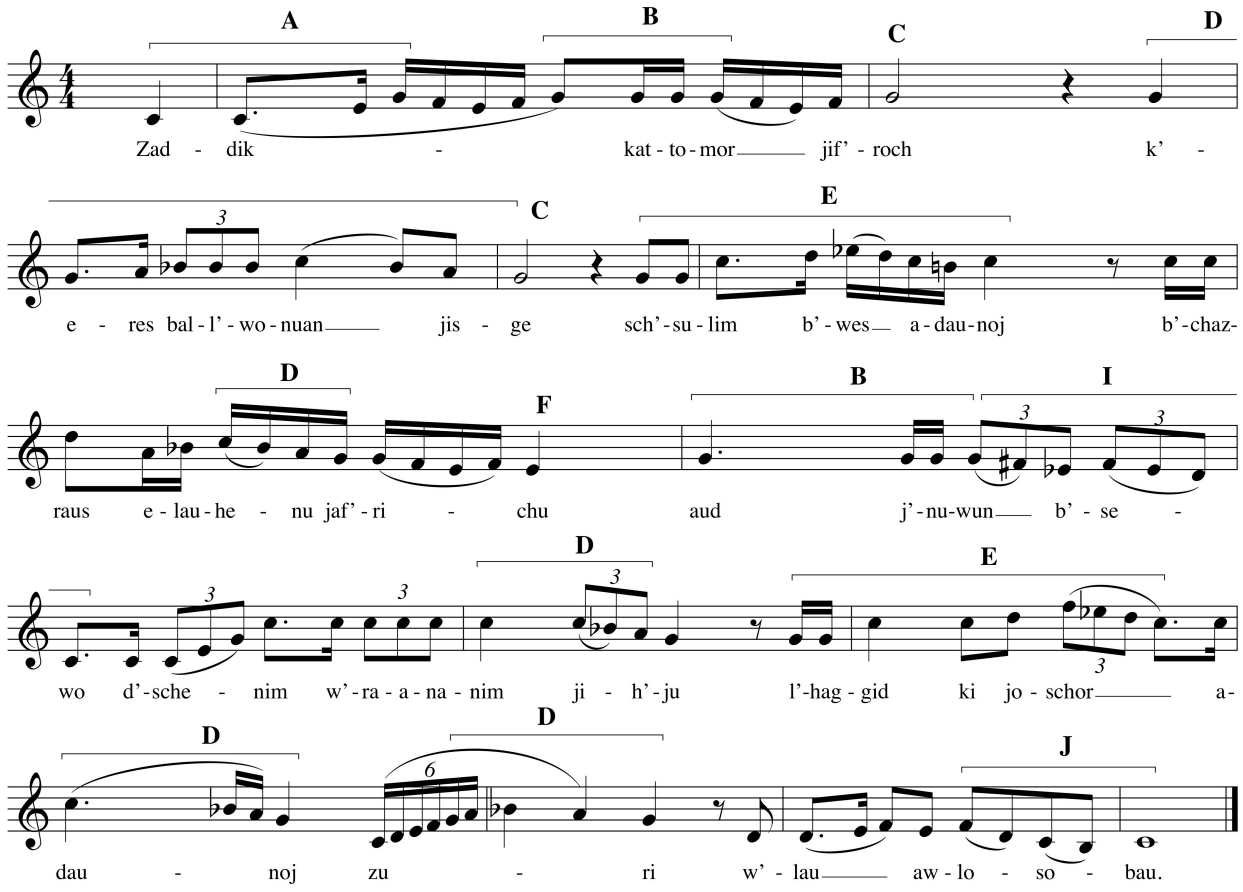
As a rule, it seems that *Adonai Malach* does not include a musical characteristic that controls the approach to the *finalis*. Thus, final cadences may include a free configuration of motifs and approaches to the *finalis* by descending or ascending motion, in step progression or skips, and a variety of possible contours. I found, however, that a more specific cadence—4-3-1, 4-2-1, 5-3-2-1 (the last permutation is used mainly in half cadences or other non-final cadences), or any other approach to the *finalis* that consists of any kind of step progression combined with one skip of a third—is more prevalent than other, non-specific variants. This variant therefore may be considered a motif-type of its own, so long as it is clear that the option of complete freedom in the approach to the *finalis* is also available. It does seem that this particular variant strengthens the sense of the mode, while, on the other "side of the spectrum" of free approaches to the *finalis*, a strong 5-1 cadence brings more of a sense of a major key (see also discussion of *Adonai Malach* and major below).

Although scale degree 1 serves the role of a *finalis* (in addition to functioning as a structural note in a few other motif-types), this note is not more important than others. Nor is it used more often. By far the most significant, central, and dominating note, is "scale degree" 5 (a fifth above the *finalis*).[68] Almost each one of the *Adonai Malach* motif-types involves some level of reference to the fifth degree. Consequently, any section of the liturgical repertoire that uses the mode manifests a dominant presence of the fifth degree as a central tone (this is indeed the starting point for the main argument in Avenary [1986–87]).

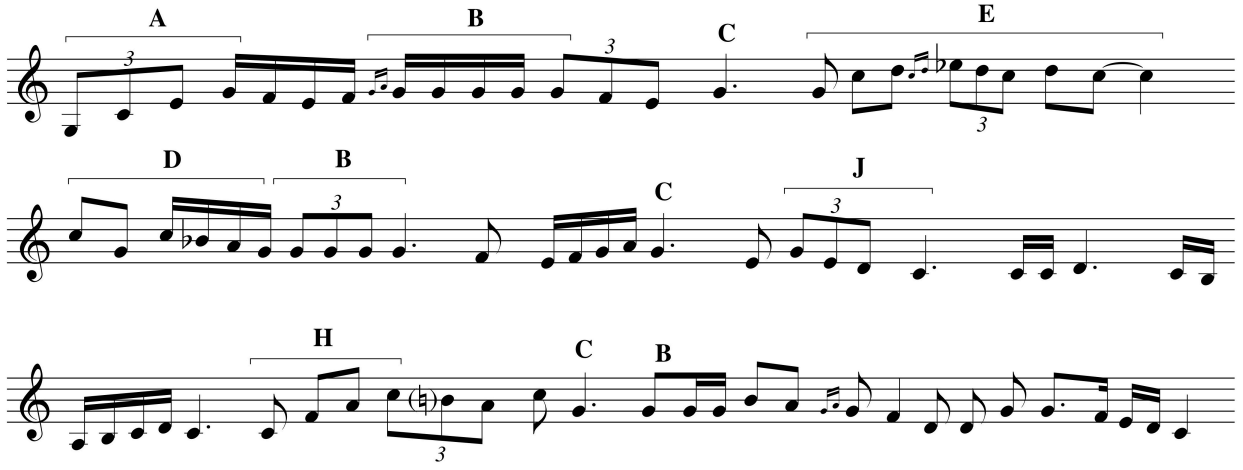
The following examples illustrate these motif-types as they appear in a nineteenth-century German manuscript (Friedmann [1901, 110] in Example 7), and as performed by a living informant from Hungary (Avigdor Herzog in Example 8)[69] and a twentieth-century American-Lithuanian cantor (Alter [1968, 31] in Example 9).

68. Although I have not conducted a statistical analysis, it is almost certain that scale degree 5 is the most frequent note.

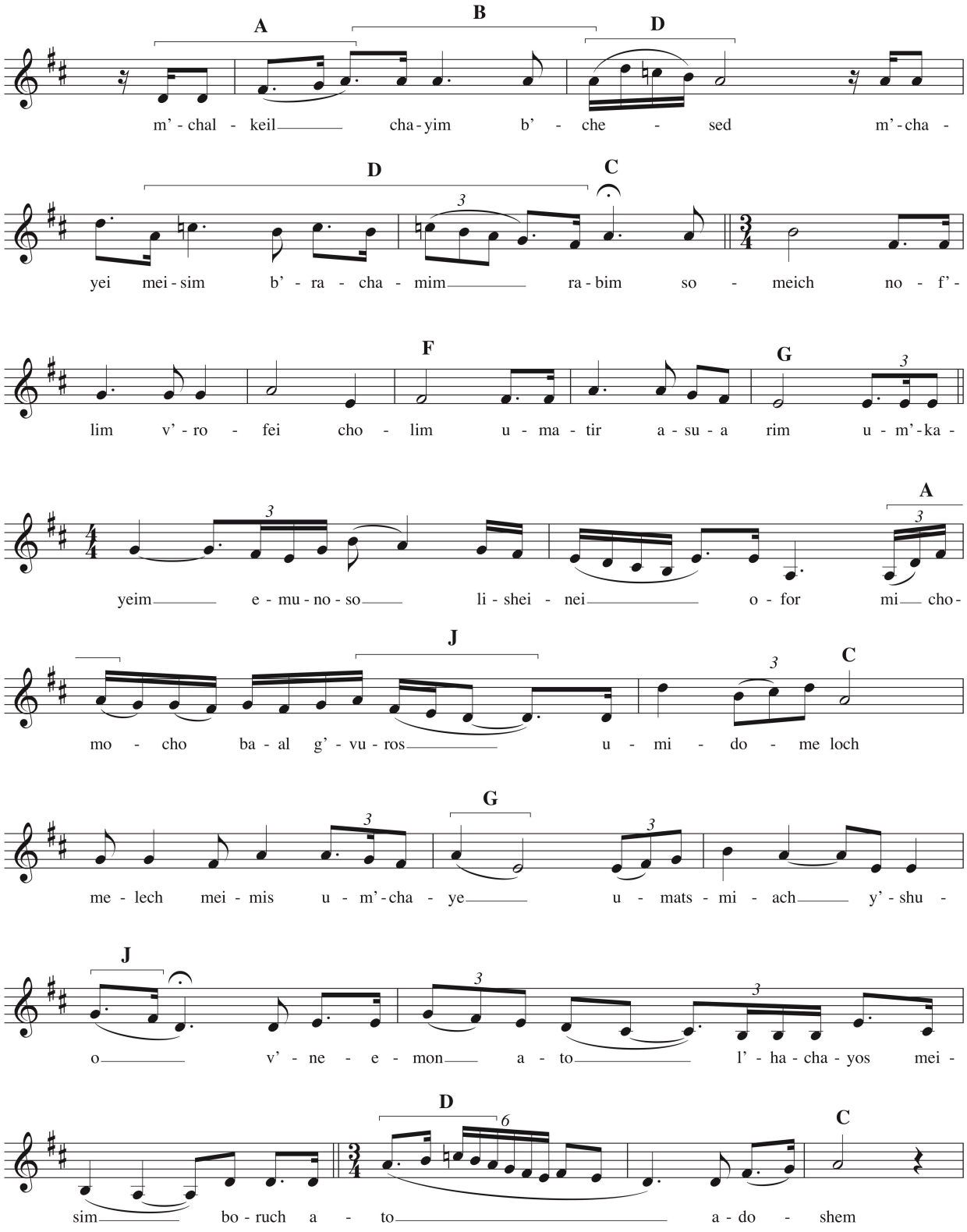
69. Herzog's performance is from a recorded interview by Uri Sharvit at the National Sound Archives at The Jewish National Library and University in Jerusalem. My transcription of this example is presented here with permission of the interviewer and the interviewed informant.




**Example 7.** Motif-types as they appear in a nineteenth-century German manuscript (Friedmann 1901, 110).




**Example 8.** Motif-types in a performance by a living informant from Hungary, Avigdor Herzog.




**Example 9.** Motif-types in a version by a twentieth-century American cantor (Alter 1968, 31).

## Additional Comments on Norms of Performance, Time, Occasion, and Textual Connections

As I mentioned at the outset of this paper, this initial foray into analyzing manner of conduct concerns itself with a narrower view of its constituents. The exploration of the entire phenomenon of *Adonai Malach* as a manner of conduct with all of its aspects and variables has yet to be taken on. In this paper I examine a narrower reflection of a manner of conduct in the interconnection between the musical and extra-musical factors. Among the latter, I take account of three primary variables: text, time-occasion, and norm of performance. The core liturgical circumstance of the mode's use, and the one in which it is most often found in its purest form is that of

> (i) *Kabbalat Shabbat* (Silverman 1946, 5–14). The liturgical form is psalms, strophic, consisting of short phrases and structural repetition. The norm of performance is that of the cantor's opening and closing each section, with congregational heterophonic chant mumbling in the interim.[70]

Other text, occasion, ritual, calendar, and norm of performance components to which the mode is attached include the following:

> (ii) The Saturday morning services (*Shabbat Shacharit* and *Musaf*)—in the first two paragraphs of the Cantor's Repetition (*Chazarat Hashats*), the paragraphs of *Avot* and *G'vurot* (Silverman 1946, 96, 137–38), primarily in the second paragraph. The norm of performance is a simple cantor recitation with concluding congregational responses to *b'rachot*.[71]
>
> (iii) *Y'kum Purkan* (a short paragraph performed after the reading from the Torah on Saturday morning (Silverman 1946, 128)—at this stage of research it is not clear to me whether this is indeed one of the liturgical sections that typically would take on the use of this mode. The norm of performance in the practicum is almost always a cantor's opening followed by silence, congregational whisper, or heterophonic chant mumbling. It may also take on a simple cantor recitation or—primarily in older traditional practice or in settings that emulate the style of that era—a cantorial rhapsody.
>
> (iv) The blessing for the new month (*Birkat Hahodesh*)—in the latter part of the section, beginning on the words ("*mi she'asa nisim*") or on the announcement of the coming of the

70. "Heterophonic chant-mumbling . . . occurs when each member of the congregation quietly (almost to himself) mumbles chant-like patterns, approximating the same musical gesture on the same text (although not clearly enunciating it) but not on the same absolute pitch, speed, rhythm, or the exact musical pattern" (Tarsi 2002c, 64, 71–72n8).

71. *B'rachot* can be loosely translated as "blessings." A *b'racha* (singular form of *b'rachot*) consists of a specific textual formula, which in turn denotes a performance formula and consequentially also a musical formula. I use the original Hebrew term as opposed to "blessing" because of significant differences between the Biblical- or Rabbinic-Hebrew term and the English translation. For a discussion of the meaning of *b'racha* see, for example, Artson (1994).

new month ("*rosh hodesh*"; Silverman 1946, 129). The norm of performance may be a cantor recitation or a cantorial rhapsody with congregational responses.

(v) The sanctification section (*K'dushah*) during the additional service on Saturday morning (*Shabbat Musaf*; Silverman 1946, 139)—at least in the opening few lines, which may be followed by a move to *Ahavah Rabbah* or minor. The norm of performance is responsorial.

(vi) The evening service of the High Holidays (*Yamim Nora'im Ma'ariv*)—mixture of cantorial recitation with *b'rachot*, and opening and closing of paragraphs (*Sh'ma Uvirchoteha*; Silverman 1951, 6–10). Here some *Adonai Malach* motifs appear in a tonal mixture with major, which is induced by the High Holiday traditional melody ("*Misinai* tune").[72] In this context *Adonai Malach* is typically connected to the cantor's recitation while the major tonality of the recurrent tune is expressed in metrical congregational singing.[73]

(vii) Sections in the additional service (*Musaf*) for Rosh Hashanah—the sections of *Malchuyot* (Silverman 1951, 159–61), and *Shofarot* (Silverman 1951, 169–70)—traditionally the norm of performance has been primarily a cantorial rhapsody.[74]

(viii) The "Seven Blessings" ceremony (*Sheva B'rachot*)—for the wedding ceremony; especially the last *b'racha*. Norm of performance: cantorial recitation and sectional cantorial rhapsody with congregational responses to *b'rachot*.

(ix) Some evidence, both oral and in written sources—e.g., Baer (1901, 170), particularly the bottom system ("D.W." [*deutche Weise*]) of number 765—suggests a sub-tradition in which the recitation parts of the ritualistic Passover evening meal (the *Haggadah* reading during the *Seder*) are performed in *Adonai Malach*.

(x) Non-liturgical uses of *Adonai Malach* can be found in some Ashkenazi secular folk and "folk-like" songs and songs prescribed primarily for singing during the Sabbath meals at home (*Z'mirot*).[75] Among examples known to me is the *Z'mira, Baruch Adonai* (this

72. Idelsohn takes this term out of its original context in rabbinic literature, assigning it to a group of tunes—known as *scarbove*—that are considered to be very old (as if "given at Mount Sinai"). These tunes must not be changed; their usage is obligatory during the appropriate holiday and time. Discussions of these tunes abound; for an introductory account, see Avenary (1960, 1971).

73. For a somewhat more detailed description of this procedure and musical examples see Tarsi (2011, 315–16, 338–39, Examples 6–7).

74. In present-day America these long text sections are often read in English at least in part, or some of the section is skipped, and some may be sung congregationally. Choral and metrical settings for parts of this text are also found in nineteenth-century European or European-derived sources.

75. There are indications that *Adonai Malach* is also involved in Klezmer music, whether in the practice or the narrative of practitioners, and in some attempts at semi-scholarly approach to creating a theory. At this stage, however, I am refraining from examining this area, particularly because of issues of "insider-outsider" views whose discussion and clarification would be too involved for the introductory objectives of this paper. Nevertheless, it should be noted that Feldman (2016) offers incisive observations on the possible musical

informant pronounces it "*Adoshem*") *Yom Yom*.[76] A different musical setting for the same text, also featuring *Adonai Malach* characteristics, appears in Levin and Pasternak (1981, 78–79; citing Mayerovich 1951, 20). One possible representative of the Yiddish folk song repertoire is *A Chazzan oif Shabbos* (many other transliterations of the Yiddish are used). It is worth noting that the latter describes an event in which a traveling cantor arrives in a small hamlet to pray over the Sabbath. Thus, the use of *Adonai Malach* may be intentional as a "quasi insider onomatopoeia," as it demonstrates the sound of the kind of music the cantor would sing on such an occasion (*Kabbalat Shabbat*). Moreover, a typical *Adonai Malach* motif (motif-type D with a neighbor note, such as featured in Example 1b), keeps repeating throughout the song. The first time this motif appears, it is sung on the words "*davenen a shabes*," which mean "praying (chanting) the Sabbath." This may be a deliberate or subconscious use of *Adonai Malach* as word painting of sorts to give these specific words their respective "color."

Further, *Adonai Malach* serves as an optional idiomatic chromatic alteration any time the major key is used. As indicated above, the scale structure alone of *Adonai Malach* is closely related to a major scale. Both *Adonai Malach* and major are used throughout the Ashkenazi liturgical repertoire. The distinction between major and *Adonai Malach* may not be so clear-cut, especially in the lower part of *Adonai Malach ambitus* in which the note collection is identical to that of a major scale. As a rule of thumb, I propose that since the determining factor for the definition of the mode is the musical characteristics as shown in Example 5, their presence indicates *Adonai Malach* and their absence would indicate a major tonality.

In addition to the built-in major–*Adonai Malach* fuzziness, some sections within the repertoire consist of a mixture, which, depending on the degree of presence of *Adonai Malach* musical characteristics, can be perceived either as primarily *Adonai Malach* sections combined with free elements in major or as sections that are mainly in major with a few *Adonai Malach* characteristics. The latter also include cases that are in major but contain idiomatic chromatic alterations that may be perceived as borrowed from *Adonai Malach* (e.g., B♭ or E♭ above the octave). Usually these alterations would also take on a motivic form that can be traced to an *Adonai Malach* motif-type. Another angle on the matter is simply the perception of a spectrum in this repertoire between sections in pure major tonality, and cases in which almost every fragment of the music can be fitted into the *Adonai Malach* motif-type, as well as all the spots on the continuum in between.[77]

connection between Klezmer and Ashkenazi religious music especially in the introduction and the first chapter as well as in Feldman (2016, 235–47, 375, 385).

76. Field recording of Naomi Cohn Zentner, interviewing Binyamin Glickman, June 10, 2009, Jerusalem.

77. Carrying the latter observation further, we might suggest that in the system of Ashkenazi liturgical music there is no major key *per se*, but rather a single (perhaps fuzzy) tonal/modal construct that constitutes a spectrum between *Adonai Malach* on one end and major on the other. Certainly, the repertoire of Ashkenazi liturgical music does include segments that for all intents and purposes can be categorized as being in a major key.

### A Comment on "Ethos"

The idea that a modal framework includes an element of "ethos"—in other words, that there are built-in connections between the musical components of the mode and elements such as emotions, philosophical concepts, virtues or ethical values and moral stances, humors, temperaments, moods, and the like—is not a formally established concept in the Ashkenazi liturgical system. Nevertheless, just as other theoretical factors that have yet to be examined, extra-musical associations that constitute ethos may also be associated with this system. Unlike other repertories in which the theory was transmitted alongside the practice and such extra-musical associations were acknowledged and documented, in the Ashkenazi tradition some detective work is called for.[78]

It was Avenary (1971, 18–19) who made the initial and unprecedented attempt to explore the concept of "ethos" in this repertoire, using *Adonai Malach* as a case study. His working assumption was that the name of the mode, derived from the title *Adonai Malach* (The Lord Reigns), provided a clue to its putative ethos. Avenary examined a few liturgical references to kingship but found little evidence to support a connection between the mode and this idea, and therefore he rejected the notion of ethos altogether. My own initial explorations suggest that there are clues indicating that elements of ethos might possibly be contained within the Ashkenazi modal system. The nature and function of these elements, however, might be fundamentally different from how ethos is constituted in other music disciplines; specifically, it may be dependent on the text, or derived from associating a mode with a given occasion. It is, in fact, *Adonai Malach* itself, and some of the extra-musical factors specific to this mode, that may hold the key allowing initial entry into this dimension of the discipline.[79]

## Epilogue: Beyond One Single Manner of Conduct

As a clearer view of *Adonai Malach* as a sui generis, highly elaborated yet flexible category of "mode" begins to emerge, it also advances the overall search for a fitting typology of the various manners of conduct in the music of the Ashkenazi synagogue. At the same time, and as an outcome of the same discussion, a note of caution is necessary. It is a given that this musical repertoire and its discipline of musical performance constitute some kind of framework of reference (blurry as its definition may be at this stage of inquiry). Yet, as Judit Frigyesi (2008, 1223) pointed out, this framework cannot be reduced to a single "governing principle" (see footnote 10 above). Thus, the analysis presented above should not be regarded as an attempt to demonstrate that *Adonai Malach* itself is a master key to the larger framework of reference. Indeed, one of the conclusions to be drawn from this case study is that we may

78. These connections should not be confused with the extra-musical factors already built into the system, such as text, time, ritual, event, etc.

79. A more detailed exploration of ethos in this system, using *Adonai Malach* as a particular example and including more details on the attendant considerations and difficulties, was presented in Tarsi (2010). I attempted an initial, limited description of the ethos-derived characteristics of *Adonai Malach* in a few liturgical contexts in Tarsi (2011, 316–18).

not assume that the characteristics that define *Adonai Malach*'s manner of conduct can be used to describe or explicate the entire repertoire. Still, the study of *Adonai Malach* constitutes the recovery of a section within the larger framework of reference. Thus, it is befitting that we review the main findings in this study with an eye to the features or properties of this particular manner of conduct that we may expect to encounter when exploring other parts of the repertoire. In other words, it is likely that the concrete details of a given manner of conduct reflect underlying concepts that apply to other cases within this framework.

Four interrelated concepts or properties that can be drawn from the details of *Adonai Malach* are worth revisiting here: fuzzy systems, degrees of freedom, the motif-type as the elementary musical building block, and the interconnectivity of musical variables as well as their connection to extra-musical factors. Although I consider or at least identify each one of these separately, most of their properties and defining characteristics are interwoven, and it is hard to speak of one without referring to the others. For the sake of clarity, I address them in order of their level of abstraction, from highest to lowest.

At the highest level of abstraction is the concept of the fuzzy system, which is well suited to analyzing any extemporized musical practice where the options available to the performer extend beyond simple changes that may still be considered an interpretation, or where any attempt to infer the rules that govern improvisation generates exceptions at every turn. Fuzziness is precisely the property that accounts for the freedom of the practitioner to choose between multiple options at each moment.

But the performer's freedom is not unlimited; a fuzzy system is still a system. The concept of degrees of freedom allows us to articulate the range of possibilities available within a given manner of conduct. Not only are there different levels of freedom, they apply to a wide range of variables that extend to every aspect of the overall framework of reference. Moreover, there are different "species" of such freedoms, which also depend on the aspects that they govern. Yet all of the definitions and defining properties and boundaries that determine the range of freedom of a given variable are fuzzy. Further, the level of strictness with which these degrees of freedom apply in each case constitutes a broad spectrum whose inner gradations are themselves fuzzy.

Degrees of freedom also affect—in fact define—the concept I here termed a motif-type.[80] As we saw in the above discussion, motif-types are a musical abstraction: they are an expression of the spectrum of degrees of freedom so far as different musical variables are concerned. Motif-types represent various degrees of specificity and freedom within different kinds of "moves." The examples supplied earlier demonstrate that these moves can vary drastically from a single note (e.g., recitation or pausal) associated with a particular scale degree to a virtually free choice of any melodic movement or gesture so long as they utilize a

80. As I mentioned in passing when introducing this term, these are more accurately *proto*-motifs, a term that is intended to suggest how the expression of these motifs is ultimately determined by degrees of freedom as well as fuzzy aspects.

given note collection that is almost always connected to a specific *ambitus* (e.g., motif-type I). As expected, the idea of the motif-type is itself a fuzzy concept. Each of these motif-types is defined by its fuzzy properties, which themselves are also a manifestation of their degrees of freedom. As illustrated above, the combination of fuzzy properties and degrees of freedom is what generates one primary characteristic of a manner of conduct—namely, the way in which a large and extremely varied range of parameters of the music may become determinant at one particular moment or another.[81]

Cumulatively, motif-types, fuzzy definitions, and degrees of freedom also have a direct effect on all aspects of the interconnectivity of musical variables, as well as their link to extra-musical factors. As one example of musical interconnectivity, we may consider motif-type D, on which I elaborated above. At root, motif-type D is a cluster of degrees of freedom and fuzzy considerations that result in different manifestations of this motif-type, but they are also inseparable from another musical factor, in this case, *ambitus*. This is, of course, only one example of interconnectivity in one mode, but it is likely that it applies to the way other manners of conduct in this repertoire bind different musical variables—fuzzily defined by different degrees of freedom—to a specific *ambitus*.

A similar variety as well as another level of degrees of freedom are manifest in the interaction between musical and extra-musical factors. Thus, a given motif-type (whose permissible musical variants are fuzzily defined by degrees of freedom) may connect to a particular part of a text, but this textual element itself is fuzzily defined by a certain degree of freedom. In the case of motif-type H, for example, the fuzzy parameter of textual connection denotes that the point of attachment may be any particular word or phrase, so long as it is located in the (fuzzy) area of an opening phrase that is more or less close to an ending paragraph, a section, or a point of textual or musical indication for a closing of sort (i.e., an opening of a pre-concluding phrase). This particular motif-type happens to demonstrate—on yet another level of interplay between musical and extra-musical factors—a lower degree of freedom regarding text-connectivity, because unlike the other motif-types in *Adonai Malach*, which are associated with any of the liturgical texts (and time-occasions-ritual) in which *Adonai Malach* is used, motif-type H occurs only on *Kabbalat Shabbat*.

Finally, we need to remember that the present discussion of *Adonai Malach* in its entirety unfolds one overarching extra-musical connection, in which the entire complex of interconnected and fuzzily defined degrees of freedom involving musical factors is attached not only to parts of texts but, to an even greater degree, to considerations of time, occasion, and calendar.[82] These different levels of attachment—performance, text, occasion, calendar—

81. As the examples given earlier in this discussion illustrate, such parameters may consist of—among many other examples—a governing tonal characteristic; a given tetrachord or pentachord; a fixed motif; any free musical motion contained within a given *ambitus*; a fragment of melody, or a miniature musical phrase, or part of a phrase; a given group of notes; an interval, or a set of intervals; or even a particular contour.
82. As described in the section "Additional Comments on Norms of Performance, Time, Occasion, and Textual Connections," subsections (i) to (x).

too are fuzzily defined by the varying degrees of freedom with which the application of *Adonai Malach* is attached to extra-musical factors.[83] This latter observation also brings us back to the likelihood that these particular features may recur in many other constituents of this repertoire or performance discipline, although, as noted, not in all of them; conversely, other features not manifested in *Adonai Malach* may need to be identified in order to explicate those contexts.

When judging whether the features traced in *Adonai Malach*—the fuzzy elements, as well as degrees of freedom and motif-types—are applicable to other parts of the repertoire, it is important to keep in mind that they may be operative in sections where, at first glance, they seem to be absent. There are parts of the repertoire that may not conduct themselves by way of motif-types: they may present a fixed melodic fragment or fragments, a genuine fixed "motif" (in the Western common-practice sense of the term), or even a complete pre-set melody in which there is not much freedom for variants. These also include cases in which there is no freedom at all on two levels, the musical and the extra-musical: the musical content may be determined by a complete melody, or motif-melodic fragments, or even a fixed melodic interval, and the extra-musical textual and time-occasion factors may dictate what the practitioner must do.[84] On the other extreme, there are many parts of this repertoire in which some musical and extra-musical considerations may be implemented, yet the practitioner may also be granted complete freedom as to how to perform them.

In such extreme cases, where every aspect of a performance is prescribed or where "anything goes," we might decide that the concepts of degrees of freedom and motif-types are simply inapplicable and even question their universal relevance to the overall framework of reference. Yet these extremes are easily accommodated in a fuzzy system. As explained above, a fuzzy system can be modeled as a spectrum whose graduation lines are themselves fuzzy. The extreme, "non-fuzzy" cases, where there is either no freedom at all concerning all musical components as well as extra-musical factors (specific word, time-occasion-calendar, such as the cases mentioned in footnote 84), or, on the other hand, complete freedom, are simply the extremes of the two ends of a fuzzy spectrum.

In sum, recognizing the presence of fuzzy phenomena such as degrees of freedom and motif-types in at least some "manners of conduct" within the Ashkenazi liturgical tradition offers a way to transform the paradigm of the "prayer modes" into a more inclusive and

83. In addition, in the case of *Adonai Malach* specifically, there is also the unique fuzziness concerning the tonal/modal realm of the (fuzzily determined) difference between the degree to which we may identify a given section of music as *Adonai Malach* or major, the defining differences between which are themselves fuzzy (see the pertinent discussion above, and footnote 77).

84. Two very clear examples are the lack of any flexibility of choices in the performing of the specific word "*vay'chulu*" on Friday night strictly as a melodic interval of a perfect fifth from scale degree 1 to 5 (see Tarsi 2001–02, 61). The other case is the singing of the phrase "*mi yanu'a umi yanuah*" in the performance of the *Piyyut* "*Unetane Tokef*" on the High Holiday additional morning service (*Musaf*) in a specific pre-set melodic fragment (the same one that is used for the words "*bohen kol eshtnot*," which in some older prayer books still appear earlier in the service).

flexible analytical tool. This should enable the construction of a music theory that is truer to the practice of this tradition. The transformed paradigm in turn opens new avenues of research that may better incorporate historical and comparative study, such as exploring individual variants and reconstructing diachronic processes from synchronic evidence. By the same token, this paradigm can help clarify thus-far vague concepts in ethnomusicological explorations of this tradition. Finally, perhaps we may apply this flexible approach to the "modes" that have been identified in liturgical music to the non-liturgical musical practices of the Ashkenazi tradition, such as *Klezmer*, *Z'mirot*, and folk and art songs. As an initial foray into the identification of *Adonai Malach*'s basic components, this paper is intended as a springboard for further discussion. Hopefully, as more and more features of the repertoire are elucidated, we will come closer to understanding the essence and conduct of prayer music of the Ashkenazi tradition.

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