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The Sound of Sacred Time

A Basic Textbook to Teach the Synagogue Modes

by Andrew Bernard

Thesis Submitted in Partial Fulfillment of
Requirements for Master of Sacred Music Degree

Hebrew Union College–Jewish Institute of Religion
School of Sacred Music
New York, New York

This thesis is intended as a basic music theory textbook to teach the Jewish synagogue modes. It is designed to be used by musicians with training in Western tonal theory who are studying this music formally for the first time. It was written with two target constituencies in mind. First, the HUC–JIR cantorial student who wants written material to supplement his/her studies. Second, HUC–JIR graduates, their accompanists, and other musical collaborators in the synagogue who want a written reference on synagogue modes. While some written materials already exist, they are not designed — as this thesis is — to be a self-contained guide to the fundamentals of Jewish modal theory. The musical examples are taken from the materials used in classes at the HUC–JIR School of Sacred Music. The primary focus, therefore, is on Eastern European, Ashkenazic music and liturgy.

The material presented in this thesis is divided into four main sections. The **Forward** is an essay on the place of the synagogue modes in contemporary worship. It provides the philosophical and theological argument for the continued study of this material. The thesis contains five chapters. The first is an overview of the history of Jewish modal theory and the structure of the modes themselves. Chapters 2–4 each present one of the three principal synagogue modes. Chapter 5 demonstrates the theory behind some of the fundamental techniques used by a skilled prayer leader in worship.

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Hebrew Union College–Jewish Institute of Religion
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New York, New York

1998
Advisor: Dr. Mark Kligman

To my classmates . . .

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Preface

This project is intended as a basic music theory textbook to teach the Jewish synagogue modes. It is designed to be used by musicians with training in Western tonal theory who are studying this music formally for the first time. Specifically, it discusses the synagogue prayer modes as taught at the School of Sacred Music at Hebrew Union College-Jewish Institute of Religion in New York and Jerusalem. The focus, therefore, is on Eastern European, Ashkenazic liturgy and music.

The target audience consists of two groups: cantorial students who wish to use this material to supplement their training at HUC-JIR; and invested cantors, their accompanists, and other synagogue musicians as a reference. It is, of course, impossible to learn the art of synagogue prayer from a book; this text is intended merely to provide insights into the notes.

The text is divided into three sections. The first chapter discusses the background of modal theory. Chapters 2–4 present the three basic modes one at a time, introducing new layers of theoretical concepts in each chapter. The final chapter tackles the advanced topics necessary to understand the practical application of synagogue modes to the liturgy.

First, however, it is necessary to come to an understanding of the unique role of music in the worship service. "The Sound of Sacred Time" is a philosophical essay in which I reflect on the teaching of my mentors regarding the role of religion and its music in the spiritual life of the Reform Jew.

Forward: *M'kadeish haShabbat v'Yisraeil v'haZ'manim*
The Sound of Sacred Time

Before describing the structure and implementation of *nusach*, a more fundamental question demands our attention: what function does it serve in the worship life of a Jew? Do we cling to it sentimentally like some old relic — Great-grandmother's Shabbos candlesticks, one of the few possessions she managed to carry with her from the old country? Is it ancient esoterica, preserved as a source of anachronistic minutia for scholarly debate, as an instrument of torture for the modern cantorial student, or as a category in a game of Jewish Trivial Pursuit? Or does it serve some significant purpose, a means of infusing our prayers with affective symbolism that heightens our worship experience and carries us to a more intense state of *kavannah*?

Let's begin "in the beginning:"

> When God began creating the heavens and the earth, the earth was without form and void. (Gen. 1:1–2)

In the first act of creation, God brought order to the chaos of the universe. It is, in fact, the primary purpose of religion to organize the world around us into a meaningful structure. By nature, human beings fear chaos — or, put another way, we have an intuitive need for structure.[1] We reject the idea that our lives might be without purpose or that the events of the universe lack meaning. The notion that our experiences are simply random occurrences, and that our time on earth does not serve some higher and worthwhile pur-

pose is unacceptable. We seek to organize our world into discernible patterns and understand our place and our function in it. For this, we turn to religion.

Through religion, we work out answers to the cosmic questions: How did we get here? What is our ultimate destination? What meaning and purpose do our lives in this world have? The answers provided by amoral science is not enough. Like the three-year-old child, we continue to respond, "Why?" We assign significance to all we see and experience, and strive to transcend the mundane. We separate out the lofty from the mundane and call it קדוש/ *kadosh* — holy.

Abraham Joshua Heschel points out that the appellation "holy" went first not to a thing or a place or an idea — but to a moment: the Sabbath. God deemed the works of creation "good" and even "very good;" but it was the creation of a unique moment in time, the seventh day, which God blessed and called "holy" (Gen. 2:3).

> The higher goal of spiritual living is not to amass a wealth of information but to face sacred moments. In a religious experience, for example, it is not a thing that imposes itself on man but a spiritual presence. What is retained in the soul is the moment of insight rather than the place where the act came to pass. A moment of insight is a fortune, transporting us beyond the confines of measured time. . . .
>
> Judaism is a *religion of time* aiming at *the sanctification of time*. . . . [T]he Bible senses the diversified character of time. There are no two hours alike. Every hour is unique and the only one given at the moment, exclusive and endlessly precious.
>
> Judaism teaches us to be attached to *holiness in time*, to be attached to sacred events, to learn how to consecrate sanctuaries that emerge from the magnificent stream of a year.[2]

. . . *m'kadeish haShabbat v'Yisraeil v'haz'manim*. It was God who declared the Sabbath day holy, creating the first sanctuary in time. Later,

God declared the People of Israel holy ("You shall be holy, for I, the Lord your God, am holy." Lev. 19:1); for it is the people of Israel who determine the time of the holy events of the year. Originally, the new month was determined by a visual siting of the new moon and affirmed by the Sanhedrin in Jerusalem. From this, the seven festival days mentioned in the Bible are calculated. That is why God sanctified Israel: so that Israel could, in turn, sanctify the days which bring order to the cycle of the year. "We bless you, Adonai, who sanctifies the Sabbath, the people Israel, and the festival seasons."

Ritual is the activity through which we sanctify time and bring order and structure to our lives. Jewish ritual delineates units of hours, days and seasons, marks the transitions from one to another, and organizes the multi-layered cycles into a comprehensible form that can be perceived over the lifetime of a generation.[3] Neil Gillman writes:

> [T]here is no ambiguity about Judaism's interest in structuring time. An elaborate set of rituals are designed to distinguish thresholds in time. We have liturgies to recite immediately upon waking up and immediately before going to sleep. We pray at sunrise and at sunset, and in each case, the liturgy notes the transition from light to darkness or from darkness to light, from day to night and from night to day. We mark the end and the beginning of a week with a Sabbath day and we separate the Sabbath from the rest of the week by rituals of transition at its beginning and at its end. . . . We have a ritual that marks the beginning of each month and a festival that marks the beginning of a new year. Two of our major festivals, Sukkoth and Passover, occur exactly six months apart and mark the natural transitions from summer to winter and again from winter to summer.[4]

Upon these rituals of time, Jews have superimposed complex strata of history, theology and tradition. Passover, for example, introduces the summer growing season, so we begin the festival with a prayer for dew[5] — in agricul-

tural terms, the hope that meteorological conditions will provide life-sustaining moisture for the crops and shelter them from the scorching middle eastern sun. The Sages referred to dew as *tal shel t'chiyah* (טל של תחיה), "the dew of life," a spiritual force powerful enough to give life to humanity and resuscitate the dead.[6] But like all of the agricultural festivals, Passover acquired a place in the story of the Jews through the Torah. The Israelites were given new life as *Am Yisraeil*, the Jewish people, when God brought them out of Egypt — the seminal event of redemption which we re-enact annually on the eve of Passover with the Seder. Thus it is through ritual that the community understands — in all the myriad of literal and symbolic levels[7] — the significance of the moment.

> The great moments in the Jewish year and in Jewish life are sanctified by elaborate pageants where liturgy and ritual — the language of words and the language of the body — come together, each doing what it does best. The ritual provides the drama and the affect. It is the visible, public expression that knits the participants into a community.

Ritual succeeds through the use of symbols. A symbol is "a word, object, or any act of behavior whatsoever that automatically suggests to those who participate in it some further level of meaning."[8] Note that it is not the tangible symbol itself which is important, but the direct emotional response it elicits in a group of people who are then carried toward a shared perception. Music is the quintessential symbol.

Music avoids substantive associations because it is, by nature, noncognitive. Human beings have the ability to assign definitions to words or

phrases, and evaluate them intellectually. We can agree, disagree, manipulate, edit or rethink an idea that is described by words. But music bypasses this intellectual evaluation. Human beings have no tools to assess its meaning. It is intangible. It doesn't "mean" anything, in the literal sense of the word.

Music symbolizes. It evokes personal memories. "It is precisely because symbols are so personally relevant that we insist on asking what they mean, as if anything that evokes such emotion from us must have some grand religious or cosmic meaning beyond ourselves."[9] In the context of ritual, music elicits an emotional association which binds the worshippers to the significance of the moment and, simultaneously, to each other.

> Sometimes the effect is to fasten everyone's attention on a particular *event* being celebrated in the liturgy; alternatively, it may establish a shared *emotion* or even just a sense of sharing the *experience* of a common melody with common associations for everyone present. Whatever the reason, the music works, as mere words do not, to develop a fused group focus. Music thus acts to convert individuals into a group where they can experience together the message of the alternative world being established in their prayers.[10]

In Jewish ritual, music's symbolic function is achieved through *nusach*. *Nusach* is part of the musical tradition which Dr. Lawrence Hoffman refers to as "the record of musical syntax, the association of certain sounds with certain events and seasons in the sacred calendar."[11] *Nusach* distinguishes between morning and evening, between Shabbat and the work week. It marks the festivals and the holy days, demonstrating their parallel nature and pointing up each of their unique characteristics. It reminds us of the

cycles of the moon and the sun, of planting and harvesting, of our historical days of joy and of sadness. Through *nusach*, we perceive the structure of sacred time and attach meaning to the endless succession of otherwise indistinguishable minutes and hours.

But *nusach* is only an effective ritual symbol if it elicits a shared emotion automatically. Symbols gain their emotional power over a long period of time and are adopted as part of tradition. Yet unless the community takes ownership of the symbol, cherishing it and handing it down from one generation to another, it loses its symbolic power. "Ownership is crucial here. If we, the recipients, do not take it as owned, it is not tradition any more."[12]

Can we recover a tradition that, if not already lost, has become diluted over time? If ritual is to remain effective in bringing order and structure to our lives, then we must once again be able to respond to its symbols. "People need to develop the art of recognizing symbols that punctuate the passage of sacred time and make Religious Moments possible."[13] Those "Religious Moments" allow us to transcend the mundane and experience a sense of wonder and holiness in the world.

> Religion . . . seeks to turn much of everyday life into special moments. It aims to have us share its seers' insight that every instant is a precious gift, not anything we could by right demand. It therefore provides us with rituals by which we may interrupt the apparent profanity of commonplace activity and, by reaching for the holy, sanctify our lives.[14]

The rejuvenation of *nusach hat'fillah* as the sound of our sacred time can allow us to reach past our intellectual appreciation of ritual and find

affective involvement — *kavannah* — as individual worshippers and as a community.

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The passion of the faculty at the School of Sacred Music for the cantorial art has been infectious. In particular, Dr. Eliyahu Schleifer, Cantor Israel Goldstein, and Cantor Noah Schall have been kind enough to look over parts of the manuscript and give me guidance. It is my hope that the finished product will do justice to their high standards.

A number of faculty members have supported me through the process of both cantorial school in general and the thesis project in particular. My deepest gratitude goes to Joyce Rosenzweig, Cantor Benjie-Ellen Schiller, Dr. Nancy Wiener, and Rabbi Zahara Davidowitz-Farkas. There are no words to describe my profound gratitude.

Finally, to my friends and family who have encouraged me and put up with me and supported me these past four years. You have given me the strength to push through. I'm terribly lucky to have you all.

Editorial Method

In order to make the musical examples as clear as possible, I have edited them to conform a single standard of notation without further comment. Beams are broken between beats and within a beat for separate syllables. This seems to be common practice in the notation of *hazzanut*. Slurs extend across multiple notes sung to a single syllable. In unmetered recitative, I have corrected rhythmic notation which is illogical by contemporary standards. For example, Adolph Katchko often writes when he apparently meant  .

The texts are transliterated in Sephardic pronunciation. Regarding the articulation of the *schwa*, the practice in *hazzanut* was generally to pronounce the *schwa merachef*; our language experts at HUC-JIR in Jerusalem all advised against it. I have adhered to the latter in accordance with the editorial procedure in the *ArtScroll* series. This means I have removed or added notes, and adjusted the rhythms accordingly. I have also used the *ArtScroll* prayerbooks to render both the Hebrew and, for the most part, the English translations. The **List of Music Examples** gives the corresponding page numbers in the appropriate prayerbook.

Any editing of musical examples over and above the practices mentioned above are noted in the **List of Music Examples**.

Chapter 1: Overview

History and Structure of the Synagogue Modes

Introduction

The cantorial art of liturgical chant remained an oral tradition for centuries. In fact, it was not until the 19th century that the prayer chants of the synagogue were notated in written form and began to be critically evaluated by Western musicians.[1] A combination of factors have made that evaluation difficult: the origins of the music; the manner in which cantors were trained and the musical traditions passed on; and the nearly impossible task of accounting for regional differences, local customs, and the cantors' personal preferences and mannerisms.

While it is generally true that musical practice pre-dates its corroborating theory — with serial music of the early 20th century a conspicuous exception — the wide gap between the inception of Jewish liturgical chant and its study poses special problems. If scholars and theoreticians cannot determine with certainty the origins of this chant, then attempts to analyze it according to paradigms of modern Western theory must necessarily be approached with skepticism. It is certainly tempting to try to deduce the nature of synagogue chant from that of the church, about which we have considerably earlier written documentation. Indeed, the first people to write about Jewish chant compared its structure to that of the medieval church modes. Yet as modern scholarship in ethnomusicology continues to yield new insights, it becomes apparent that Jewish and Arabic liturgical chant share

many salient features, yielding greater insights than the comparisons to medieval church music.

The nature of the oral tradition and its practitioners adds another layer of complexity. Until recently, the majority of *hazzanim* were not trained as Western musicians. Thus they may have lacked the vocabulary and the framework for categorizing their music. Music which can be categorized and discussed theoretically is more likely to be passed on intact than music which relies on the aural skills of those to whom it is entrusted. For example, if a modulation can be described according to the intervallic relationship of the two tonal centers, and the common and altered tones which implement the modulation, then it can be widely reproduced with accuracy. If, on the other hand, a cantor is trained to "hear" the modulation, then as the cantor "internalizes" the music, individual aptitude and personal predilections become important factors in the accuracy of transmission.[2]

Geographical distance only exacerbates the situation. Without modern communications technology, regional traditions are most likely to be influenced by its principal local practitioners and the indigenous culture. The personal preferences of a respected cantor would be passed on and elaborated upon by his disciples, and adopted as *minhag* (custom) by the local community. Some customs were carried afar by those Jews involved in trade. However, it was the mass migrations due to hardship — the persecution and expulsion of Jews throughout Europe, from the First Crusade in 1096 to the Chmielnicki pogroms in 1648, and the spread of the Black Death (1348–50)[3]

— which played a greater role in the spreading and blending of Jewish cus-tom.

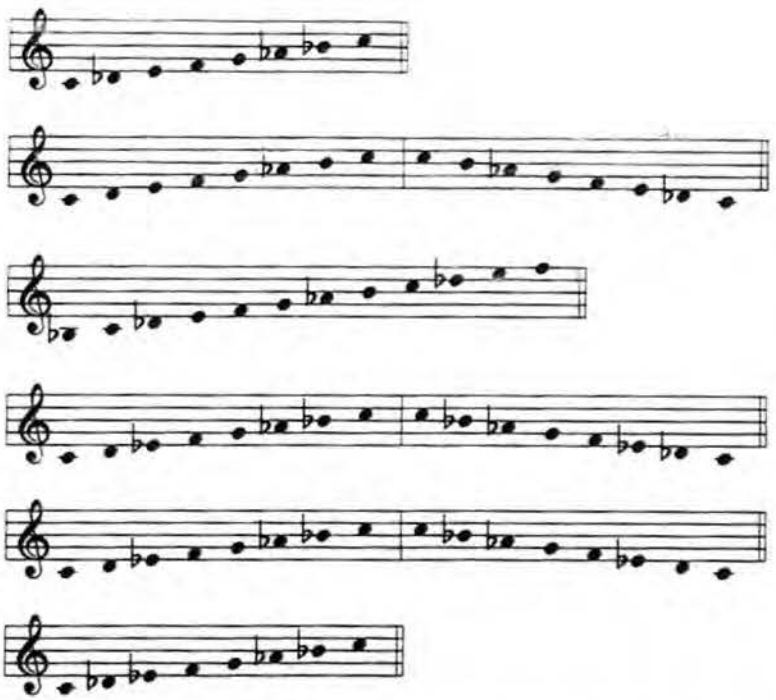
All of this goes to say that the long oral tradition prevents us from tracing the development of Jewish liturgical chant definitively. Those who have sought to systematize an understanding of modal practice have been limited by the subjective nature of their training and the breadth of scholar-ship at the time of their writing.

The Development of Jewish Modal Theory

The earliest attempts at understanding the Jewish modes compared them to the medieval church modes.[4] In 1859, Hirsch Weintraub ascribed certain Jewish prayers to the mixolydian, aeolian and phrygian modes.[5] Samuel Naumbourg expanded upon this in 1874,[6] adding the dorian, lydian and ionian modes, and analyzing synagogue music in terms of its adherence to one or more of the church modes, and to scales which did not fit into the ecclesiastical system.

In an 1886 pamphlet, the Viennese cantor, Josef Singer, proposed that all Jewish liturgical chant fit into one of three modes which he called by the Yiddish term used by cantors: *steiger*.[7] Each *steiger* was named after an important prayer chanted in that particular mode. This is an important concept for understanding modal theory, since each cantor described modes according to the manner in which he himself chanted the prayers. Two sig-nificant consequences result. First, it is not enough to know the name given to a particular mode. Depending upon the traditions employed by the cantors

in question, the same name could refer to radically different musical renditions of a particular prayer. Max Wohlberg lists the following scales, all referred to by different cantors as "Yishtabach":[8]



Second — for reasons which will become apparent later in this discussion — the number of modes referred to by various cantors is rather large. Here is just a sampling: Yishtabach, Mi Shebeirach, Ahavah Rabbah, Magein Avot, Yekum Purkan, Av Harachamim, Or Chadash, Adonai Malach, Titgadal and Tikanta Shabbat.

Cantor Singer's three modes were Yishtabach (what is now usually called Ahavah Rabbah), Magein Avot and Adonai Malach. While they are roughly equivalent to our modern definitions, Singer still classified his modes according to the eight-note, repeating-octave scales typical of the church

modes and contemporary Western tonal music. Eric Werner says, "He should not be blamed too much for that error, however. His misconception was shared by all major scholars . . . at that time. They were obsessed by the idea that every musical structure can be broken up into its constituent scales . . . .[9] This approach persisted through the end of the nineteenth century.[10]

Three new ways of thinking about Jewish liturgical music arose at the beginning of the twentieth century: 1) new classifications of synagogue music, 2) the recognition of influences beyond the Medieval church modes and 3) the acceptance of non-repeating octave scales. Both Pinchas Minkowski[11] and Rabbi Francis L. Cohen[12] suggested that the music heard in the synagogue could be divided into several types: biblical cantillation (trope, *te'amim*), prayer motives (*nusach hat'fillah*), fixed melodies (the so-called *MiSinai* tunes) and hymns. These four classifications, while not mutually exclusive, do provide insight into the sources and functions of various types of our liturgical music. We shall return to this discussion in the next chapter.

Cantor Aron Friedmann was the first to point out[13] that a *steiger*, unlike Western music, is not formed from repeating octave scales. In some cases, the *steiger* may not encompass an entire octave; in others, half-step alterations take place both above and below the principal octave.

Minkowski and musicologist A. Z. Idelsohn[14] recognized similarities between Eastern and Jewish music. Minkowski asserted that there were three periods of foreign influence: Greek, Arabic and German. Idelsohn saw elements of the Arabic *maqamat*, Indian *ragas* and modes (*echos*) of the Byzantine Church in synagogue music.[15] This was a crucial connection to have

made because the very basis upon which oriental and Western musics are conceived is quite different. The oriental modes carry strong aesthetic affiliations apart from their unique structure. The literal meaning of the Sanskrit *raga* is "emotion," "affect," or "passion." Different emotional affects and ethical categories are ascribed to the individual *maqam*. In both cases, the *ragas* and *maqamat* are associated with specific temporal occasions — which, as we shall see, is the essential function of the Jewish mode.

Western tonal music is based upon a scale from which harmonic relationships (tonic, dominant, subdominant, etc.) are derived. The medieval church modes are also scale-based; in this case, the amplitude of the melody (*ambitus*) and the important structural pitches — *finalis* and recitation tone (or dominant) — are derived from the scale of the authentic or plagal mode.[16] Oriental music, on the other hand, is based on a stock of motives *from which* it may be possible to derive a scale.

Recognizing the relationship between oriental music and Jewish liturgical chant completely reverses our understanding of the basis of synagogue music. Modes are not scales upon which liturgical chant is constructed. Rather, modes are a collection of musical phrases which are characteristic of a certain prayer or group of prayers *from which* we may deduce some kind of scalar pattern.

A logical question is: Why didn't the cantors in the nineteenth century — the guardians and purveyors of this oral tradition — speak of the modes from this perspective? Hanoch Avenary points out that "[t]he earlier investigators had been trained synagogue cantors and knew the facts and problems

from within. They found it easy to communicate with each other, and it was possible to arrive at a consensus of opinion without working out the theses to the last detail."[17] In other words, the motivic foundation of the modes was assumed; it would have been unnecessary to include it in the discussion. Rather, as the music began to move from oral to written tradition, the cantors applied the tools of music theory they had available to them — Western modal and tonal theory — to the problem of describing the synagogue music. The imposition of Western theory on oriental music caused the investigators to misrepresent the nature of the liturgical chant.

The influence of Idelsohn cannot be overstated. He was the first Western musicologist to collect, classify and analyze Jewish middle eastern traditions. While some of his general conclusions must be approached with a healthy skepticism in light of modern scholarship, his theory of the modes, which he claimed were the basis for all eastern music, is the foundation of our current understanding of synagogue music. He defined a mode as music "composed of a number of motives (i.e., short music figures or groups of tones) within a certain scale."[18] His definition of *maqam* is essentially the same: "In no way may the concept *maqam* be identified with 'church mode' or even 'tonality.' For while these latter merely denote the scale in which tunes can be sung as desired, in *maqam* both scale type and melody type are comprised, and preeminently the latter."[19] Working from Idelsohn's theory, Egon Wellesz found that in the chant of the Byzantine Church, "the mode . . . is not merely a 'scale' but the sum of all the [motivic] formulae which constitute the quality of [the mode]."[20]

As Idelsohn continued to scrutinize the music he had collected, he realized that, within a mode,

> [t]he motives have different functions. There are beginning and concluding motives, and motives of conjunctive and disjunctive character. The composer operates with the material of these traditional folk motives within a certain mode for his creations. His composition is nothing but his arrangement and combination of these limited number of motives. His "freedom" of creation consists further in embellishments and in modulations from one mode to another.[21]

Perhaps the limitations placed here upon the *hazzan* or composer imply a narrower range of creativity than is, in reality, the case. Idelsohn's premise was taken up and worked out by Baruch Cohon who more generously states: "Within the limitations of its scale, its patterns and its ritual application, it affords opportunity for improvisations of both flexibility and virtuosity."[22] Cohon produced charts which show how different groups of motives that adhere to the same scale are attached to specific liturgical occasions. Within each of these groups, motives may function as opening, intermediate or concluding phrases. He further subdivides the intermediate phrases into pausal, modulatory and pre-concluding phrases. In so doing, Cohon lays out the basic catalogue of *nusach hat'fillah*.

Further investigation has confirmed or refined the work of Idelsohn and Cohon. Levine states that "[s]ynagogue prayer modes are aggregates of characteristic phrases shared with synagogue Biblical cantillation."[23] He attempts, by showing the correlation between motives of chant and those of the Adonai Malach *steiger*, to support Idelsohn's contention that the prayer modes have their sources in biblical *te'amim*.[24] Levine echoes what has now gained wide acceptance by musicologists when he says that "[s]ynagogue

modality . . . is seen to fall within the purview of Middle Eastern song, whose chief vehicle is the Arabic system of *maqamat*."[25]

Cantor Lieb Glantz proposes a refinement when he applies the tetrachordal principle of the Greek modes to the theory of the synagogue modes.[26] In doing so, he is able to explain some of the unique characteristics of the prayer modes, such as the chromatic variations generated by the motives in adjacent octaves or the melodic augmented seconds. It must be pointed out that, while his theory does shed some light on the structure of the modes, it is not universally accepted.[27]

Toward a Definition of the Jewish Modes

After tracing the development of modal theory, is it now possible to define the Jewish prayer mode? With confidence we can answer: yes and no. A mode can be defined as a collection of musical motives which are the basis for cantorial improvisation for a particular prayer on a specific occasion. From these motives, the *hazzan* may deduce the scale which will serve as the framework for additional improvisation and embellishments. Hanoch Avenary is more accurate when he defines these motives as "the most typical [melodic] movements within the scalar framework."[28] For, akin to the riddle of Elgar's *Enigma Variations*, the pure form of these motives upon which the improvisation occurs cannot be determined. Dr. Eliyahu Schleifer calls the art of cantorial chant "an endless series of variations on a model which does not exist."[29]

Although the motives may be mixed and matched within a mode pretty much at the discretion of the *hazzan*, certain melodic formulae imply grammatical function. The case is similar to that of the *te'amim*, although by no means adhered to as strictly. Some motives are pausal; that is, they indicate punctuation within a sentence of the text. Other phrases indicate the end of a sentence, and may be preceded by a pre-concluding phrase — one which leads inexorably to a melodic cadence. Still others initiate a modulation to another mode in which the cantor may dwell for a few sentences, or initiate the transition to the next prayer.

The nature of the improvisations will vary according to the particular musical abilities, predilections, creativity, mood and vocal skills of the *hazzan*. The cantor uses a variety of techniques to express the text and maintain the interest of the congregation. Certain melodic patterns of repetition, variation or sequence are often found. The cantor may make a temporary modulation, interpolate a phrase from his stock of coloratura formulae, alternate arioso with recitative, or insert a congregational melody — all within the context of the given mode.[30]

The term "mode" is actually used on two planes at once. We just defined it as a stock of motives used for a specific liturgical occasion. This is, indeed, its more accurate sense. That is why cantors discussed such a large number of modes: they were referring to a particular portion of a particular service and the motives that are employed. On a broader level, prayers whose stock of motives share the same collection of pitches are often grouped together according to an overarching scale. This is the sense in which the term

"mode" is commonly used today. It is important to remember, however, that this is not really a *mode* but a *scale*. In this sense, "Ahavah Rabbah" is really talking about *all* of the modes that are comprised of motives which share a particular scale whose salient features include the interval of an augmented second between the second and third degree of the scale. While different prayers that are chanted in the Ahavah Rabbah mode may use the same motives in similar ways, many of the prayers have "typical melodic movements" that are unique.

To further confuse the issue, *hazzanim* sometimes refer to a modulation which is characteristic of a particular prayer as a mode. For example, in the "*Mimkom'cha*" of the K'*dushah* for *Shabbat shacharit*, the cantor begins in Ahavah Rabbah mode, modulates to Magein Avot on the fourth scale degree, and then to the relative major (on the third scale degree of the Magein Avot) at the words "*Titgadal v'titkadash b'toch Yerushalayim ir'cha*" (see example 5.4b). Hence, that major key is sometimes referred to as "Titgadal Major" or Titgadal Mode."

It is important to keep in mind that cantors designated the modes according to the liturgical practices of their everyday lives. Our current terminology results from theoretical studies. The concepts are, thankfully, not as confusing as the terminology.

One final word must be said in general regarding theoretical discussions of music. One musicologist remarks that "Greek theorists played with harmonics, or the theory of acoustics, for its own sake. They considered it superior to musical art precisely because it had no practical use."[31] This

should remind us that the music itself is not synonymous with the theory. Just as musical notation is merely a graphic representation of sound, music theory is simply a framework in which to understand what is being heard. As in much scientific research, a theory is only as good as the amount of light it sheds on a particular matter. One theory is "better" than another only if it yields greater depth of insight and initiates richer discussion. The theory which follows is designed to help the person trained in Western music to understand a sacred tradition which has been preserved, varied and expanded for hundreds of years. It is meant simply as a first step to help the ear make sense out of the Jewish modal language by expanding the theoretical boundaries of tonal music.

Musical Terminology

There are very few technical terms which are unique to describing the music of the synagogue modes. At the same time, the danger in describing non-Western music in Western terms is that unintended implications of tonality can be mistakenly inferred. This dilemma can only be resolved by using familiar terms with certain caveats stated at the outset. The term "tonic" will be used to refer to the modal center on which a particular mode is built. This tonic identifies not only a particular note but that note in a particular octave. Unlike tonal music, in which the notes are identical in every octave, the Jewish modes feature chromatic adjustments of certain pitches in different octaves. Similarly, "subtonic" refers to the note a half or whole step below the tonic — as opposed to "the seventh scale degree" which is a major

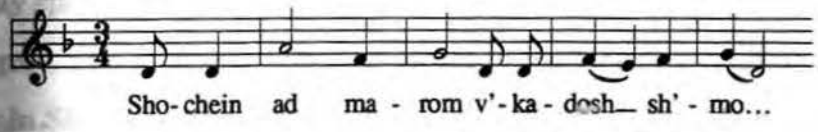
or minor seventh above the tonic. This distinction will be crucial, for instance, when discussing the Adonai Malach modal family in which the subtonic is raised (i.e., it is a half step below the tonic) but the seventh scale degree is lowered (i.e., a minor seventh above the tonic). Likewise, "supertonic" is the note in the mode immediately above the tonic.

The term "scale degree" also has tonal implications, but here simply refers to the number of intervals of a second (minor, major, or augmented) from the tonic up to the note in question. The tonic would be considered the first scale degree, the note in the mode immediately above the tonic is the second scale degree, the note in the mode above that is the third scale degree, and so on. Other musical and non-musical terms which are used in a unique way when discussing synagogue music are listed in the Glossary. Any tradition that has been transmitted orally for so as long as synagogue music naturally develops a jargon all its own.

Chapter 2: The Magein Avot Family

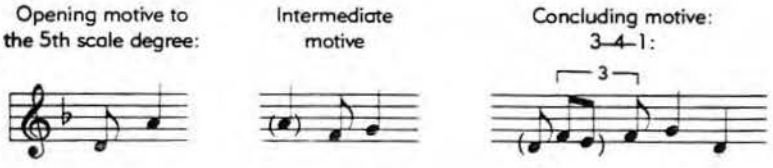
The Magein Avot family takes its name from the central prayer of the *m'ein sheva*, the concluding section of the *amidah* for Friday night. It is the most straightforward of the modal families with few modulations or excursions (see Chapter 5). It lends itself to simple chanting, often declaiming a portion of the text on a single note, as in the morning blessings for weekdays. The simplicity of this family is appropriate for the restful mood of *ma'ariv l'Shabbat*. Baruch Cohon states it nicely: "Some of these phrases seem to indicate a feeling of eternity . . . . All the phrases are sung with a serenity that is Sabbath peace."[1]

The principal features of the Magein Avot family can be seen in the following brief examples of *Shochein ad marom* from *p'sukei d'zimrah* of *Shabbat* morning. Up to this point, the service is chanted by a lay precentor or an assistant cantor. The *hazzan* leading the *shacharit* service would begin *davening* at the words *"Shochein ad marom v'kadosh sh'mo"*/"He Who abides forever, exalted and holy is His name."



Example 2.1a

From this phrase, we can derive three **motives** or **phrases: opening, intermediate,** and **closing**. The numbered scale degrees are based on a modal tonic on d^1:

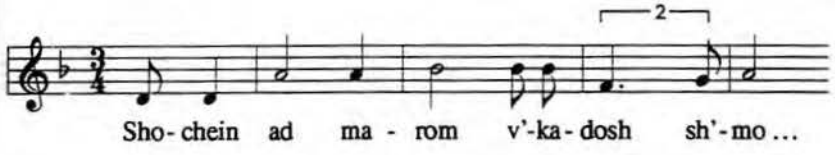


Example 2.1b

In this example, we observe the following characteristics:

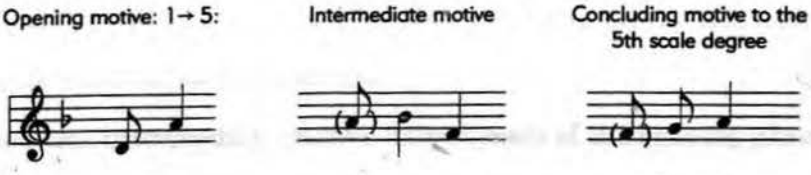
- **Opening motive**: 1→ 5
- **Concluding motive**: characteristic motive is 4th scale degree descending to the 1st; often preceded by the 3rd degree.
- **Intermediate motive** connects opening and closing

A variation of this cantorial passage is as follows:



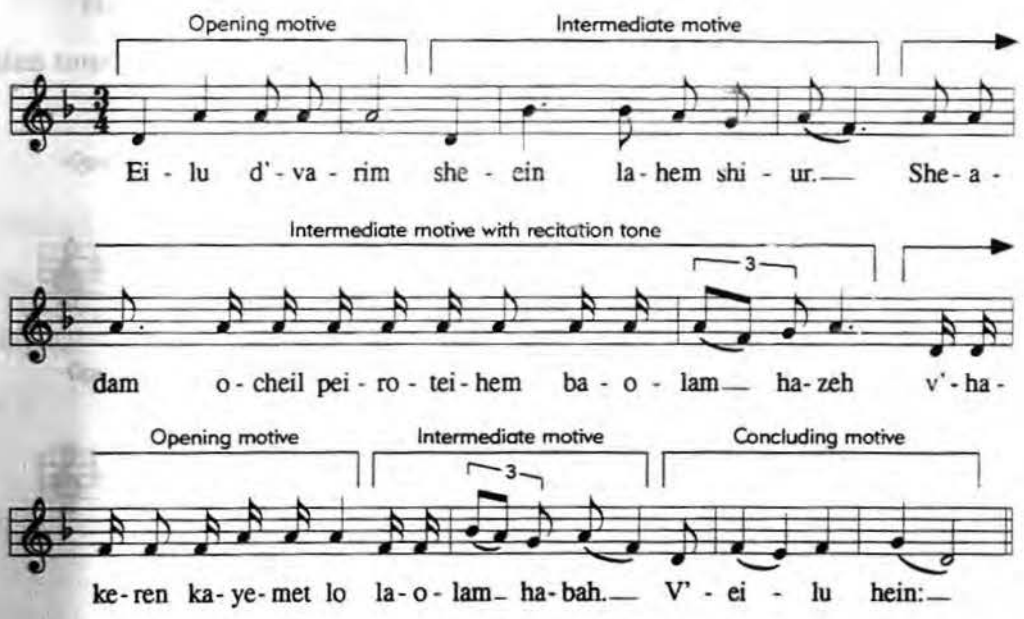
Example 2.2a

Pay special attention to the concluding motive which ends on the fifth scale degree. This ending is typical of modes in the Magein Avot family, particularly in *Shabbat* and Festival *ma'ariv*, and *Shabbat* morning services.



Example 2.2b

In the next example, we see these same motives expanded to accommodate a longer text. *Eilu d'varim* is part of *birchot hashachar*, the morning blessings that begin the preliminary portion of the *shacharit* service. The cantor introduces the paragraph by chanting the first line of text:



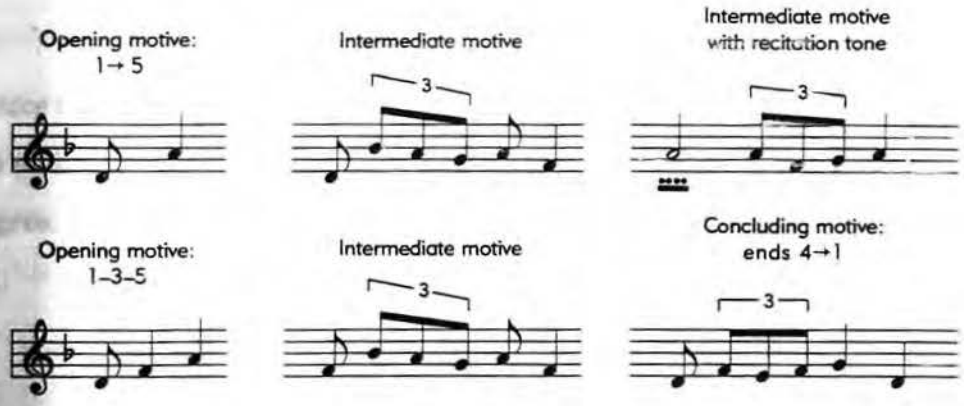
Example 2.3a

Notice that there are two opening phrases. The second one also moves from the first to the fifth scale degree, but this time by way of the third. While they can be seen as variants of the same motive, the first is more sparse and declamatory in introducing the prayer. The second keeps the text moving forward with a smoother melodic flow.

The same intermediate motive follows each of the opening phrases. Only the pickup note is changed so that it better matches the phrase before.

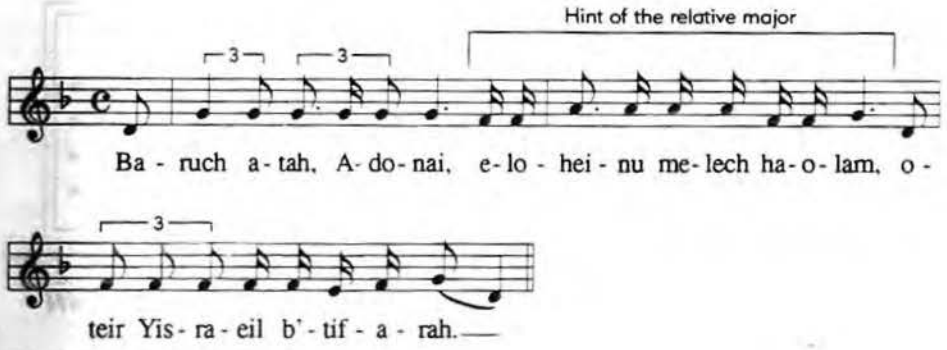
In order to accommodate a greater number of words and still maintain the simple *davening* style appropriate to this liturgical rubric, a portion of the text is "spoken" on a single note, called a **recitation tone**. This style of chant is often referred to by the Italian musical term *parlando*.

Here is the catalogue of motives from the example above. The recitation tone is indicated by the symbol 𝅗𝅥.



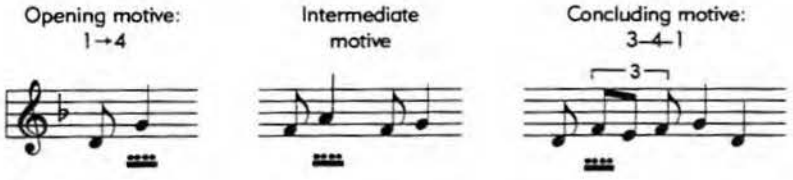
Example 2.3b

The weekday services tend toward brevity. The demands of a daily work schedule do not allow the Jew to linger in prayer as is possible on the Sabbath, Festivals, and High Holidays. A *hazzan* must be aware of both the aesthetics and time constraints of the service. The chanting throughout is simple with few embellishments and greater use of recitation tones for saying large amounts of text quickly. The *birchot hashachar* demonstrate this style:



Example 2.4a

Notice that recitation tones appear in all three phrases: opening, intermediate and concluding. We also see a new opening phrase to the fourth scale degree. The intermediate and concluding phrases first appeared in example 2.1.



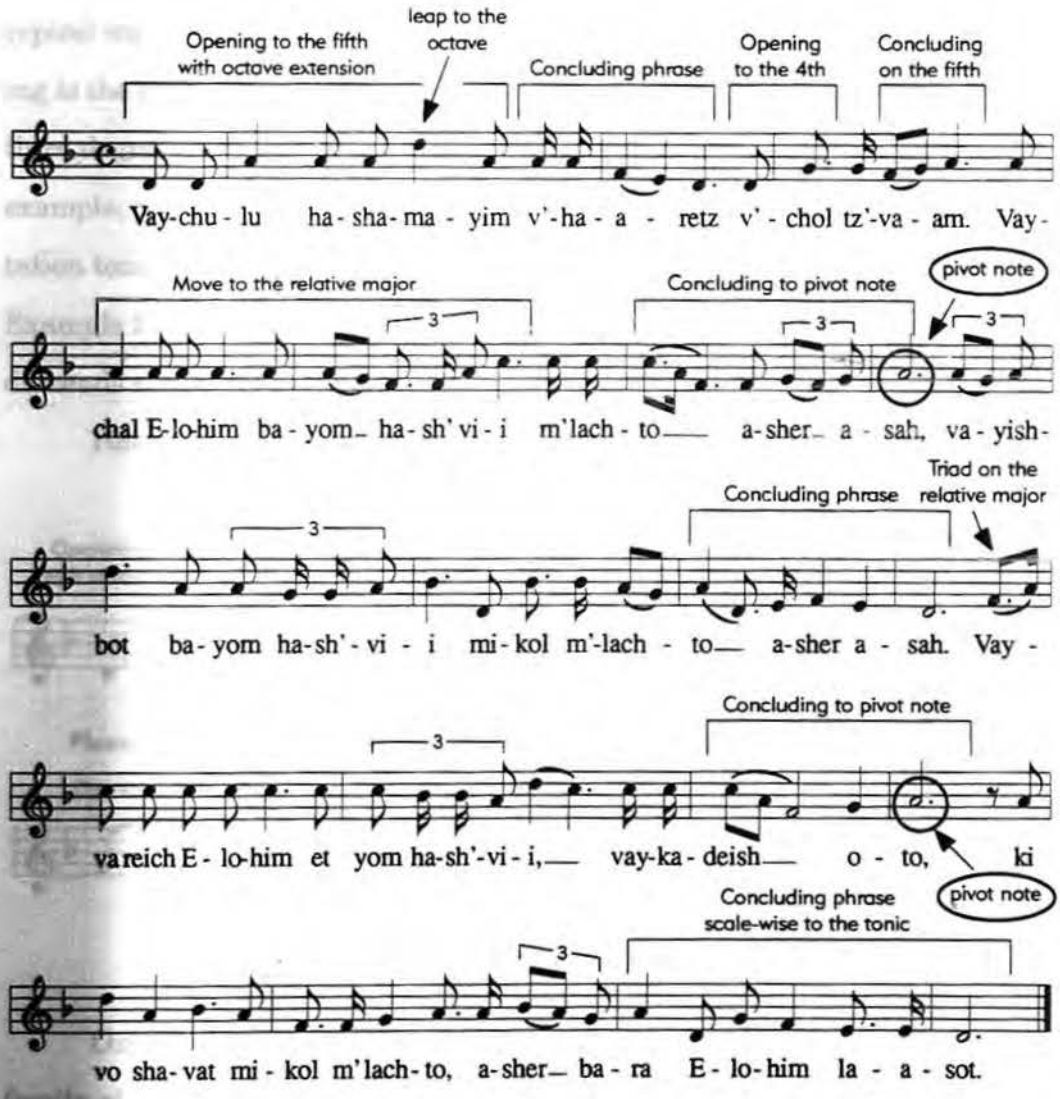
Example 2.4b

Let's review the characteristics of the Magein Avot family we have seen thus far. The recitation tone is characteristic of modes in this family which often are used for rapid *davening* or express simplicity and peacefulness. The opening phrase generally rises from the tonic directly to the fourth or fifth scale degree. The intermediate phrase has a small amplitude, can contain a recitation tone, and may hint at the relative major. The concluding phrase moves to the tonic or fifth degree, often preceded by the fourth degree.

Magein Avot Modal Features

- **Recitation tone**
- **Opening motive** to the 4th or 5th degree
- **Intermediate motive**: small amplitude; may hint at the relative major
- **Concluding motive** ends on the tonic or 5th degree

We now turn to the *m'ein sheva* section of the Friday night liturgy whose central prayer, *Magein avot bidvaro*, is the one from which this modal family takes its name. In the following example — *vaychulu hashamayim*, the introduction to the *m'ein sheva* — we can see again many of the modal features found in the previous examples. One interesting (and common) variation is the leap to the upper octave after the opening to the fifth which, in this case, serves as text painting for the word "*shamayim*"/"heavens".

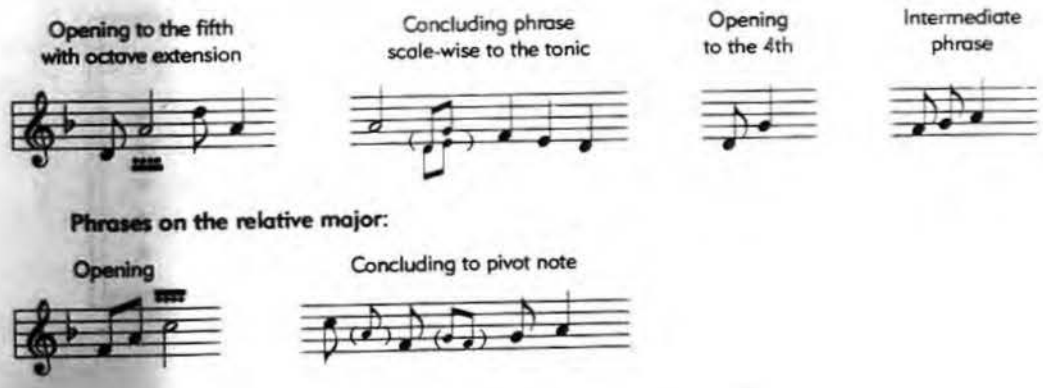


Example 2.5a

Prominent in this example are the two phrases in the relative major (beginning of the second line and the end of the third). According to Cantor Noah Schall,[2] this is the defining characteristic of the Magein Avot family. The second of the two phrases in the major is introduced by the triad on f — a

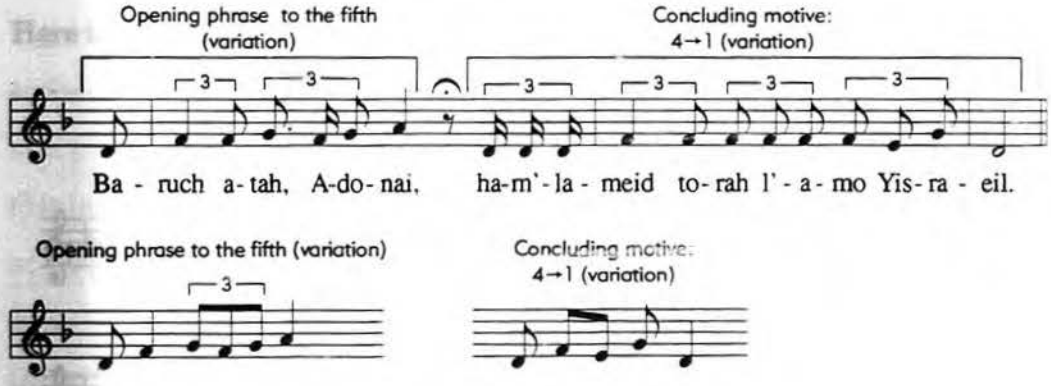
typical way to introduce the move to the relative major. Particularly interesting is the shift out of the major. This is accomplished by the pivot tone: the third degree in the major is the fifth degree above the modal tonic (in this example, a^1). We saw earlier that this note plays an important role as a recitation tone, and as the last note of both an opening and concluding phrase. Example 2.4a also contains a concluding phrase we have not yet seen which descends step-wise to the tonic.

Here again are the key phrases of "*Vay'chulu hashamayim*":



Example 2.5b

One final example will complete our first look at the Magein Avot family of modes. This is the concluding blessing — the *chatimah* — for the study of Torah from *birchot hashachar*. The opening phrase is the characteristic motive for the words "*Baruch atah, Adonai*"/"Blessed are You, Adonai." It is a variation on the opening to the fifth degree. The second phrase is simply a variation of the 4→1 concluding motive we saw earlier.

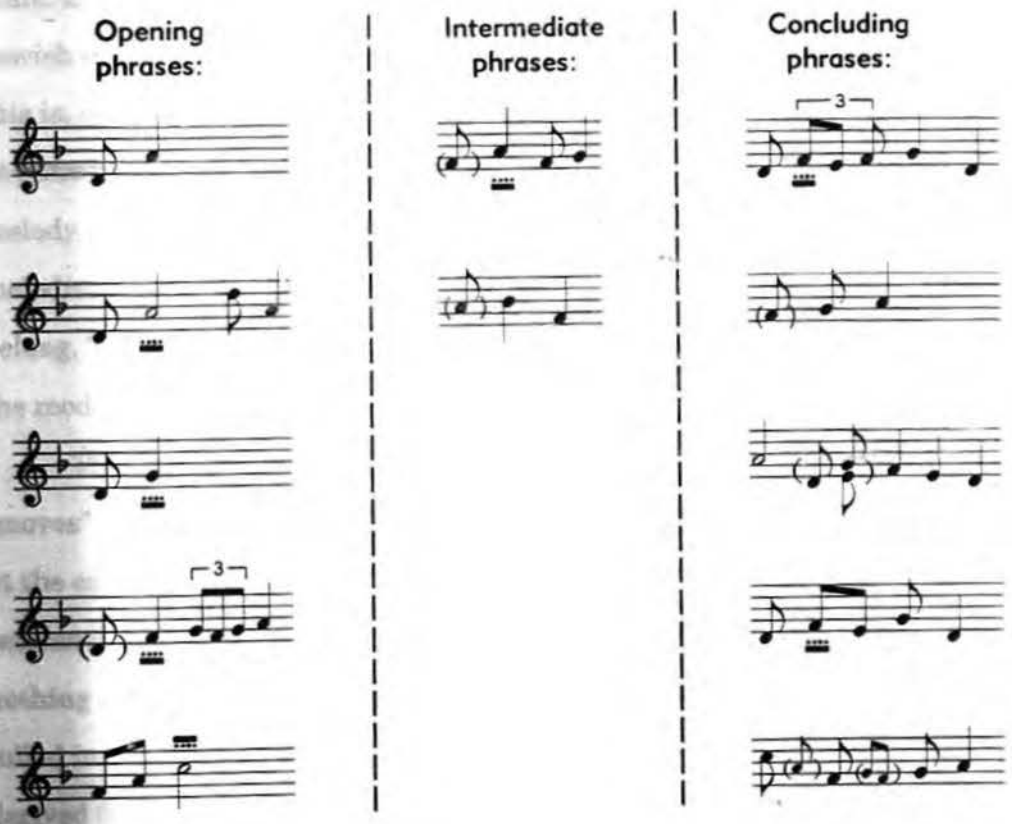


Example 2.6

Basic Characteristics of the Magein Avot Family

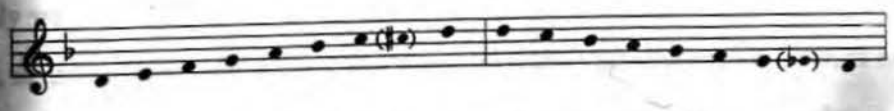
- **Recitation tone**
- **Intermediate phrase** on the relative major
- **Opening phrases**: to the 4th or 5th scale degree
- **Intermediate phrases**: suggestion of the relative major
- **Concluding phrase**: terminating on the fifth as well as the tonic

Here is the catalogue of motives we have covered:



Example 2.7

From this catalogue of motives, we can derive a scale which underlies all the modes of the Magein Avot family.



Example 2.8

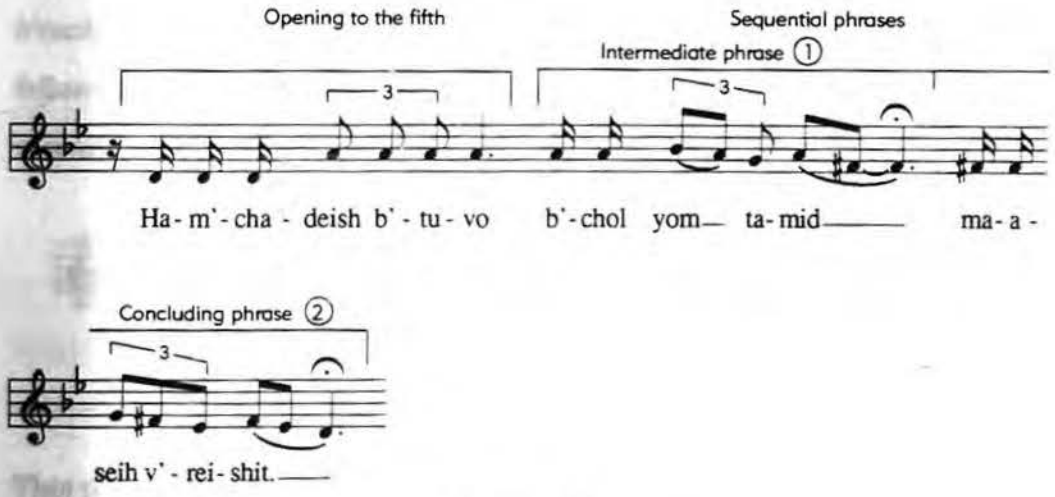
Please make careful note of two things: 1) This looks like the natural minor scale. 2) This is ***not*** the natural minor. It is a mistake when discussing the Jewish modes to see them in terms of a scale. To Western-trained musicians, this is, of course, quite natural. We are taught in Western music to look first at scales and keys, and then examine harmonic sequences and patterns of melody. In the case of the modes, the characteristic motives or phrases (not melodies!) define the individual modes and the modal families to which they belong. The scale is quite useful as a point of reference. But the scale is not the mode.

This is the reason I have presented the motives and characteristic "moves" of the modal family first, and have only given the encompassing scale at the end of this chapter. In discussions of *nusach*, you will generally hear reference made to "the Magein Avot mode" and the scale above. While there is nothing grievously wrong with using that terminology, it is crucial not to be lulled into a Western manner of thinking about *nusach*, which, in reality, is derived from motivic patterns chanted at particular parts of the liturgy.

That said, this mode requires a few more remarks. First, the Jewish modes can be transposed to any modal center. For example, the Magein Avot family is not necessarily based on a modal center of **d**; this scale could be transposed to any note. It is not uncommon to see a mode in the Magein Avot Family written on **c** (with a key signature of three flats), **e** (one sharp), **g** (two flats), or any other note with a key signature that is equivalent to that of the natural minor. (A discussion of the use of key signatures in the modes is presented in the next chapter.) Second, occasionally certain degrees of the scale will be altered for emphasis or color. For example, a raised seventh scale

degree may be used as a leading tone to emphasize a modal tonic. In fact, the lowered second scale degree or the raised seventh scale degree serve as descending and ascending leading tones, respectively. In example 2.7, both the $c^{\sharp}$ in the ascending scale and the $e^{\flat}$ descending are leading tones which emphasize the tonic d and, especially in the case of the $e^{\flat}$, lend color to the phrase.

The motives presented in this chapter must, naturally, be adapted to suit the length and accents of the texts which they declaim. They might be varied to lend interest to a section of the liturgy or to paint the text. Certain notes can be altered for coloristic variety. And it is up to the *hazzan* to use the motivic patterns as the basis for improvisation. We will see in Chapter 5 how the foundation we have laid out for the Magein Avot family can be put into practice by the *ba'al t'fillah* or the *hazzan*.

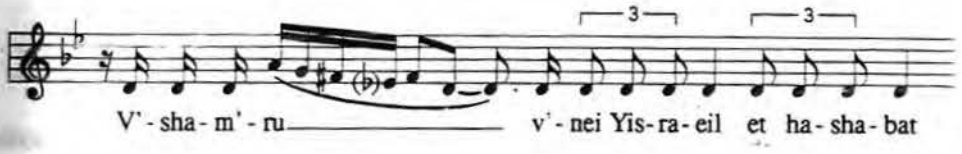


Example 3.1

This passage begins with a simple opening to the fifth scale degree, just as we saw in Magein Avot (cf. example 2.3a). It continues with two phrases — intermediate and concluding — which form a sequence. The intermediate phrase contains the lowered sixth scale degree (b♭) and the major third (♯) which identify the mode as belonging to the Ahavah Rabbah family. The concluding phrase emphasizes the interval of the augmented second between the second and third scale degrees — the most characteristic interval in this mode — with an alternation between those two notes before descending to the tonic:

The text *"V'sham'ru v'nei Yisraeil et haShabbat . . ."*/"The children of Israel shall keep the Sabbath . . ." (Exodus 31:16–17) appears in the traditional *Shabbat* liturgy three times: on Friday night before the silent *amidah*; on Saturday morning in the *k'dushat hayom* (the central blessing of the *amidah* for the Sabbath, Festivals and High Holidays which contains the

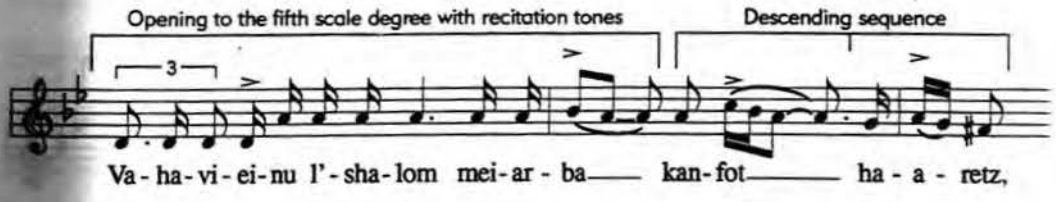
b'rachah that identifies the particular day); and as the preface for *kiddush* following Saturday's *musaf* service. Example 3.2 is taken from the Saturday morning liturgy where *"v'sham'ru"* is chanted in Ahavah Rabbah.



Example 3.2

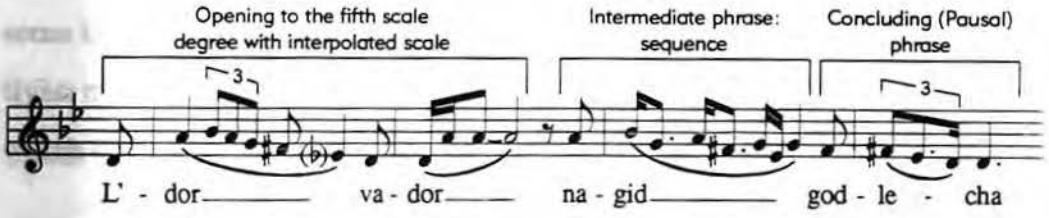
This passage opens with the interval of a fifth ascending from the tonic and returns to the tonic via a simple scale pattern in which the augmented second is emphasized by the notes f♯–e♭–f♯–d. The remaining words of the phrase are recited simply on the tonic note.

In example 3.3, both the tonic and fifth scale degrees are used as recitation tones. This passage ends with a short, descending sequence on the words *"kanfot ha'aretz."*



Example 3.3

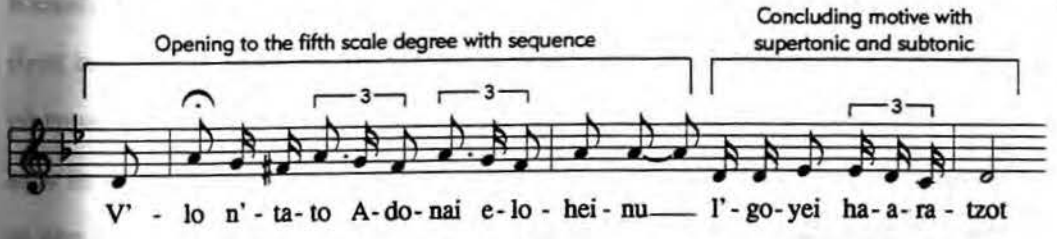
The use of **sequence** is an important feature of *nusach* and, in particular, of the Ahavah Rabbah modal family. Example 3.4 shows a more elaborate opening to the fifth scale degree on the words *"L'dor vador"* and is again followed by a descending melodic sequence:



Example 3.4

Notice that the concluding phrase contains the augmented second in its **descent** to the tonic. However, the augmented second does not have the same **emphasis** as it does in the figure  . The simpler descending **scale at** *"godlecha"* is not as strong an ending; in fact, it could be viewed as a **pausal phrase** — clear punctuation but not final.

Yet a different method of extending the opening to the fifth — by incorporating a sequence — is found in example 3.5 (*"V'lo n'tato Adonai eloheinu"*). Here, the concluding motive employs the lowered subtonic (c^1) as well as the lowered supertonic ($e^{\flat}$):

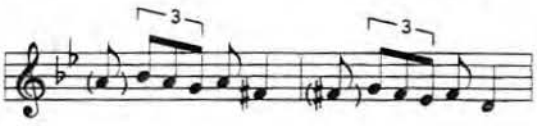


Example 3.5

Each of these examples features a different version of the opening to the fifth scale degree, one of the primary opening motives of this modal family. In all four cases, the opening is followed by a descending pattern, often utilizing

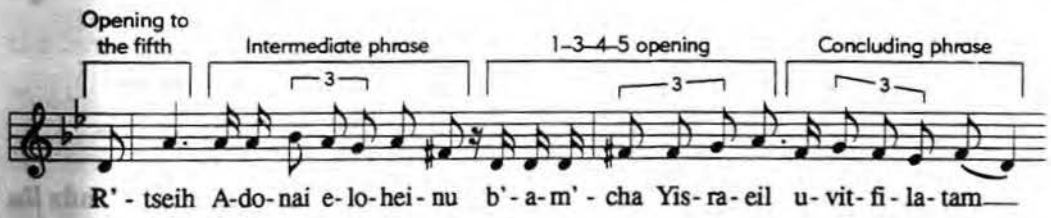
some kind of sequence. We have also observed two types of concluding motives: one which gives prominence to the augmented second interval, and one which emphasizes the tonic from the notes above and below.

As we said before, sequential phrases are typical in Ahavah Rabbah:



Example 3.6

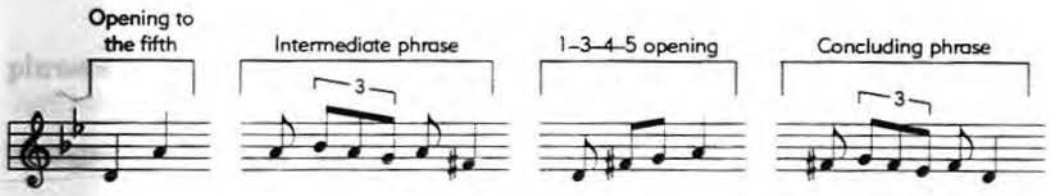
This sequence is employed in an interesting way in the next example:



Example 3.7a

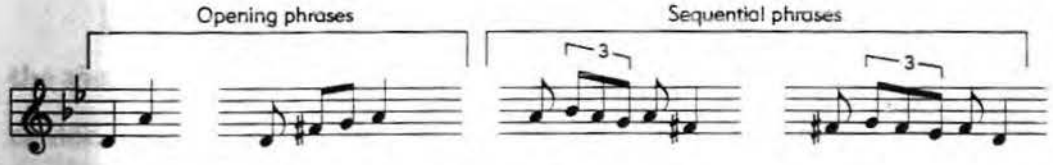
Example 3.7c has two opening phrases. The first is a simple move from the first to the fifth scale degree, while the second is a fuller 1–3–4–5 opening phrase. This is reminiscent of the pair of opening phrases in Magein Avot we saw in example 2.2a. However, we shall see shortly that the 1–3–4–5 opening is one of the principal introductory phrases for *davening* in Ahavah Rabbah.

Notice that the phrases which form the descending sequence in example 3.7a are not adjacent. These are the phrases first as they appear in the music:



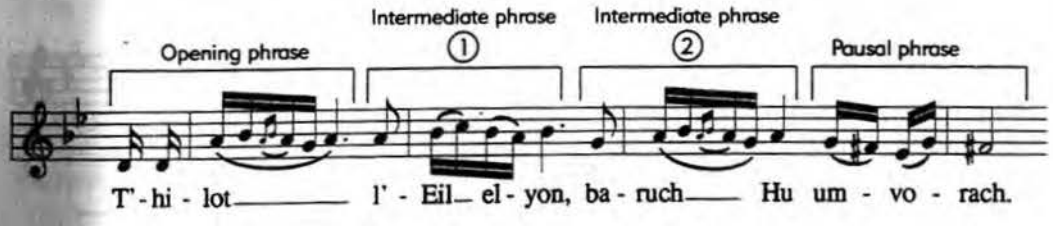
Example 3.7b

Here they are again, rearranged by category:



Example 3.7c

"T'hilot l'Eil elyon" is the *hazzan's* introduction to *"mi chamocha"* for all *shacharit* services. Example 3.8 shows the opening to the fifth scale degree and the descending sequence with some cantorial ornaments.

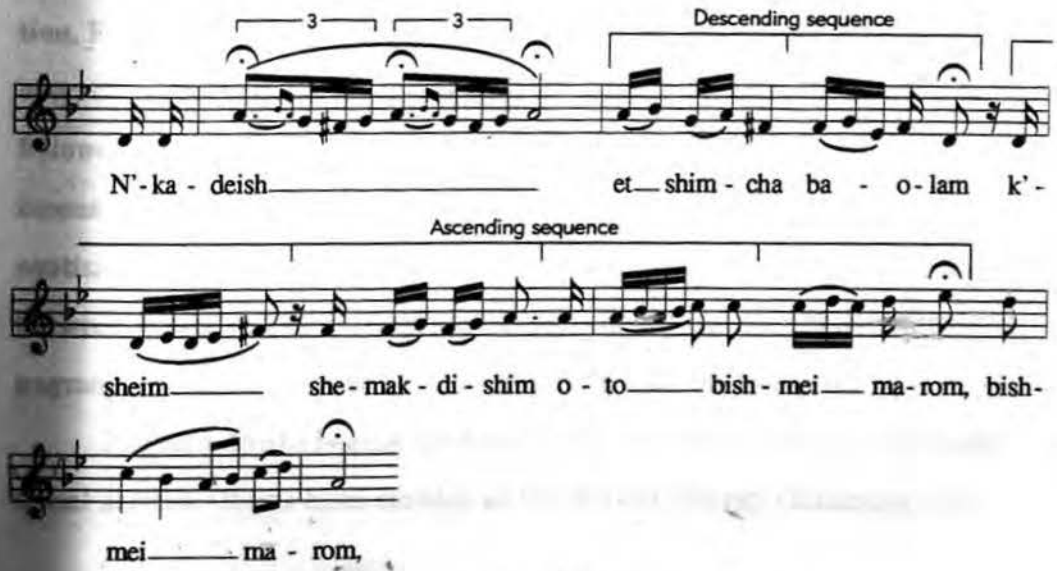


Example 3.8

This is a particularly interesting example because of the way similar melodic and rhythmic patterns are used in phrases with different functions. All four phrases make use of the rhythmic pattern  . The first three

phrases all use the melodic pattern  while the concluding phrase **changes** the figure to  which provides the sense of finality corresponding to the period at the end of the textual sentence: "Praise to God on high, the blessed One Who is blessed." Note also that "*l'Eil elyon*"/"to God on high" coincides with the phrase with the "highest" pitches.

Example 3.9 shows the beginning of the *k'dushah*, the third section of the ***shacharit amidah*** and often one of the more virtuosic moments for the cantor. After the opening to the fifth, there are two sequences which are at the core of the word painting. The translation of this passage is "We sanctify Your Name on earth, just as they sanctify It in heaven above." The descending sequence paints the words "on earth" while the ascending sequence paints "in the heavens above."



Example 3.9

In all of the examples we have examined thus far, the common thread has been the opening to the fifth degree followed by a descending sequence either to the third scale degree or returning to the tonic:

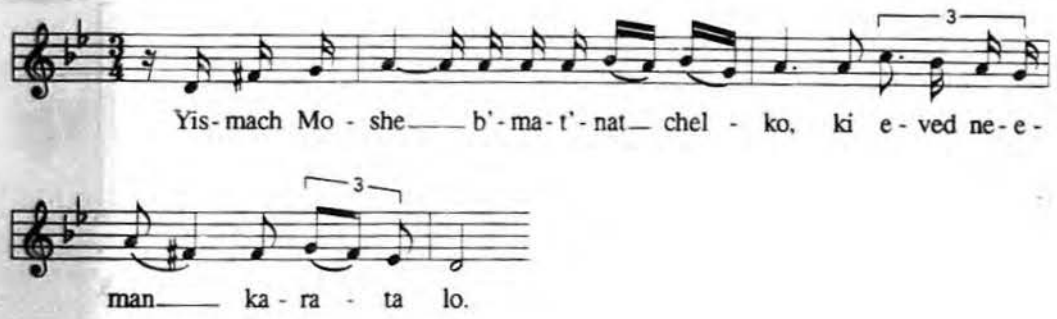
Basic Motivic Categories

- **Opening** to the fifth scale degree: 1 → 5
- **Sequence** descending to 3 or 1

In example 3.7a, we saw a second opening in Ahavah Rabbah: 1–3–4–5. This opening phrase also moves from the modal tonic to the fifth scale degree but, according to Dr. Eliyahu Schleifer,[2] it provides a stronger opening in Ahavah Rabbah. While the 1 → 5 opening could indicate any mode in the tonal, ecclesiastical or eastern systems (with the exception of the largely theoretical locrean mode), the 1–3–4–5 opening gives us much more information. From a Western perspective, it outlines the major triad. Notice, however, the notes that follow. In example 3.7a, the 1 → 5 opening is immediately followed by $b^{\flat}$, the minor sixth scale degree above the modal tonic — and inconsistent with the major mode. The second opening phrase (1–3–4–5) continues with a descending pattern that emphasizes the augmented second between $f^{\sharp}$ and $e^{\flat}$. The lowered second scale degree ($e^{\flat}$) and the resulting augmented second are also both inconsistent with the major mode.

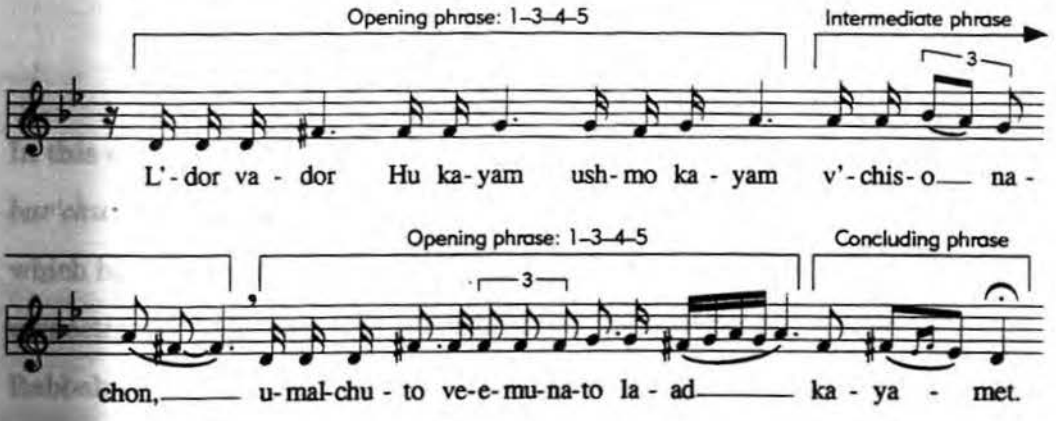
Yismach Moshe begins the *k'dushat hayom* for *Shabbat* in the traditional service. (It has been omitted in the Reform liturgy.) Example 3.10

features the 1–3–4–5 opening followed immediately by the minor sixth scale degree ($\flat$). This combination identifies the Ahavah Rabbah modal family.



Example 3.10

In example 3.11, the 1–3–4–5 opening occurs twice:



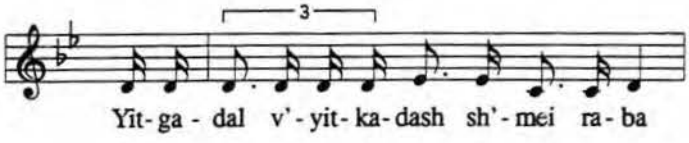
Example 3.11

In each case, the opening motive — which outlines a major triad — is followed by a phrase which identifies this passage as being part of the Ahavah Rabbah family. After the first opening, the intermediate phrase contains a

minor sixth scale degree ($b^{\flat}$); after the second opening, the concluding phrase emphasizes the minor second scale degree ($e^{\flat}$).

> A strong opening in Ahavah Rabbah outlines the major triad (1–3–4–5) and is quickly followed by the minor sixth or minor second scale degree which identifies the mode.

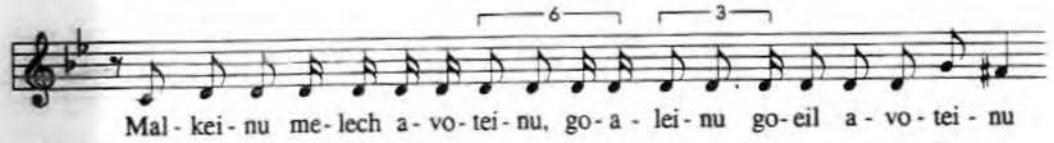
A third type of opening phrase features a small melodic amplitude centered around the tonic:



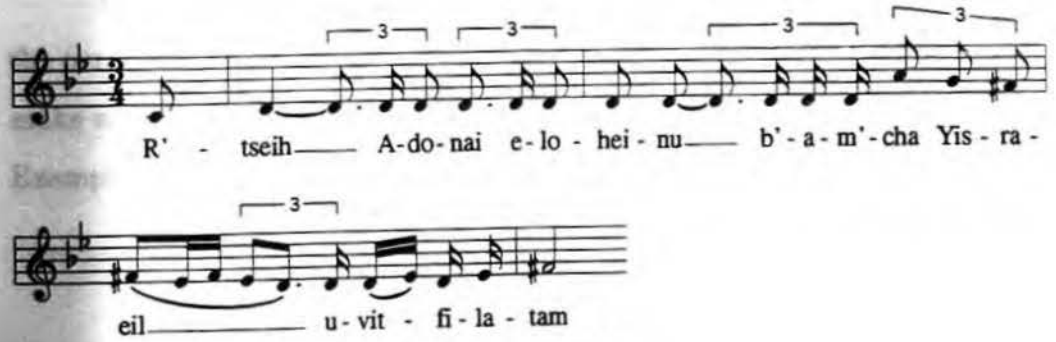
Example 3.12

In this opening line from the weekday *hatzi kaddish* that precedes the ***bar'chu***, the Ahavah Rabbah mode is established with the figure 1–2–7–1 in which both the second and seventh scale degrees (supertonic and subtonic, respectively) are lowered. This combination is possible *only* in Ahavah Rabbah or the Phrygian mode in the ecclesiastical system. It is for this reason that Ahavah Rabbah is also referred to as *freigish* (the Yiddish parallel of the word "phrygian"). Notice the similarity between example 3.12 and the closing phrase in example 3.5. One of the characteristic features of the synagogue modes is that ***motives can serve more than one function in the musical syntax***.

The next two examples demonstrate the opening from the lowered **subtonic**. In both cases, there is an immediate move to the tonic which serves as a recitation tone in this *parlando* style of *davening*.



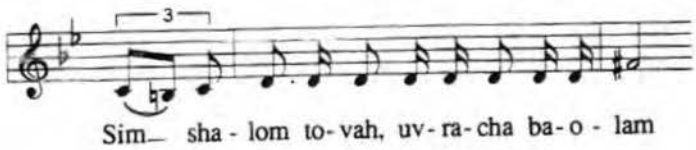
Example 3.13



Example 3.14

Example 3.13 comes from the *g'ulah* (redemption) section of the *shacharit* liturgy — one of the paragraphs before *mi chamocha*. This simple style of *davening* allows for rapid declamation of text. Example 3.14 is the opening phrase of the *avodah*, the first of the final three blessings of the *amidah*. While also demonstrating a rather simple and rapid *davening* style, the melodic figure in the second half clearly emphasizes the augmented second interval and the Ahavah Rabbah mode.

The phrase which begins below the tonic is one of the typical openings in Ahavah Rabbah. Example 3.15 also shows the *parlando* style. Notice that below the tonic, the sixth scale degree ($b^{\natural}$) is raised!



Example 3.15

The next three examples show a variety of openings for *Tzur Yisraeil*, the paragraph following *mi chamocha* in the *shacharit* service. All three make use of the raised sixth and lowered seventh degrees below the tonic. Example 3.16a is the simplest version:

Example 3.16a

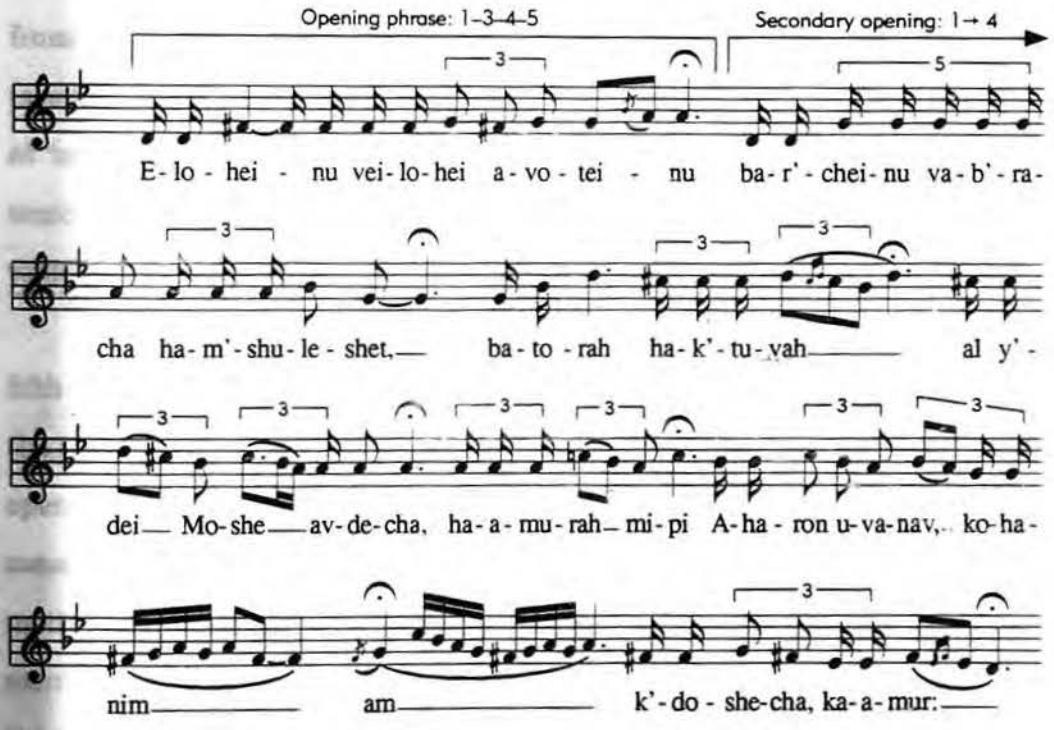
The figure 

, where d^1 is the tonic note (i.e., the note that begins the principle octave) is a very common opening in Ahavah Rabbah. The next two are variants. Example 3.16b is from the famous *Sacred Service* of Ernest Bloch and shows the descent to the fifth degree below the modal tonic. Example 3.16c begins one of the best-known cantorial settings by *hazzan* Israel Alter.

Example 3.16b

Example 3.16c

There is one additional opening motive which is usually used as a **secondary opening phrase** — that is, it does not actually begin a recitative but begins a section after Ahavah Rabbah has already been established. This is the opening to the fourth scale degree.



Example 3.17

This introduction to the Priestly Benediction begins with the 1–3–4–5 opening motive. The second phrase, at *"bar'cheinu vab'rachah ham'shuleshet"* makes use of the 1→ 4 opening. Notice that this implies the tonal key of **g minor**. That is the reason that this 1→ 4 opening is not favored to open a recitative: it does not immediately establish Ahavah Rabbah. Yet it is a legitimate phrase within the context of Ahavah Rabbah.

In this particular example, the feeling of **g minor** is also avoided by the use of the **c♯** immediately following the **g minor** triad at *"batorah."* This forms an augmented second between **b♭** and **c♯**, the sixth and seventh scale degrees. Yet the **c♯** is used only when approached from above; that is, when descending

from the d^2. When c is the upper note in a melodic passage, it appears as $c^{\sharp}$ (see the phrase beginning at *"ha'amurah"* in the third line and the *coloratura* at *"am"* in the fourth line). Raising the seventh degree in the octave above the tonic can occur in Ahavah Rabbah; however, the seventh degree below the tonic is always lowered.

So far we have seen opening phrases to the fifth scale degree, to the fifth by way of the third and fourth scale degrees, and to the tonic by way of the lowered subtonic or raised sixth below the lowered subtonic. A secondary opening to the fourth scale degree is also common. The intermediate phrases consist mostly of descending patterns, often as a sequence. The concluding motives are primarily scale-wise descents to the tonic, emphasizing the augmented second between the second and third scale degrees, or simply rest on the tonic encircled by the supertonic and subtonic.

Characteristics of the Ahavah Rabbah Family

- **Opening phrases**

  To the fifth scale degree: 1→ 5; 1–3–4–5

  Beginning on the subtonic: 7–1; 1–2–7–1; 7–6Maj–7–1

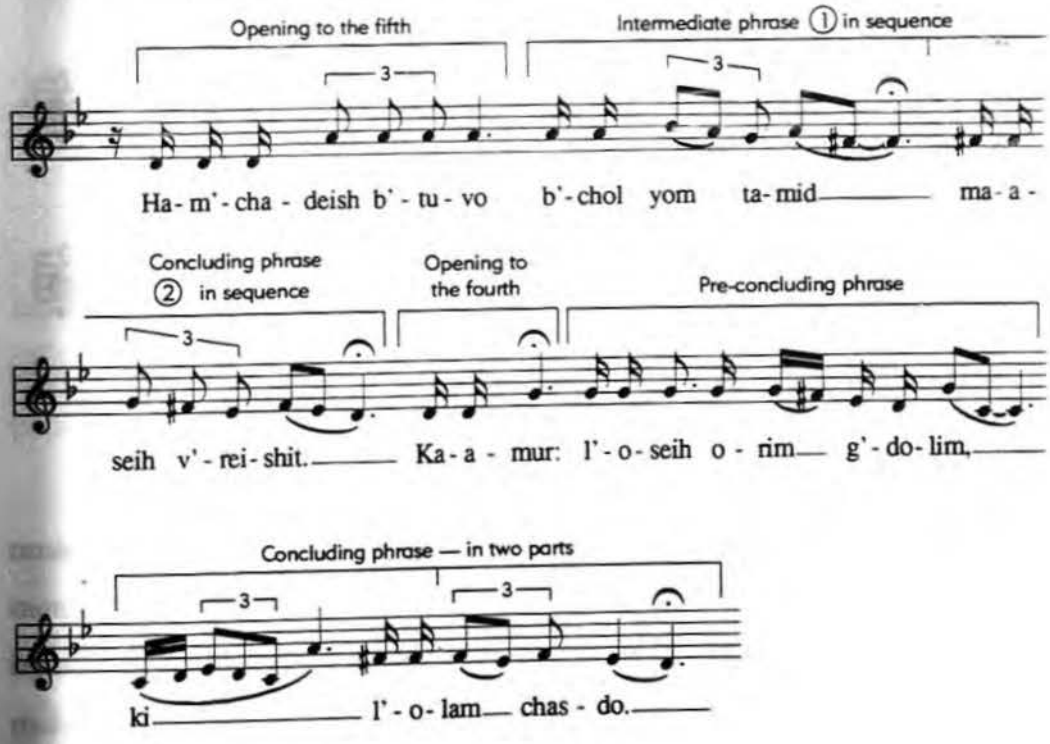
  Secondary opening: 1→ 4

- **Intermediate phrases**: descending patterns, often in sequence
- **Concluding phrases**: descending scale patterns to the tonic emphasizing the augmented second; or encircling the tonic.

An important structural feature of the Jewish modes is the **pre-concluding phrase**. A pre-concluding phrase is one that leads inexorably toward a

conclusion. The Ahavah Rabbah family features a strong pre-concluding phrase.

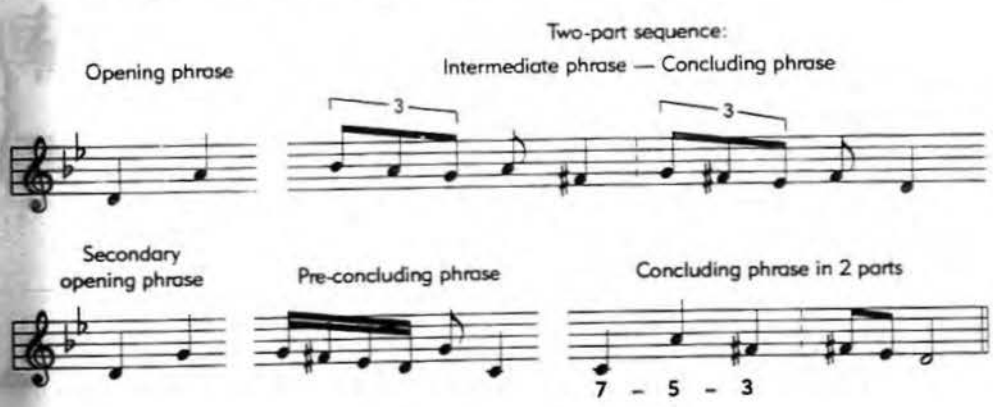
An extension of example 3.1, the example which follows has many of the characteristics we've already examined in this chapter. The text comes from the first blessing before the *sh'ma* in the *shacharit* service.



Example 3.18a

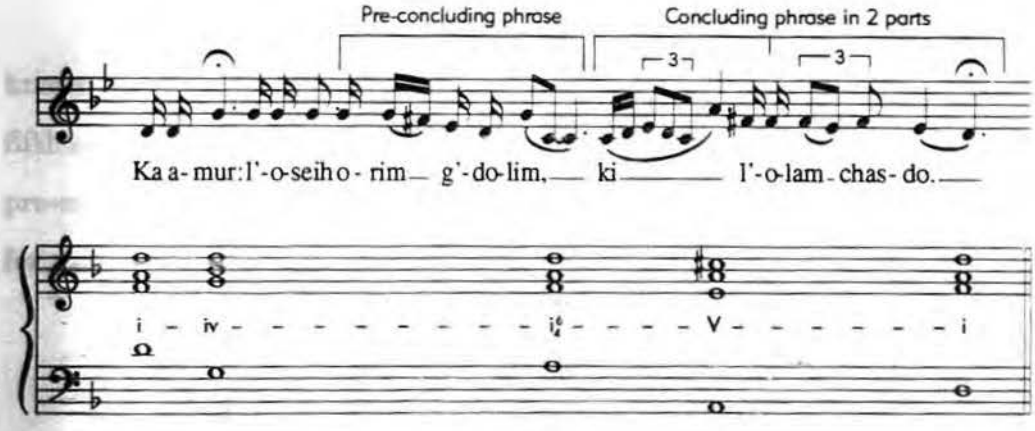
Note the opening to the fifth degree followed by a pair of phrases that return to the modal tonic in a descending sequence. The secondary opening to the fourth scale degree follows at the word *"ka'amur"* (on the second line). Next, however, is where we see a new feature: the pre-concluding phrase. Pre-concluding phrases in Ahavah Rabbah generally end on the lowered subtonic.

"*L'oseh orim g'dolim*" moves downward to **c**, the lowered subtonic of **D Ahavah Rabbah.** A strong ending following the pre-concluding phrase leaps upward, beginning with the pattern 7–5–3 and then descending scale-wise to the tonic. Here are outlines of the phrases in this example:



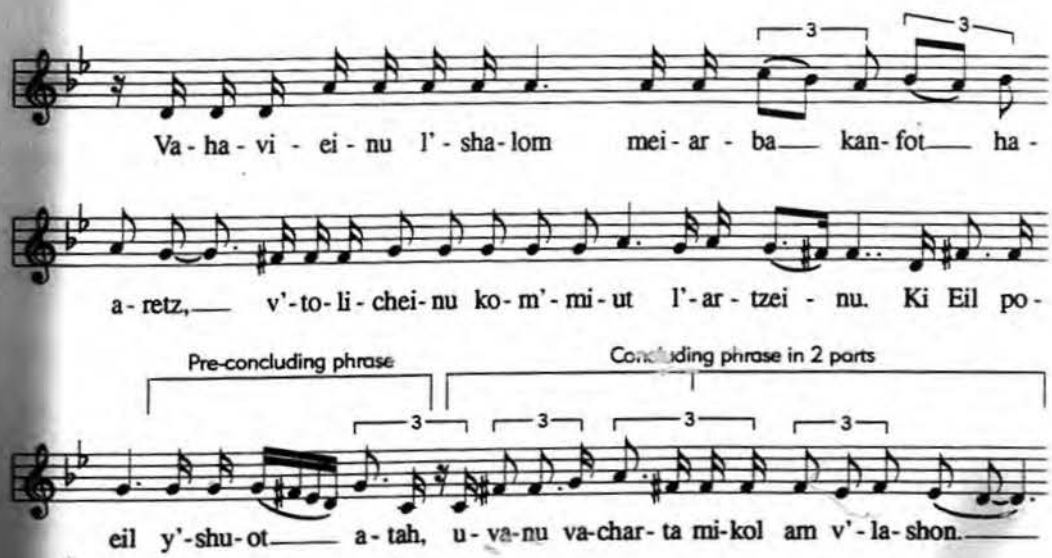
Example 3.18b

The pre-concluding phrase of the Jewish modes has a parallel in tonal music: the cadence to the dominant, particularly the I^6_4 chord. Once a harmonic progression arrives at the I^6_4 chord, we know that the V–I cadence is imminent. In the Jewish modes, the same drive to a cadence is achieved melodically. In the two lines of music which follow, the lower staves show a typical harmonic progression in Western tonal music, while the upper staff shows the melodic equivalent in Ahavah Rabbah. In the harmonic progression, the i^6_4 chord leads to the V–i cadence. The modal equivalent is the pre-concluding phrase leading to the two-part concluding phrase.



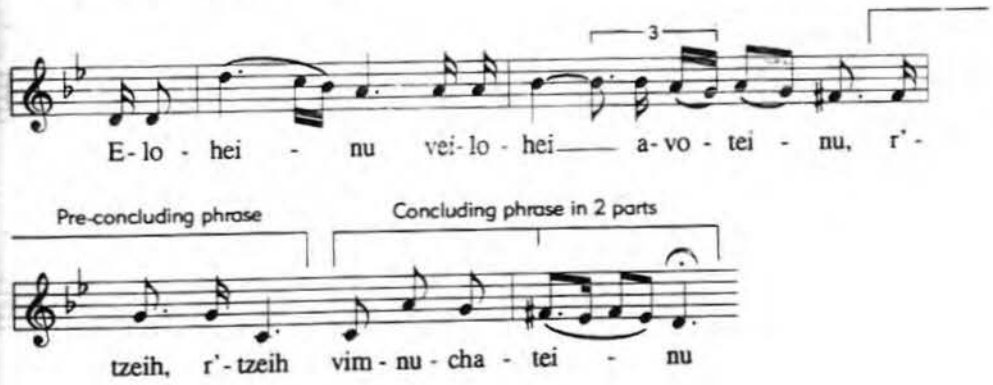
Example 3.19

The example below again shows the pre-concluding phrase (*"y'shuot atah"*) and the concluding phrase which follows. As before, the concluding phrase is in two parts. The first part begins on the lowered subtonic (c^1) and then moves to the fifth (a) and third ($f^\sharp$) scale degrees.



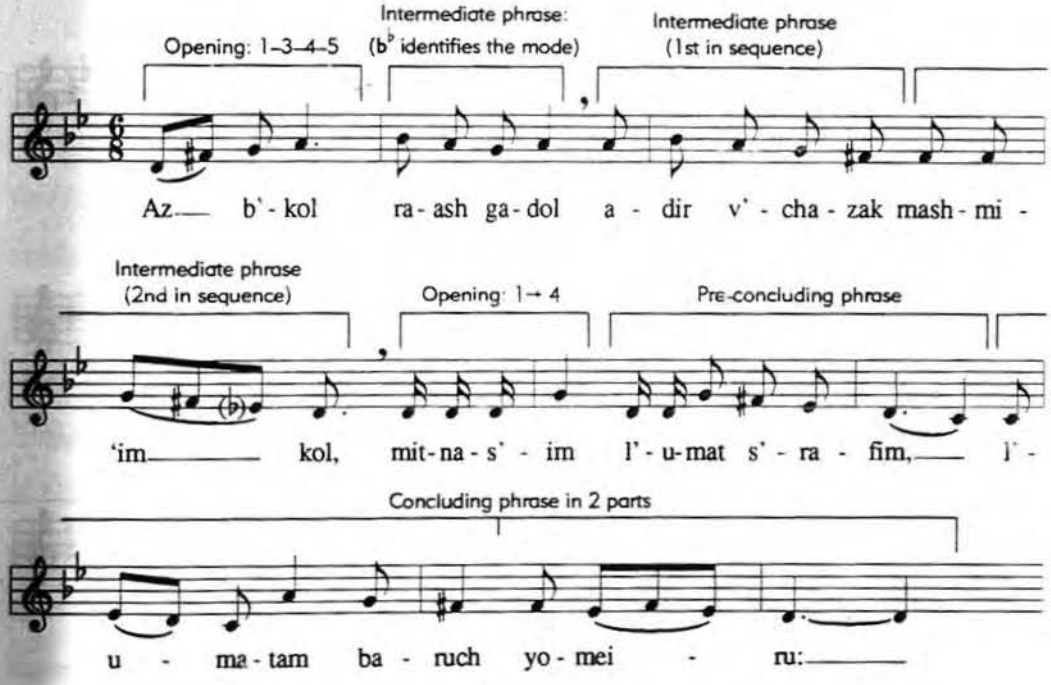
Example 3.20

The "*R'tzeih vimnuchateinu*" of Israel Alter is another of his best-known liturgical recitatives. The opening motive here does proceed to the fifth scale degree, but only after an attention-grabbing octave leap. Again, the pre-concluding phrase to the lowered subtonic leads to a concluding motive for this section of the recitative:



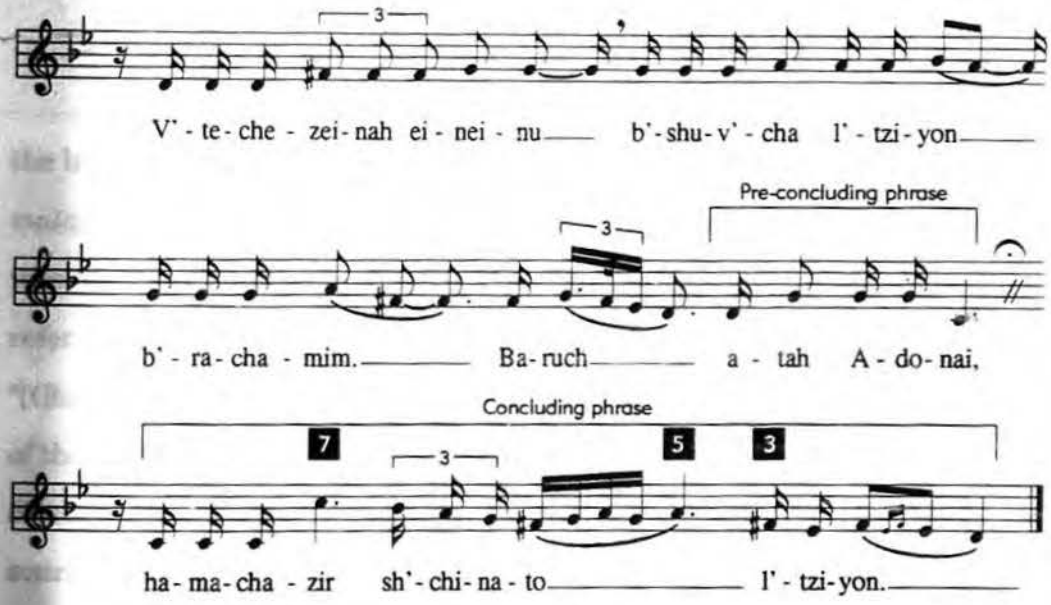
Example 3.21

This setting of "A*z b'kol*" from the *Shabbat* morning *k'dushah* demonstrates many of the characteristic features of Ahavah Rabbah *davening*:



Example 3.22

In "*V'techezeina*," which concludes the *avodah* blessing of the *amidah*, the pre-concluding phrase ends with a downward leap to the lowered subtonic. The concluding phrase which follows still utilizes the 7–5–3 pattern, but the ascending octave leap on the seventh degree (at "*hamachazir*") changes the shape of this motive.



Example 3.23

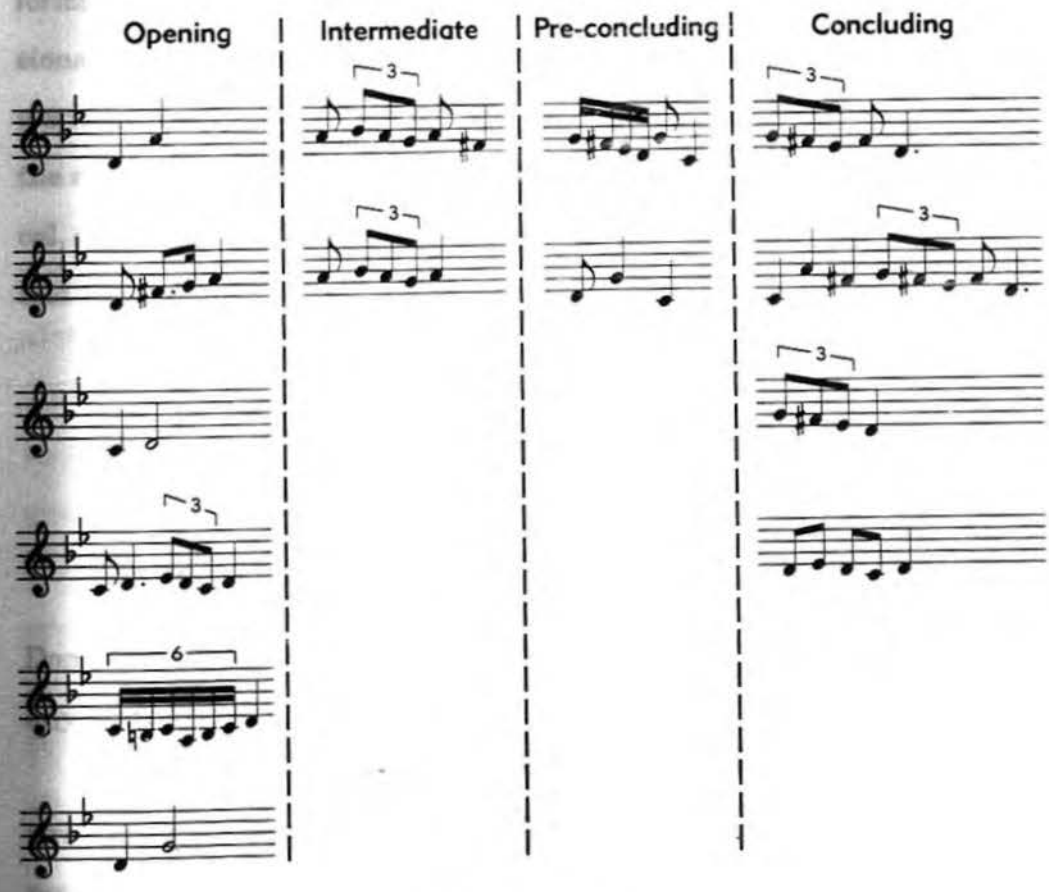
From all of the examples we have examined in this chapter, we can identify the principal phrases of the Ahavah Rabbah family. In general, the opening phrases use one or more of the notes of the major triad built on the modal tonic in combination with one or more of three notes which, in combination with the major triad, identify Ahavah Rabbah: the lowered subtonic, the minor second scale degree (lowered supertonic), and the minor sixth scale degree. The intermediate phrases are often descending patterns and form some kind of sequence. The pre-concluding phrases end on the lowered subtonic, while the predominant concluding phrase descends scale-wise to the tonic, emphasizing the augmented second between the second and third scale degrees.

Chapter 4: The Adonai Malach Family

The Adonai Malach family is named for the opening words of Psalm 93, the last psalm of the *Kabbalat Shabbat* service on Friday evening: "*Adonai malach geiut laveish*"/"The Lord reigns, robed in majesty." (Traditional Jews who do not pronounce the name of God outside of the worship setting would refer to this mode as HaShem Malach.) Commentators generally agree that "[t]his mode generally conveys an ethos of grandeur and majesty."[1] To think of the mode in this way is not without some merit. The psalms of *Kabbalat Shabbat* indeed speak of God's reign, the wonders of Creation, and God as the source of salvation for all Creation. The music of *Kabbalat Shabbat* features sweeping arpeggios outlining major chords. The Adonai Malach family is also used on *Rosh Hashanah* during portions of the Shofar service: for the beginnings of *malchuyot* (proclaiming God's reign) and *shofarot* (the promise of Redemption which is recalled in the blast of the shofar). However, this modal family is also used in other places in the liturgy which are of a penitential nature. Most notable among these are three paragraphs at the beginning of the *Vidui*/Confession on *Erev Yom Kippur*, the Day of Atonement.[2] It is one of the fascinating realities of Jewish liturgy that the same musical mode is used to proclaim the majesty of God and the contrition of humankind.

It is also one of the great ironies of Jewish liturgy that Psalm 93, "*Adonai Malach*," is usually *davened* in a mode which is not Adonai Malach. This is a result of the *hazzanic* practice of **anticipation**. Anticipation, in turn, stems from a broader principle: that the cycle of Jewish living and learning is eternal. On the festival of *Simchat Torah*, when we demonstrate our joy in

Principal Phrases in the Ahavah Rabbah Family

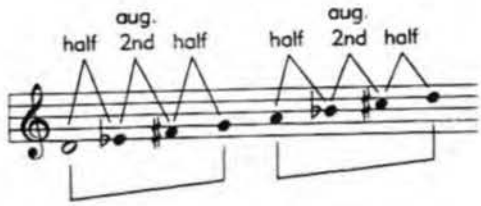


Example 3.24

From the examples in this chapter, we can derive this scale for the Ahavah Rabbah family (on d^1):

Example 3.25

The salient features are: the lowered second scale degree and the major third forming an augmented second; the raised sixth below the tonic; and the occasional raised seventh degree in the primary octave, forming another augmented second interval between the sixth and seventh scale degrees. With the raised seventh degree, the primary octave can be broken into two identical, disjunct tetrachords with the intervals of a half step, augmented second, and half step.

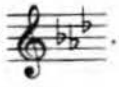


Example 3.26

Don't forget that, like all Jewish modal music, the scale can be transposed to any pitch.

Notating music in Ahavah Rabbah is a challenge when one attempts to write a key signature. Three options are available. First, it is possible to notate the music with a blank key signature and insert the accidentals each time — the way the scale in example 3.25 is written. The second is to write a key signature which reflects the standard notes of the primary octave. For Ahavah Rabbah on d, that would look like this:  with the combination of one sharp and two flats. While technically accurate, it may be difficult to read for the musician trained in Western tonal harmony. This method results

in some confusing-looking key signatures, such as Ahavah Rabbah on **e**:

 or on **c**:  .

The most common method is the one employed throughout this chapter: write the key signature of the minor key whose tonic is a fourth above the modal tonic. In this chapter, all the examples have been written in **D Ahavah Rabbah** with a key signature of two flats — corresponding to **g** (a fourth above **d**) **minor**. Then you must add accidentals to indicate the major third (in these examples, f♯) throughout the piece. In tonal music, we run into a similar situation in the minor mode. Oftentimes the seventh scale degree is raised in a minor key to form a major triad on the dominant. In fact, **g minor** — just like **D Ahavah Rabbah** — would require f♯s to be written as accidentals. While perhaps a bit more cumbersome, this is the method most easily interpreted by Western-trained musicians. We will revisit this approach to writing key signatures in modal music in the next chapter as well, where the considerations will be a little different.

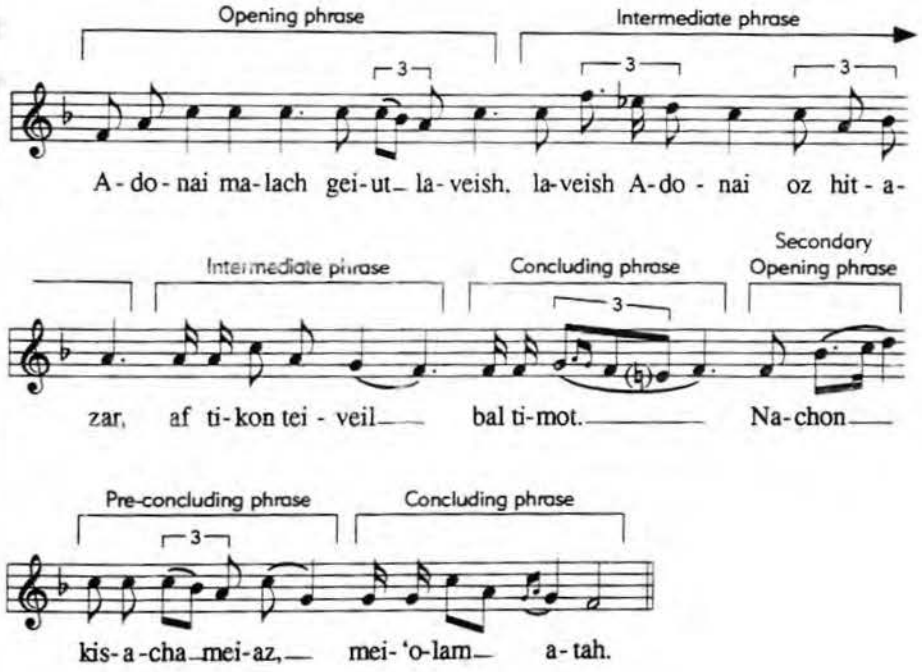
the study of Torah, the reading of the last portion of the scroll is followed immediately by the reading of its beginning, symbolizing the continuity of learning. On *Shabbat* afternoon, the beginning of the Torah portion for the following week is read, anticipating the learning that will follow. This principle is played out in other ways in the liturgy. For example, on the *Shabbat* immediately preceeding the start of a new month, the *hazzan* will announce the coming of the new moon (this is also called *bentching Rosh Chodesh*). The announcement will often contain a musical anticipation. The *hazzan* may include a fragment of a tune connected with an important holiday in the coming month: a snippet of the blessing over the *Chanukkah* lights anticipates the month of *Kislev*, while a phrase of trope from *Eicha* (Lamentations) — the scroll read on *Tisha B'av* — may be included in announcing the month of *Av*.

Within a single service, liturgical and musical anticipations are used both as reminders to the congregation to insert prayers appropriate to the day, and to help them make a smooth transition to the next portion of the liturgy. For example, the inclusion of *v'sham'ru* — the words of Exodus 31:16–17 which proclaim Sabbath observance — immediately before the silent *amidah* on Friday night reminds the congregation that they will be reciting the *Shabbat* and not the weekday *amidah*. On a weekday at the end of the *v'ahavta* — often chanted in Torah trope — the *hazzan* will chant the final words "*Adonai eloheichem emet*" in Ahavah Rabbah, signaling the return to that mode in the *g'ulah* section which follows.

Although most of the psalms in *Kabbalat Shabbat* are *davened* in Adonai Malach, the Eastern European tradition is to *daven* the *Shabbat ma'ariv* service in Magein Avot. The *hazzan* who wanted to alert the congregation to the transition from *Kabbalat Shabbat* to *ma'ariv* would move to Magein Avot at the end of the last psalm in *Kabbalat Shabbat*: Psalm 93, "*Adonai malach geiut laveish*." Over time, this anticipation moved further and further backwards to yield a tradition which *davens* the two psalms following *L'cha Dodi* — Psalms 92 and 93 — in Magein Avot. It is because of this principle of anticipation that the psalm "*Adonai malach*" is often not chanted in the Adonai Malach mode.

Just in case this is not confusing enough, there is a Western European tradition which *davens* the *Shabbat ma'ariv* service in Adonai Malach. In that tradition, the case of anticipation in Psalm 93 does not apply, which is why one can find settings of "*Adonai malach*" in the Adonai Malach mode.

A setting of Psalm 93 will serve to introduce the salient features of the Adonai Malach modal familiy. All examples in this chapter are written with a modal tonic of f^1.



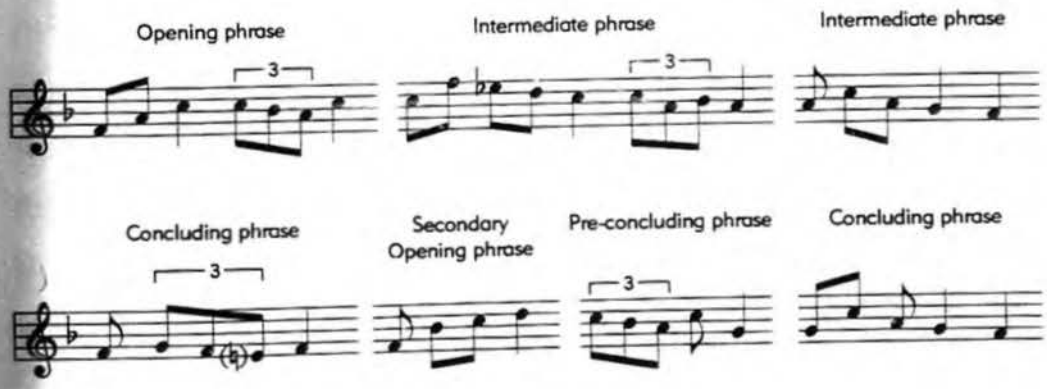
Example 4.1a

The ascending triad of the opening phrase is one of the most characteristic features of the mode. The flat seventh ($e^{\flat}$) in the second phrase is also one of the essential elements of the Adonai Malach family. Notice that the first of the concluding phrases (at "*baltimot*") contains the raised subtonic ($e^{\natural 1}$) — in contrast to the lowered seventh scale degree ($e^{\flat 2}$).

Two features that we saw in the Ahavah Rabbah family also apply to Adonai Malach: the secondary opening phrase and the pre-concluding phrase. As in Ahavah Rabbah, the secondary opening phrase begins on the tonic and emphasizes the fourth scale degree. In Adonai Malach, the secondary opening phrase is actually the start of a concluding section. The pre-concluding phrase ends on the *super*tonic. (Remember that in Ahavah Rabbah, the pre-

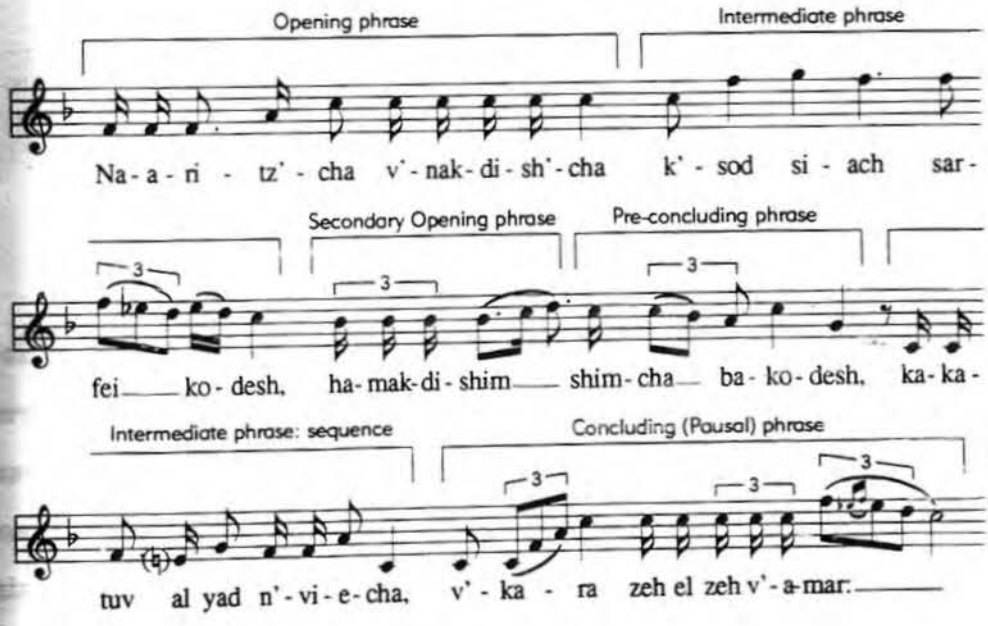
concluding phrase ended on the lowered *sub*tonic.) In fact, the pre-concluding phrase is the *only* Adonai Malach motive that does not rest on the first, third or fifth scale degrees. Phrase endings on 1, 3, and 5 are a distinguishing feature of this mode.

The phrases in example 4.1a can be catelogued as follows:



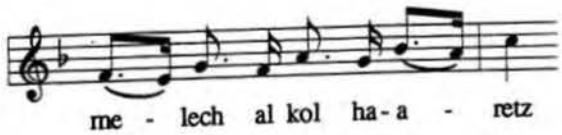
Example 4.1b

Na'aritz'cha is the opening text of the *musaf k'dushah* which is also chanted in Adonai Malach:



Example 4.2a

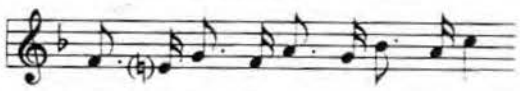
Two new phrases are introduced here. The penultimate phrase is an intermediate motive containing a sequence. This motive is often extended as, for instance, in Max Janowski's *Kiddush* for *Rosh Hashanah*:



Example 4.2b

Because of the sequential nature of the phrase, it can be used to enumerate a list (of attributes, names, etc.).

Intermediate phrase:
sequence

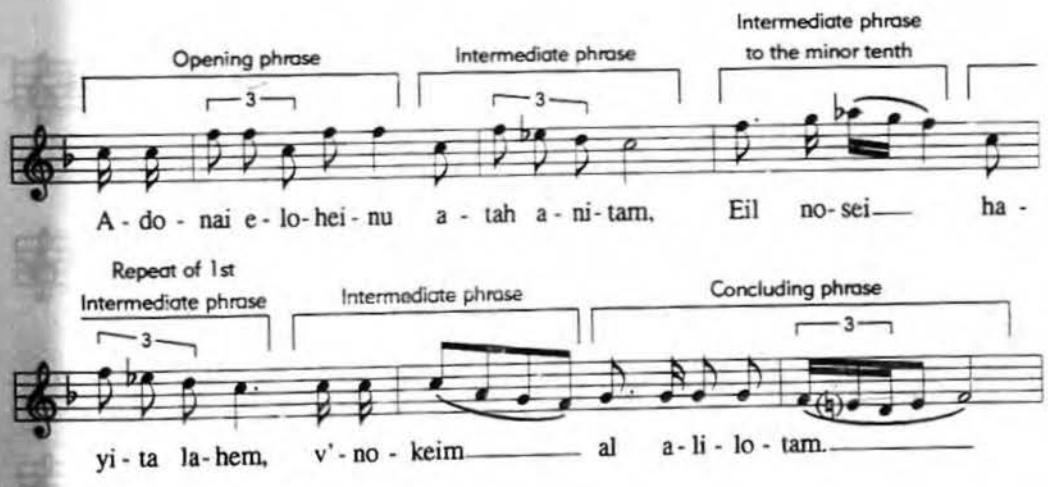


Example 4 2c

The concluding phrase in example 4.2a, with its ascending arpeggio, looks very much like a typical opening in the Adonai Malach mode. Actually, ***certain motives can have multiple functions in this mode***. Notice also that this motive ends on the fifth scale degree, which gives less of a sense of finality to this concluding phrase. Indeed, some *hazzanim* would categorize this as a pausal phrase — a subset of the intermediate phrases. The ending on the fifth scale degree in this mode implies that something is to follow. The "*na'aritz'cha*" paragraph is the introduction to the congregation's proclamation: "*Kadosh, kadosh, kadosh, Adonai tz'vaot . . . .*" By concluding on the fifth scale degree, the cantor cues the congregational response.

Similarly, the cantor's entrance often concludes a section of congregational *davening*. In a traditional *Kabbalat Shabbat* service, the *hazzan* chants the opening of each psalm aloud prompting the congregation to *daven* the entire psalm in an undertone. The *hazzan* then repeats the last line(s) of the psalm out loud and continues to the first line of the next psalm, where the entire procedure is repeated. In this way, the motion of the prayer service is continuous, but the cantor's audible interjections keep the congregation together moving at more or less a unified pace.

Because the cantor is "interrupting" the congregational *davening*, the nature of the opening phrase can be modified.

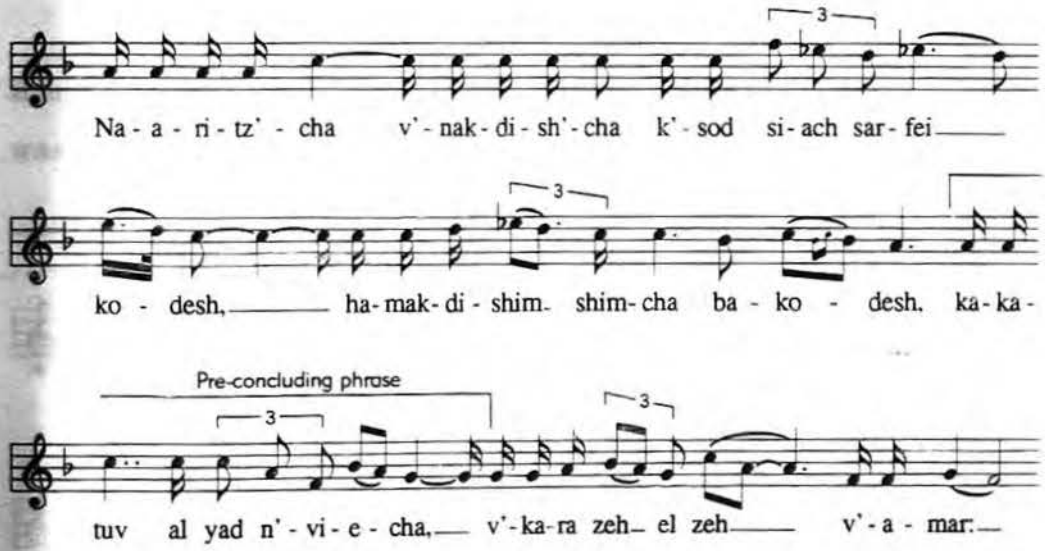


Example 4.3

The opening phrase in the higher register is a more effective "interruption" on the part of the *hazzan*. And because it does not outline the major triad, the motive has a sense of "beginning in the middle of a phrase." Indeed, the cantor *is* beginning in the middle of the psalm.

Notice that at the words "*Eil nosei*"/"a forgiving God," the intermediate phrase extends upwards to the tenth scale degree above the tonic ($a^{\flat 2}$) which is minor. This is in contrast to the third scale degree ($a^{\flat 1}$, an octave lower), which is major.

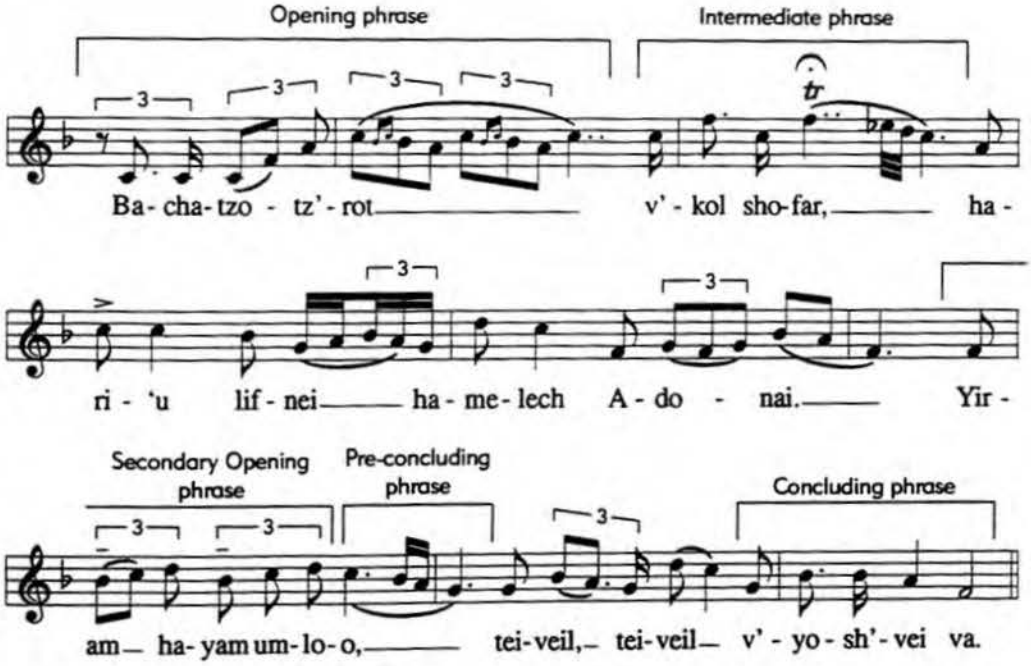
In this simple setting of "*Na'aritz'cha*" by Katchko, we observe variations on the phrases we saw in previous examples.



Example 4.4

Pay particular attention to the pre-concluding phrase. In examples 4.1a and 4.2a, the pre-concluding phrase followed the secondary opening phrase. In fact, the secondary opening phrase is almost always followed by a pre-concluding phrase to the second scale degree. However, the pre-concluding phrase can also be used in the absence of the secondary opening phrase, as is this case in example 4.4.

Adonai Malach can paint text in a quite vivid manner. Look at this setting from Psalm 98:



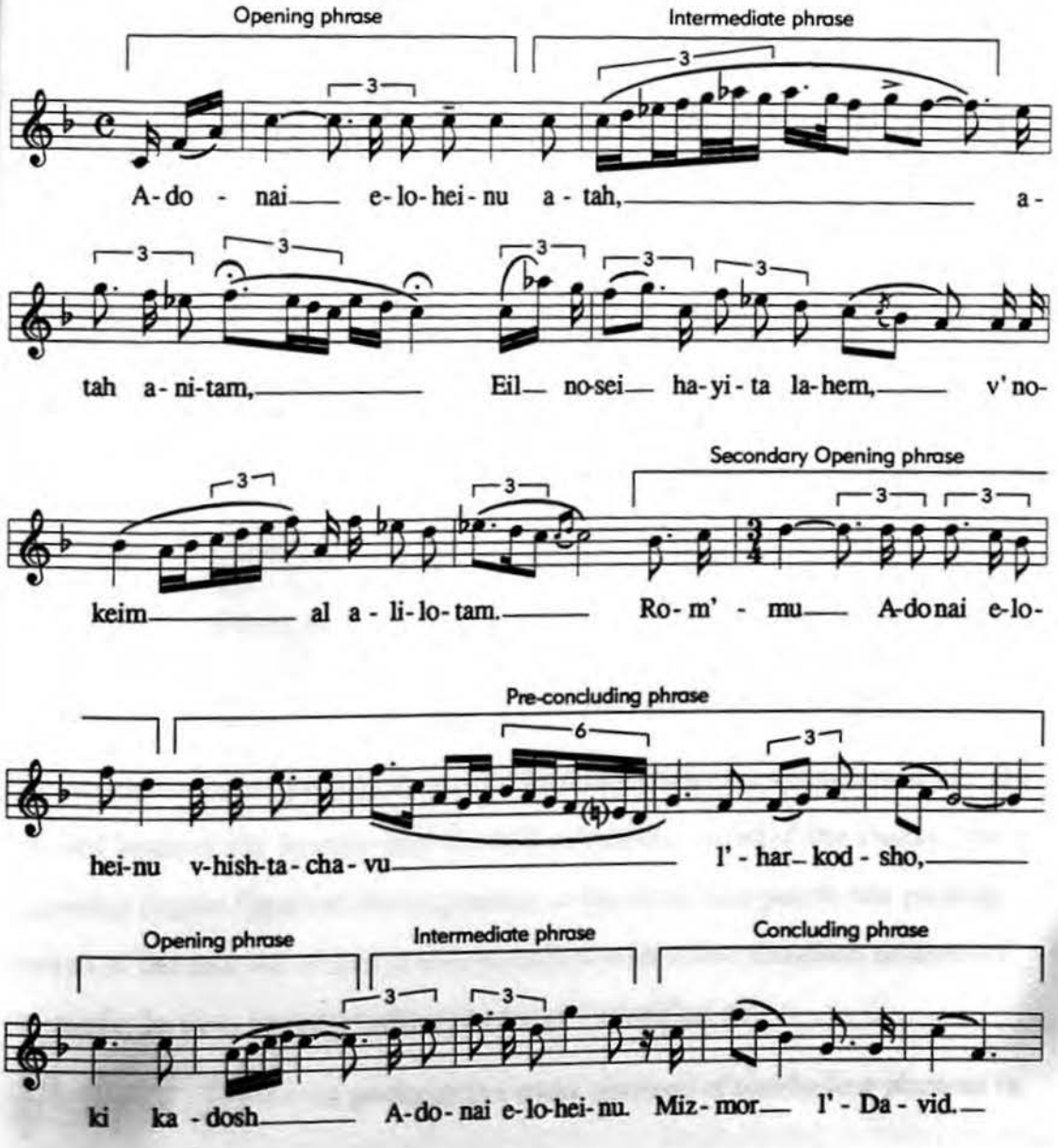
Example 4.5

Bachatzotz'rot v'kol shofar	With trumpets and shofar sound
hari'u lifnei hamelech Adonai.	call out before the King, Adonai.
Yiram hayam umlo-o	The sea and its fullness will roar
teiveil v'yosh'vei va.	the world and those who dwell therein.

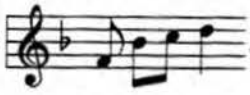
The arpeggio of the opening phrase is used to portray the trumpets, while the upward leaps of the fourths and the trill mimic the sound of the shofar. The repeating triplet figure at the beginning of the third line paints the rocking motion of the sea. All of this is accomplished within the standard motives of the mode. In fact, the concluding phrase at *"v'yosh'vei va"* —

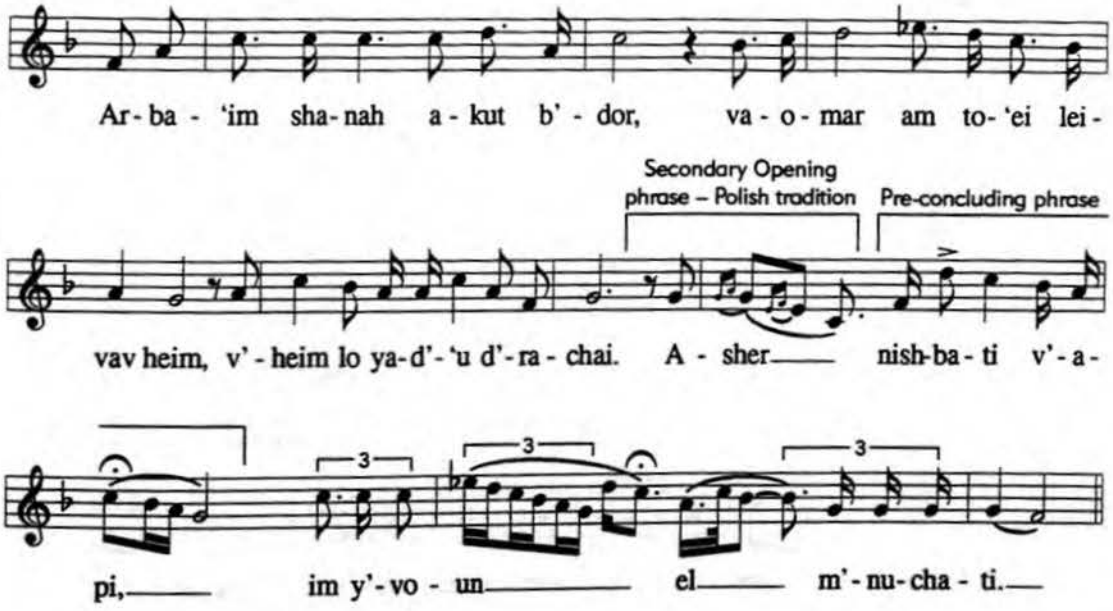
— is perhaps the most common of concluding phrases in Adonai Malach.

In more complex *hazzanut*, the motives can be embellished even further. Compare the first half of the following example to the same text as it was set in example 4.3.



Example 4.6

In discussing the principle of anticipation, we said that the Eastern and Western European traditions for chanting the *Shabbat ma'ariv* service were based on different modes. In actuality, there are many regional differences in cantorial traditions. In example 4.1b, we saw that the secondary opening phrase looked like this:  . Example 4.7a makes use of a different secondary opening which is taken from the Polish tradition.



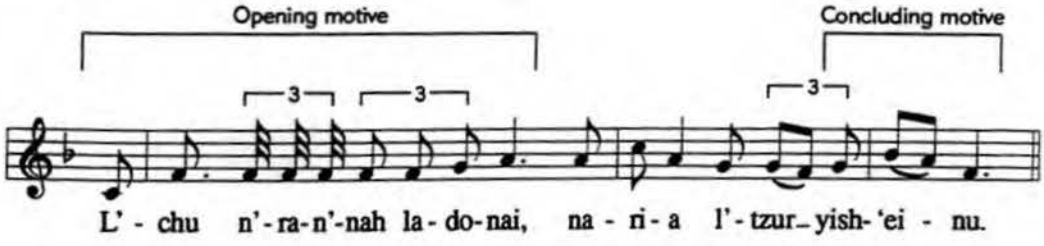
Example 4.7a

Instead of being centered on the fourth degree above the tonic, the secondary opening in the Polish tradition is centered on the fourth degree *below* the tonic — in this case on c^1:

Example 4.7b

Note also that, except for the first and last phrase, all of the phrases in this excerpt end on the second scale degree — somewhat unusual for this mode.

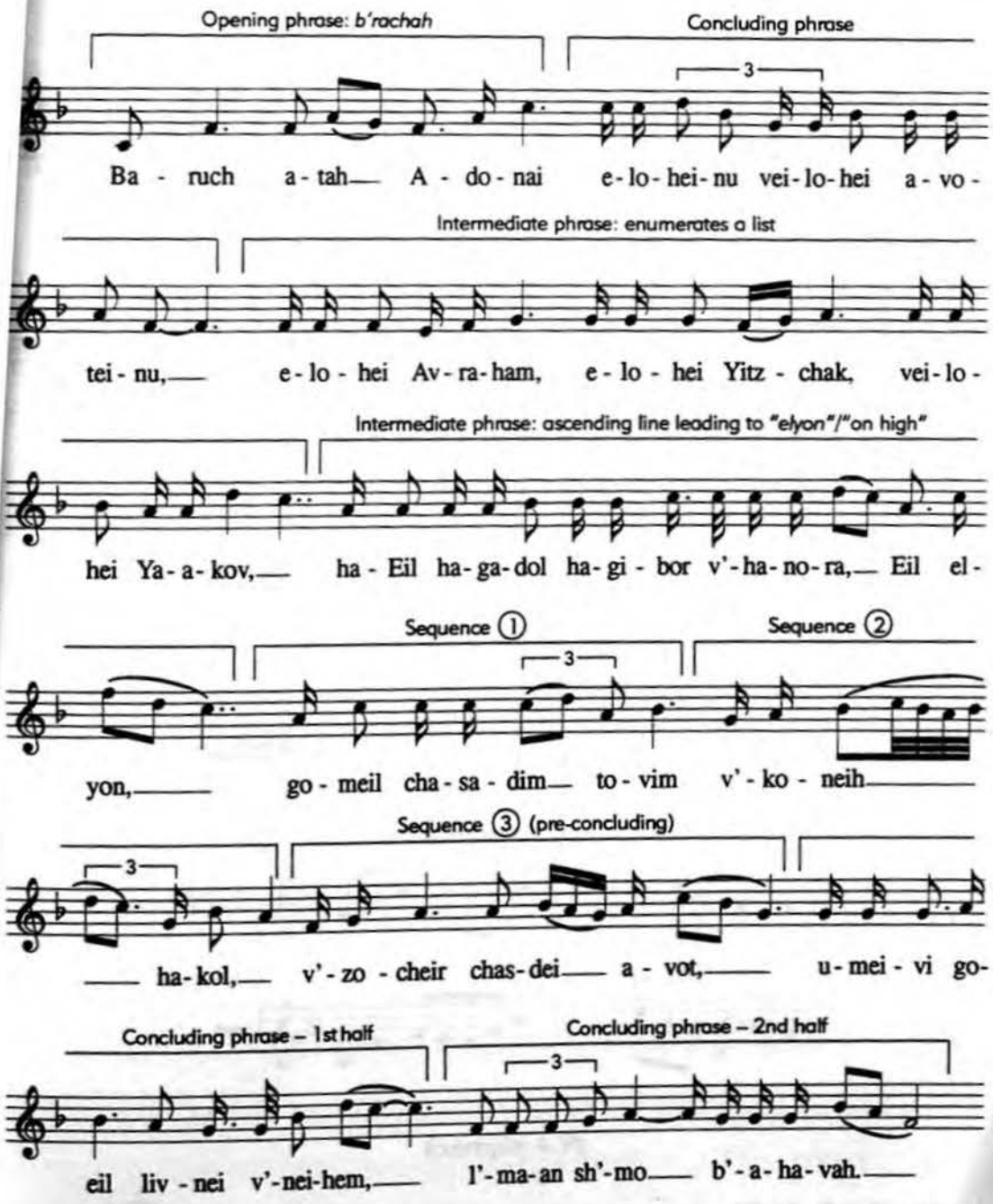
In a traditional *shul*, it is common on Friday afternoon to *daven* the weekday *mincha* service and continue more or less without interruption to the end of *Shabbat ma'ariv*. It is thus quite important to mark the beginning of *Kabbalat Shabbat*. Although the first psalm, *"L'chu n'ran'nah,"* can be chanted using the motives we've already looked at, it is frequently heard this way:



Example 4.8

While the concluding phrase is similar to others we've seen, the opening phrase does not use either the ascending triad (see example 4.1a) or the opening to the octave above the tonic (example 4.3). Instead, the characteristic opening call for the *Kabbalat Shabbat* service begins with pickup note a fourth below the tonic, establishes the tonic itself by using it as a recitation tone, and rises only to the third scale degree. (It is interesting to compare this to example 4.12.)

Characteristic motives which designate a particular portion of the liturgy are especially evident in the Adonai Malach family. It is here that we can clearly see the distinction between "modal family" and "mode." While certain phrases are common to several modes within the Adonai Malach family, there are certain distinct motives which are associated with a particular portion of the liturgy. Perhaps the best known of these is the *Avot* of *shacharit* and *musaf* for *Shabbat*, the Three Festivals and the High Holidays:



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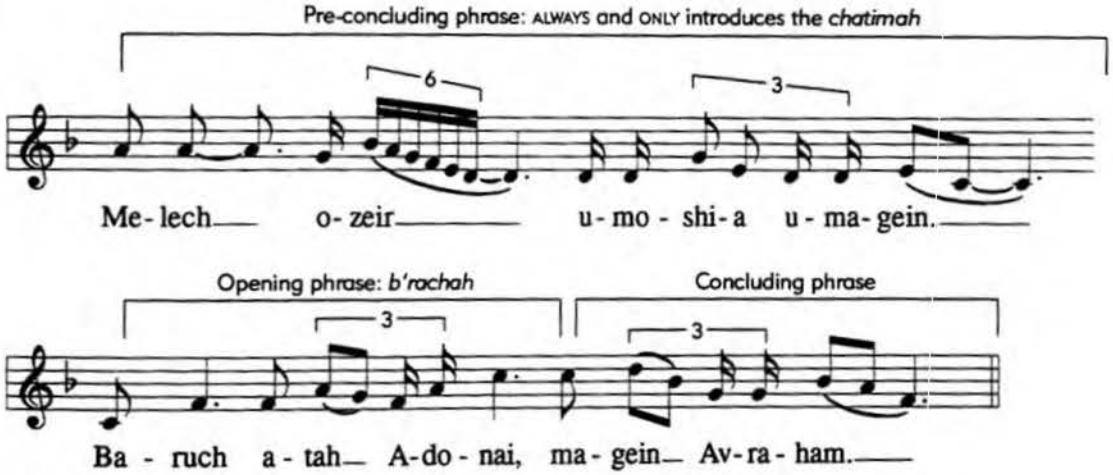
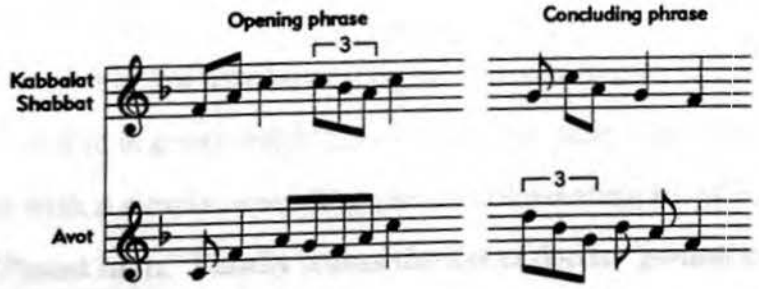


Example 4.9a

The opening phrase which contains the *b'rachah* and it's subsequent concluding phrase are perhaps the most distinguishing motives. While these are similar to phrases used in *Kabbalat Shabbat*, they are immediately recognizable as belonging to the *Avot*.



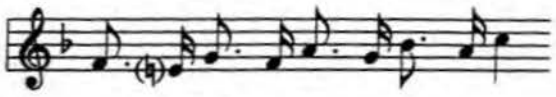
Example 4.9b

It is not overstating the point to distinguish these as the "Kabbalat Shabbat Mode" and the "Avot Mode."

Another phrase which is part of this Avot mode is the pre-concluding phrase that leads to the *b'rachah* (*"melech ozeir umoshia umagein"*):

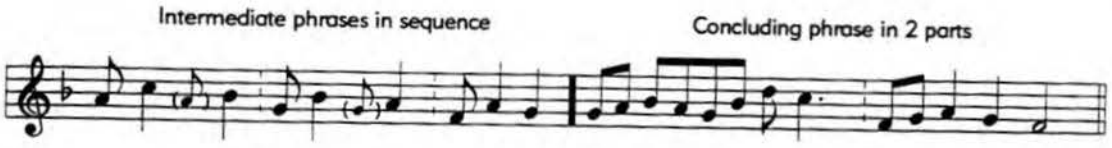
Example 4.9c

There are three kinds of lists in the *Avot*, each handled somewhat differently. The first is the list of names (*"elohei Avraham, elohei Yitzchak, veilohei Ya-akov"*/"the God of Abraham, the God of Isaac, and the God of Jacob"), and is almost identical to the intermediate phrase for enumerating a list (cf. example 4.2b):



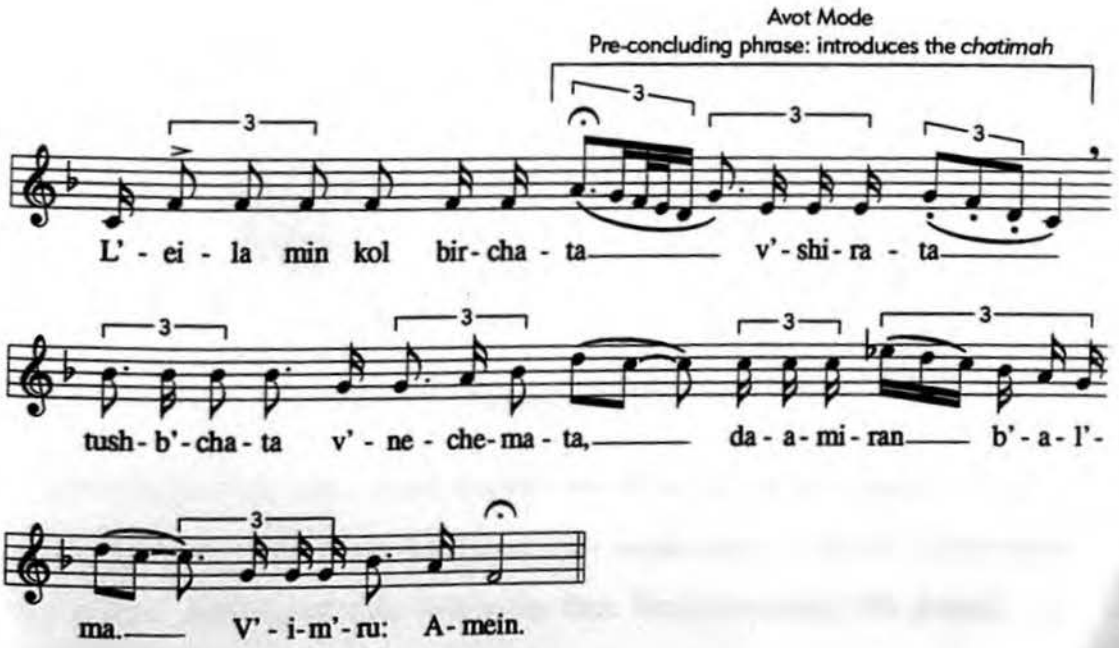
Example 4.9d

Next comes a list of attributes: *"haEil hagadol hagibor v'hanora, Eil elyon"*/"the God who is great, mighty, awesome, the most high God." This is accomplished with a simple ascending phrase culminating in, of course, the word *"elyon"*/"most high." Finally comes the list of deeds: *"gomeil chasadim tovim, v'konei hakol, v'zocheir chasdei avot, umeivi goeil livnei v'neihem: l'ma-an sh'mo b'ahavah."*/"Who bestows lovingkindness, and Who creates all, and Who remembers the pious deeds of the Patriarchs, and brings a Redeemer to their children's children: for His Name's sake." The chanting of this section begins with three sequential phrases and ends with a two-part concluding phrase:



Example 4.9e

Sometimes a motive from one of these distinct modes withing the Adonai Malach family can be borrowed for another text which is also chanted in Adonai Malach — for example, the *hatzi kaddish* for *musaf* on *Shabbat* and the Three Festivals (except for the first day of Passover and the last day of Succot when the special *nusach* for *Tal* and *Geshem* — the prayers for dew and rain — is used).

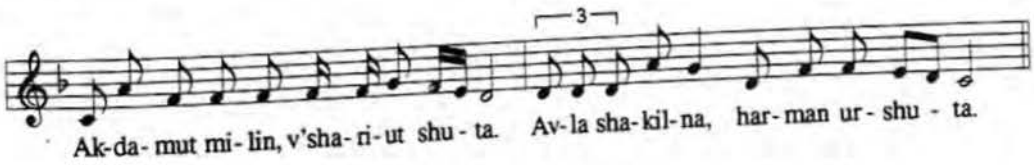


Example 4.10

Although this setting of the *musaf hatzi kaddish* makes use of the pre-concluding phrase before the *chatimah* from the Avot Mode, that pre-concluding phrase has been transported into an entirely different context. In this new context, two more intermediate phrases follow and extend the *davening* before the conclusion at *"V'im'ru: Amein"*/"And let us say: Amen."

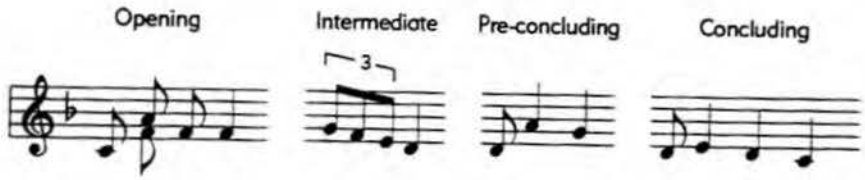
> ***Important performance practice note!*** The *staccato* markings on the last triplet of *"v'shirata"* are ***not*** interpreted in the manner familiar to the Western-trained musician: as short notes. Instead, the notes are connected but each is given more weight — in the manner of the *tenuto* marking used by Western composers.

Another mode within the Adonai Malach family is the Akdamut Mode. It is a simple mode based on this tune from the festival of *Shavuot*:



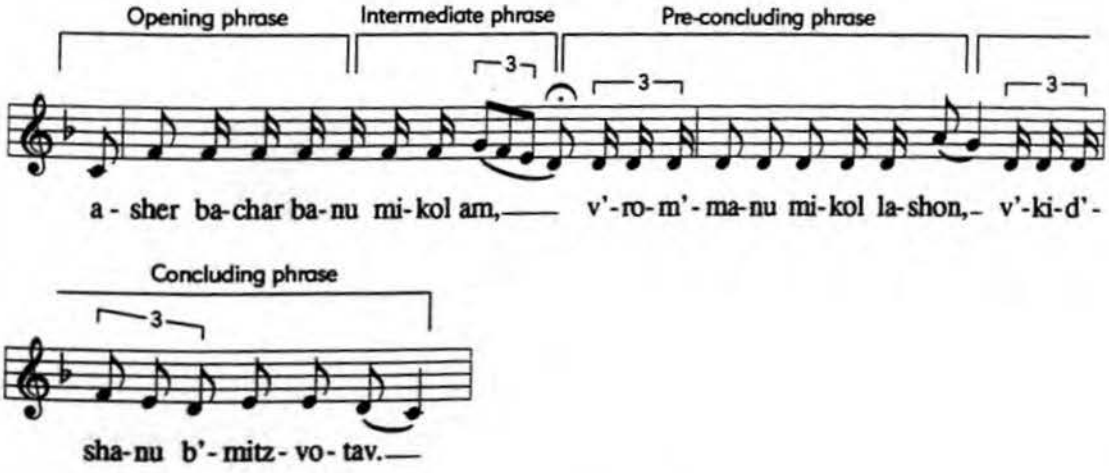
Example 4.11a

These are the first two verses of a 90-verse Aramaic poem chanted responsively by *hazzan* and congregation — two verses each — on the (first) morning of *Shavuot* immediately before the first Torah blessing. The melody consists of four motives:



Example 4.11b

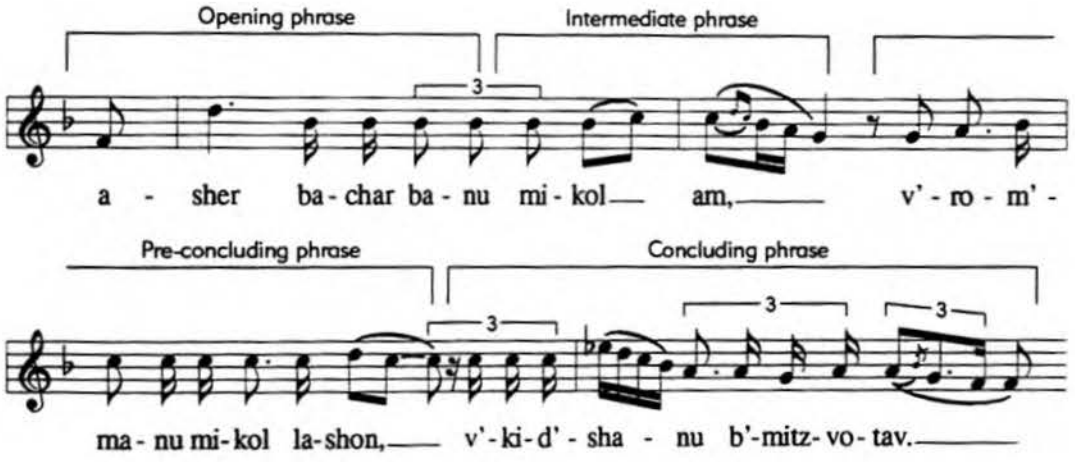
The Akdamut Mode appears in the *kiddush* for High Holidays and the Three Festivals, and also in places which are associated with the giving of Torah and the covenant at Sinai: calling up *Chatan Torah* and *Chatan B'reishit* (*aliyot* for the end of Deuteronomy and the beginning of Genesis on *Simchat Torah*), and in the *Sheva B'rachot* (seven blessings of marriage) of the Wedding service. Here is a portion of the *kiddush* for Passover:



Example 4.12a

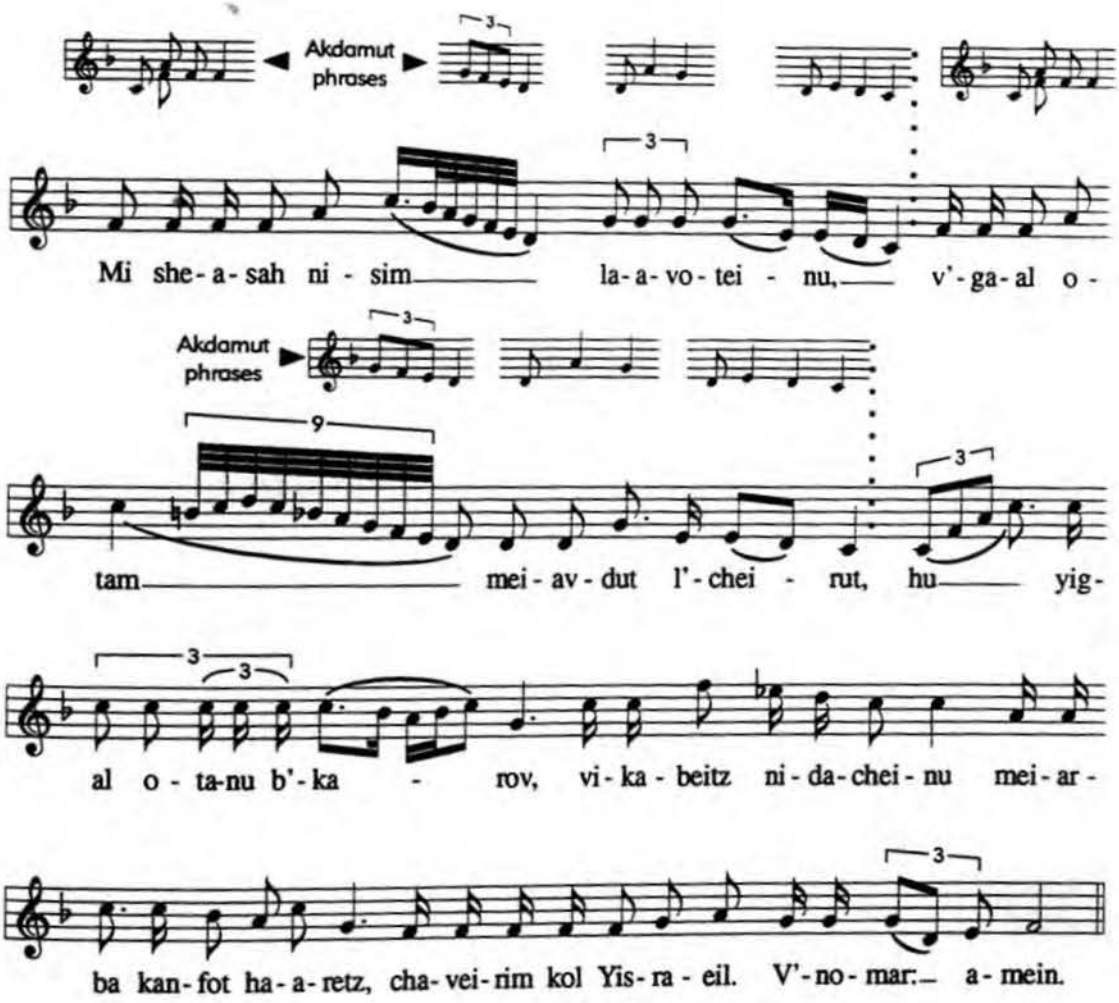
Notice that it is almost a direct quote from the Akdamut tune.

Next is the same text in a more florid setting. Note that the Akdamut tune is now on the fourth scale degree of Adonai Malach on f^1 — not an uncommon usage.



Example 4.12b

As we saw with the Avot Mode, the Akdamut Mode can be borrowed and utilized in an entirely different context.

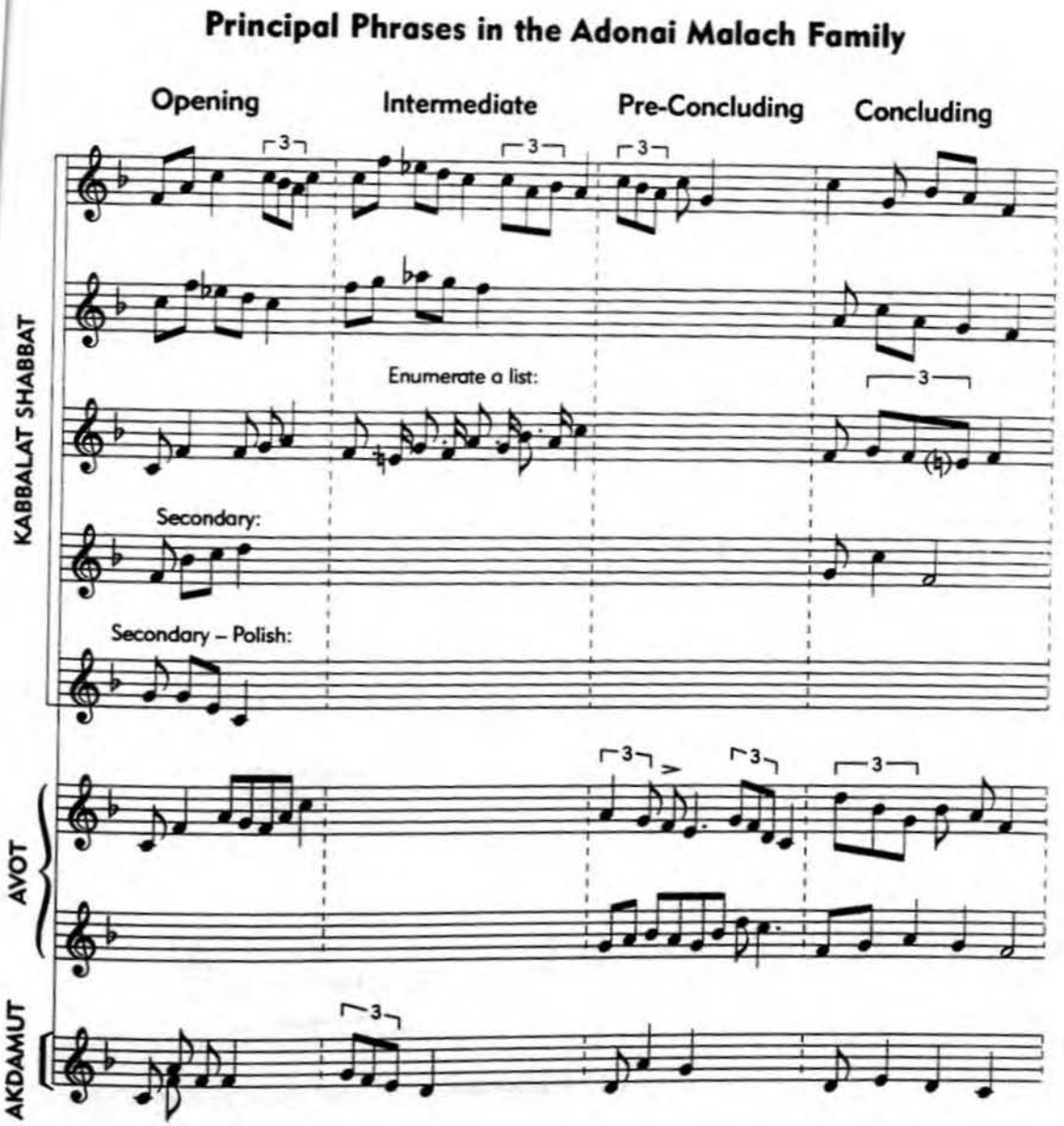


Example 4.13

This prayer is part of the blessing of the new month (*Birkat Rosh Chodesh*). The Akdamut motives — used twice through — have been placed (in smaller notes) above the corresponding phrases in the *Rosh Chodesh* prayer. Why use the Akdamut tune in what at first appears to be a totally unrelated portion of the liturgy? Perhaps an analysis of the text will shed some light. The first part translates as: "He Who performed miracles for our ancestors and redeemed them from slavery to freedom . . ." and goes on in the second half to

say: ". . . may He redeem us soon and gather in our dispersed ones from the four corners of the earth; all Israel becoming comrades. Now let us respond: Amen." The first half refers to how God redeemed our ancestors from Egypt, while the second half looks forward to further redemption for the Jewish people of today. The portion of text which refers to the past uses the ancient tune of Akdamut. We may further speculate that, although the main historical event of redemption is more directly connected to Passover, the redemption from Egypt led to the revelation of Torah at Sinai (commemorated on *Shavuot*); hence, the use of the *Shavuot* tune.

From the examples above, we can catelogue the following chart of motives for the Adonai Malach family:

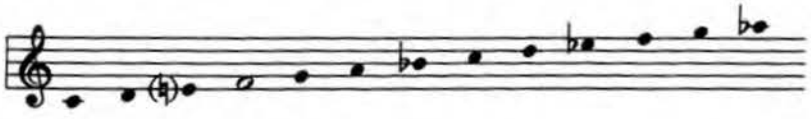


Example 4.14

The opening motives generally emphasize the pitches of a major triad on the tonic (f), usually with some kind of ascending motion. Intermediate phrases end on the third and fifth scale degrees. A pre-concluding phrase ends on the

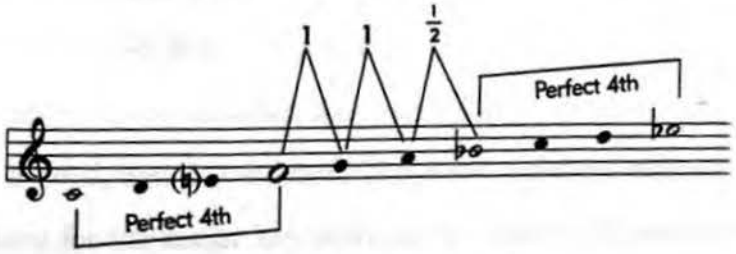
second scale degree, except for the special pre-concluding phrase associated with the Avot Mode. Concluding phrases generally end on the tonic; however, a concluding phrase ending on the fifth scale degree serves as a cue for the next prayer.

From these motives, we can derive the following scale (on f) for the Adonai Malach family. As with the other modes, this scale can be transposed to any pitch level.



Example 4.15a

This scale is made up of conjunct tetrachords. Each tetrachord contains the identical intervals: **whole step + whole step + half step.**



Example 4.15b

This yields a scale with tetrachords stacked in perfect fourths. While pitches higher than the minor tenth are rarely used, they can easily be predicted from this pattern.

The important feature of this scale is that it consists of **non-repeating octaves**. In Western music, the notes of any key are the same in every octave.

But in Jewish modal music, the notes of the mode depend, in part, upon their distance from the pitch upon which the mode is built. It is for this reason that "modal tonic" or "tonic" in this study refers to a particular note in a particular octave. This is most apparent in the Adonai Malach family.

One of the interesting implications of non-repeating octaves is that when a female chants a prayer originally set for a male voice, she is actually transposing the entire mode. In reality, this is more theoretical than practical. It does, however, have real implications for polyphonic choral settings. In Adonai Malach, the lowered seventh degree in the men's parts clashes with the raised subtonic of the women's parts; the men's minor tenth clashes with the women's major third, and so on.

On a most practical level, the key signature for Adonai Malach is, once again, problematic. It is, of course, always possible to write a piece with a blank key signature and place all of the accidentals within the score. This can become cumbersome. It is also possible to write the key signature of the primary octave, which includes the lowered seventh scale degree. Some composers do, indeed, use this method. The most common method is to write the key signature for the major key built on the Adonai Malach tonic. In fact, Cantor Noah Schall often refers to Adonai Malach as the "Jewish major."[3] While Adonai Malach contains pitches which distinguish it from the major mode, it is more intuitive for Western-trained musicians to see the major key signature and have the lowered seventh degree treated as an accidental.

Chapter 5: Ba'al T'fillah

Modulations, Excursions and Identifying Phrases

In the previous chapters, we examined the basic characteristics of the Jewish modes. We looked at the different kinds of motives — opening, concluding, intermediate, pausal, and pre-concluding — that form the basic building blocks for the composition and improvisation of liturgical chant. We saw how scales for particular modal families are derived from these groups of motives and discussed alternative methods for writing key signatures that enable us to transcribe this non-Western genre in a manner compatible with our Western notation.

This chapter presents characteristic modulations, excursions and phrases (or motives) that identify a particular portion of the liturgy. While not always required, a skilled *ba'al t'fillah* — leader of the worship service — will traditionally include some or all of these "moves" when chanting a particular service, rubric or prayer. Some of these modulations or excursions are the most accepted means of introducing variety or extending the *davening* within a particular modal family or prayer. They give emphasis to a particular idea or word within the prayer. In many other cases, these characteristic phrases, modulations or excursions are the sounds which, along with the *MiSinai* tunes, are emblematic of the liturgical moment in sacred time.

Occasionally these characteristic sounds will turn up in entirely different portions of the liturgy, serving as a kind of musical midrashic reference. For example, some settings of the *sheva b'rachot* from the wedding ceremony include a phrase from the *Akdamut* tune, itself linked to the festival of

Shavuot. *Shavuot* celebrates the covenant between God and the Israelites at Mt. Sinai — *the* fundamental covenant of the Jewish people. Some cantors equate the sanctity of the commitment made by bride and groom to the covenant established between God and Israel by chanting a phrase of the *sheva b'rachot* to a fragment of *Akdamut*.

The **identifying phrases** are a particular category of motive. They can be opening, intermediate or concluding motives which assume the additional function of identifying the liturgical occasion.

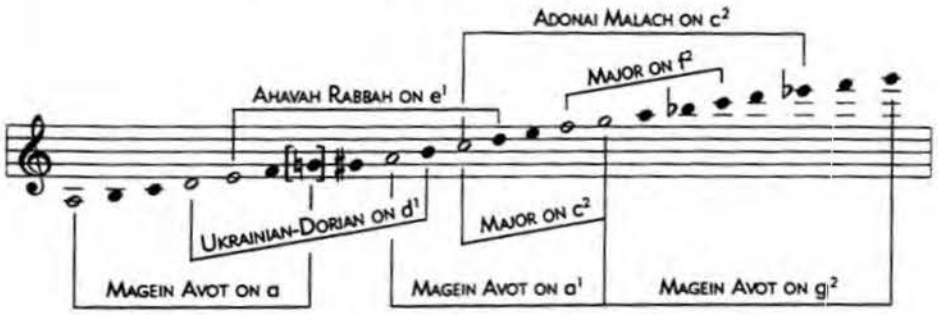
I have differentiated between modulations and excursions. **Excursions** are short detours into a different mode which add variety, color, or interpretation to a particular prayer. By definition, they always return to the original mode. Excursions are a subcategory of modulations.

Modulations are full-fledged migrations to a different mode or modal center. In some cases, the modulations return to the original mode; in others, they lead into the *davening* of a new liturgical section.

The modulations and excursions can be divided into two categories: continuing and contrasting. A **continuing modulation/excursion** is one which migrates along a continuum of overlapping modal and tonal scales, shown in example 5.1 below. Since the scales overlap — that is, they share a number of common tones with adjacent scales — shifts between neighboring modes are not jarring to the ear. Such shifts are not unlike those in a tonal composition that switches between *relative* major and minor keys, or modulates around the circle of fifths to the most closely *related* keys. A **contrasting modulation/**

excursion brings a sudden change of color, similar to the way a tonal composition in a minor key takes on a new character when it jumps to the *parallel* major.

The scales of the continuing modulation are shown here:



Example 5.1

This composite scale is made up of:

- Magein Avot on **a**
- Ukrainian-Dorian on **d¹**
- Ahavah Rabbah on **e¹**
- Magein Avot or natural minor on **a¹**
- Adonai Malach or major (the relative major of the scale on **a¹**) on **c²**
- major on **f²**
- Magein Avot on **g²**

Keep in mind that, as with individual modes, this entire composite scale can be transposed.

Let's begin looking at the continuing modulations/excursions by examining two modes in the middle of this scale: Magein Avot on **a¹** and Adonai Malach/major on **c²**. We saw the temporary move from Magein Avot to the relative major in Chapter 2. In fact, one of the features that distinguishes Magein Avot from natural minor is that the former always includes a phrase in the relative major (see example 2.4a). Since the move from Magein Avot to

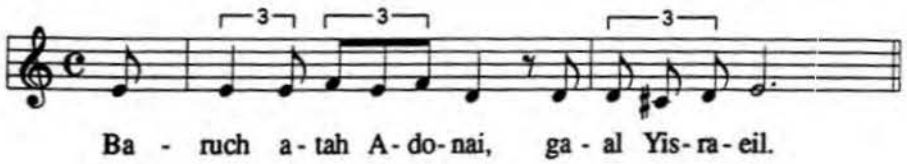
major is usually quite brief, we would classify it as an excursion rather than a full-fledged modulation. Thus, we can now re-define this move as a *continuing excursion*.

Another overlap in the composite scale occurs between Ukrainian-Dorian and Ahavah Rabbah. Charles Davidson says that Ukrainian-Dorian is not actually a mode but simply a hexachord with no characteristic motives.[1] Its most distinguishing characteristic is the augmented second between the third and fourth scale degrees. Ahavah Rabbah, on the other hand, is a modal family with a full set of motives identifying each of its constituent modes. The most prominent feature of the Ahavah Rabbah family is the augmented second between the second and third scale degrees. Dr. Eliyahu Schleifer agrees that Ukrainian-Dorian does not exist as a stable mode; it is used as an exursion or temporary modulation. There are no hazzanic recitatives that are entirely in the Ukrainian-Dorian mode.[2]

Ukrainian-Dorian can, however, serve several unique functions. If you recall from Chapter 3, the pre-concluding phrase in Ahavah Rabbah comes to rest on the lowered subtonic. The composite scale now shows us that a Ukrainian-Dorian hexachord can be built on the lowered subtonic of Ahavah Rabbah. (The lowered subtonic of Ahavah Rabbah on **e** would be **d**.) Since this is the note on which the Ukrainian-Dorian mode is based, Ukrainian-Dorian can be used to extend or delay the final phrase of a composition in Ahavah Rabbah. Think of it, if you will, as the cadenza of a Classical concerto. Remember that we compared the pre-concluding phrase to arriving on the dominant — specifically the I_4^6 chord — in a tonal composition. In a classical concerto, it is common for the orchestra to arrive at a cadence on the dominant

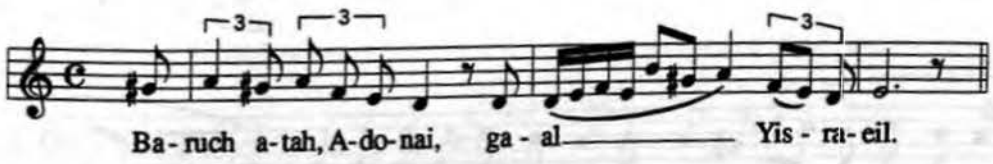
which then introduces the soloist's cadenza. The cadenza is, of course, merely an extension (although it may serve other purposes as well) of the harmonic progression leading to the final cadence. Similarly, the Ukrainian-Dorian mode can be used to extend the melodic phrase just before the concluding motive. And, like the cadenza, it can also serve an additional function — here, to highlight a particular text.

Example 5.2a shows a simple version of the concluding *b'rachah* of the *g'ulah* (*mi chamocha*) in Ahavah Rabbah.



Example 5.2a

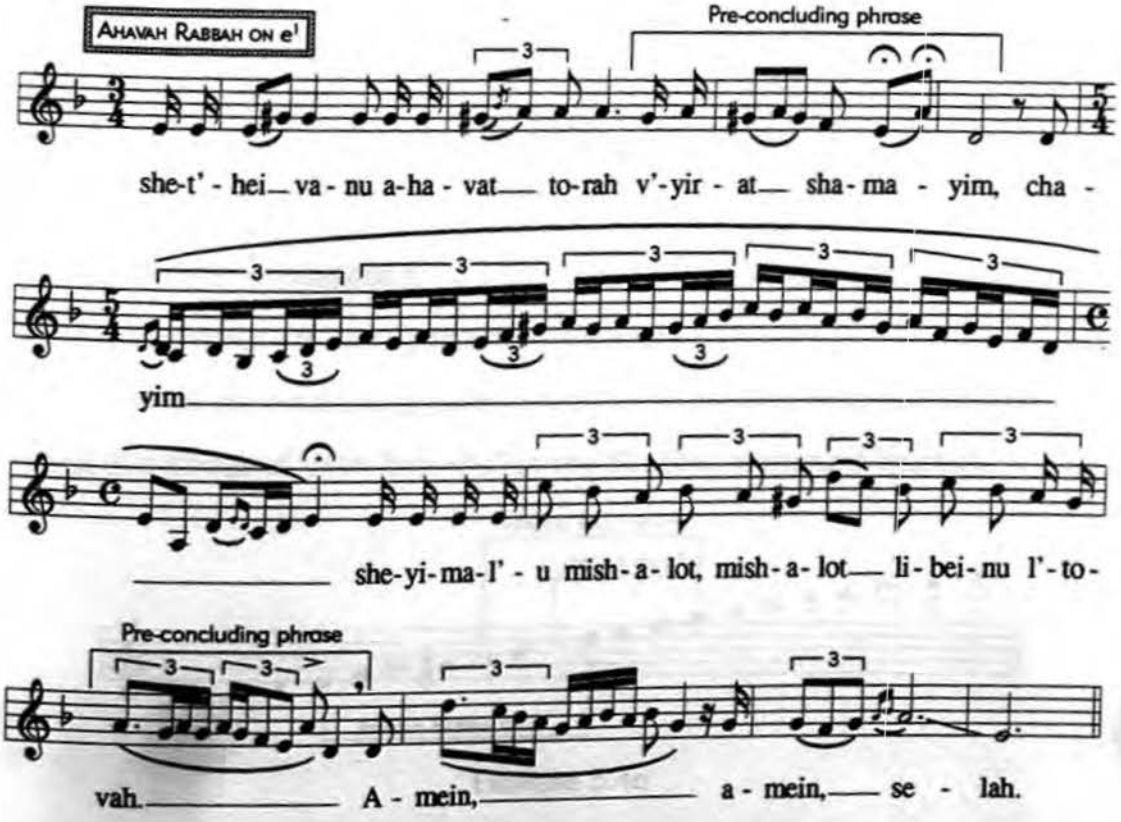
In example 5.2b, the key word, *ga'al* is given a little more emphasis with a short extension based on the lowered subtonic of Ahavah Rabbah on **e** or Ukrainian Dorian on **d**.



Example 5.2b

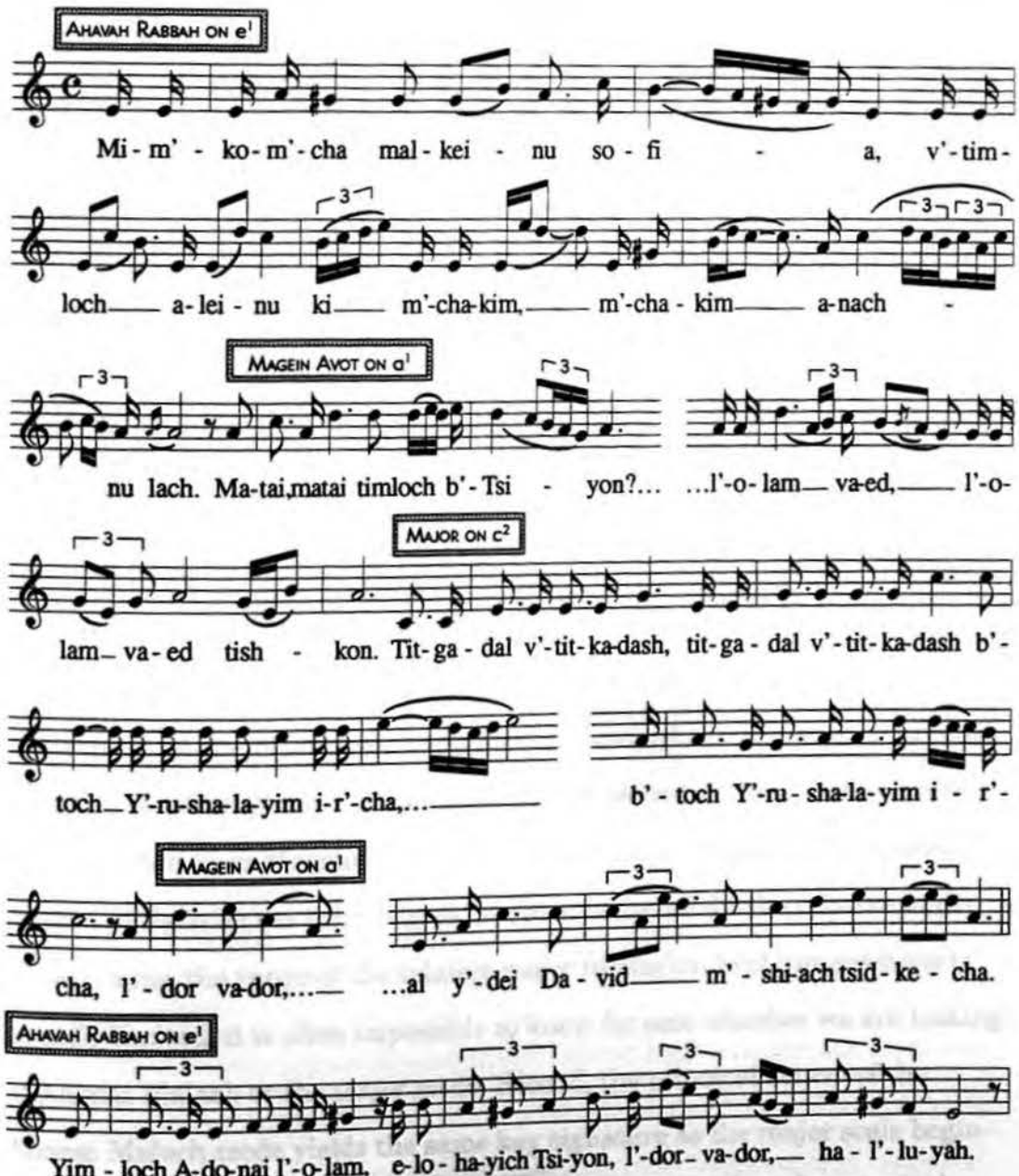
An extensive and dramatic illustration of the Ukrainian-Dorian extension in Ahavah Rabbah is seen in example 5.2c. This is a brief excerpt from the last section of the *Shabbat Rosh Chodesh* prayer *"Y'hi ratzon"* in which

we pray that the new month bring us a life of happiness and blessing. As the prayer enumerates these blessings of life — a long life, a life of peace, a life of goodness, etc. — the word *"chayim"*/"life" receives prominence. In the final petition, for a life in which the wishes of our hearts are fulfilled in goodness, the word *chayim* is given special emphasis: a pre-concluding phrase in **E Ahavah Rabbah** ending on the lowered subtonic introduces *"chayim"* set as an elaborate extension in Ukrainian-Dorian. Although it resolves to the tonic at the firmata on line 3, the descriptive phrase which follows again ends with a pre-concluding phrase on the lowered subtonic and a second, brief Ukrainian-Dorian elaboration on *"amein"* before the concluding phrase on *"selah."*



Example 5.2c

"*Mim'kom'cha*" begins in Ahavah Rabbah (e), modulates to Magein Avot on the fourth scale degree (a), and then to the relative major of Magein Avot at the words "*titgadal v'titkadash b'toch Y'rushalayim ir'cha*"/"May You be exalted and sanctified within Jerusalem, Your city." The modulatory pattern then moves in reverse; either the conclusion of "*Mim'kom'cha*" or the prayer which follows ("*Yimloch Adonai l'olam*") returns to Ahavah Rabbah.

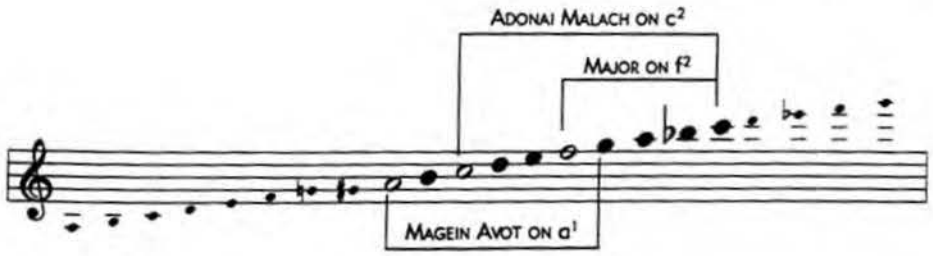


Example 5.4b

The passage in major is sometimes referred to as "Titgadal Major" and the sequence of modulations as "Titgadal Mode." Noah Schall says that cantors

used to refer to this modulation as the "bridge" because of its symmetrical arch form.[3]

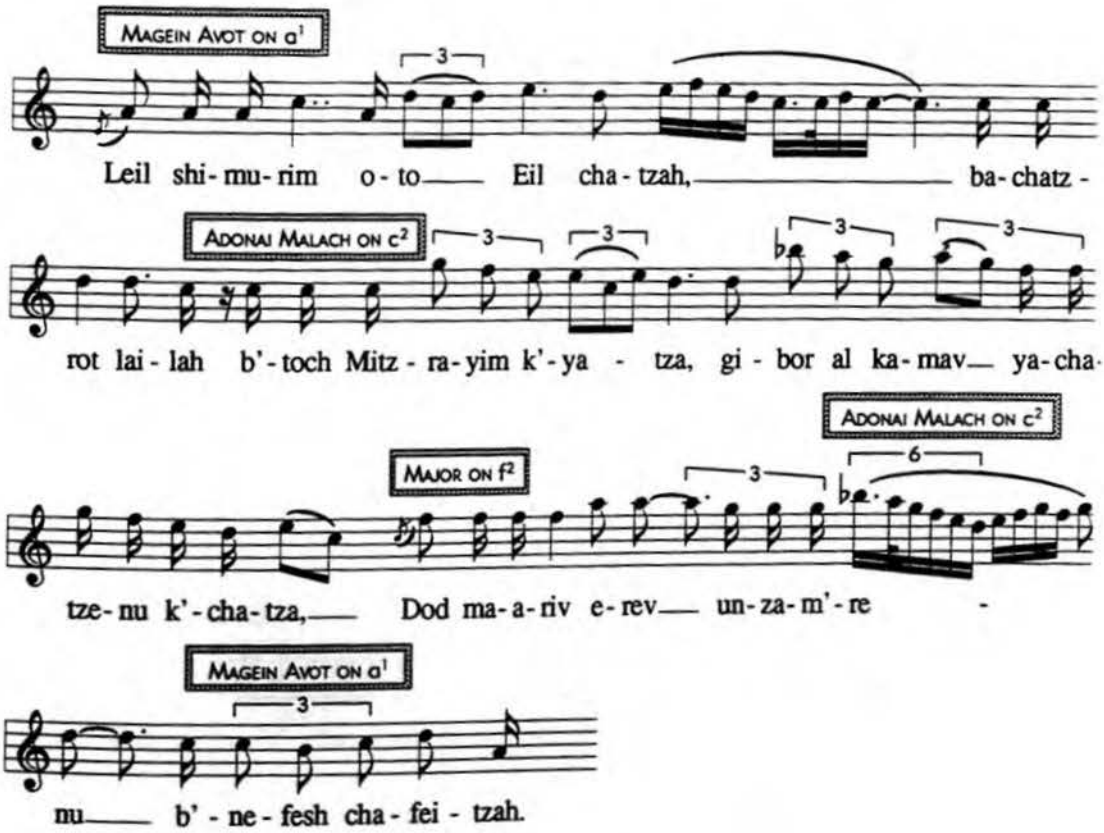
Continuing excursions from Magein Avot to Adonai Malach on the third degree (similar to the move to the relative major) and then to the major a fourth higher is another way of extending the chanting of longer texts.



Example 5.5a

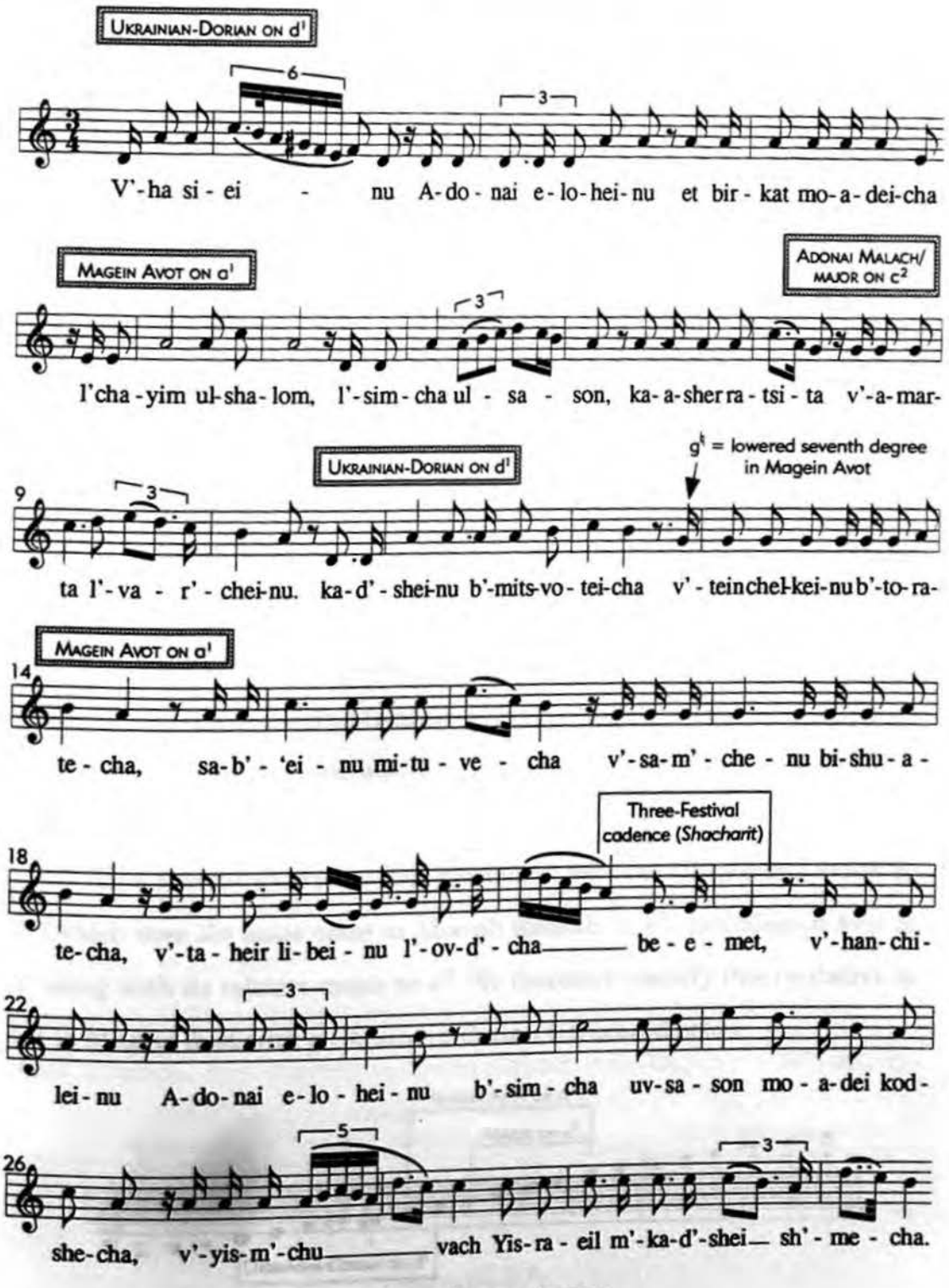
Remember that the principal octave of the Adonai Malach mode contains the same notes as the major scale except for the lowered seventh degree. Because of that relationship, two significant consequences result: first, in the continuing excursion from Magein Avot to the relative major (discussed previously), Adonai Malach on the third degree can be substituted for the relative major. In fact, since the range of the relative major in Magein Avot compositions is usually limited, it is often impossible to know for sure whether we are looking at Adonai Malach or the major mode. Second, the principal octave of the Adonai Malach mode yields the same key signature as the major scale beginning on the fourth degree. In example 5.5a, you can see that the principal octave of Adonai Malach on c^2 contains a $b^\flat$, the key signature of the major scale on f (here given beginning on f^2). In the following example, we can see

the continuing modulation from Magein Avot on a^1 to Adonai Malach on c^2 and the major on f^2.



Example 5.5b

The *nusach* of the *Shalosh R'galim* (Three Festivals: *Succot*, Passover and *Shavuot*) provides a particularly interesting challenge to both the modal theorist and the accomplished *hazzan*. Let's begin by examining *"V'hasieinu"* from the Festival *shacharit* service as notated by Abraham Baer.



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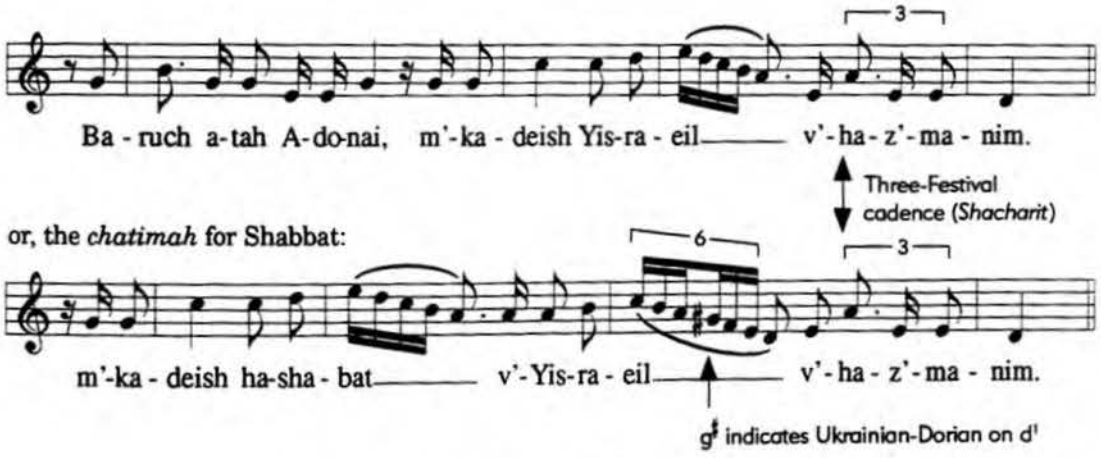
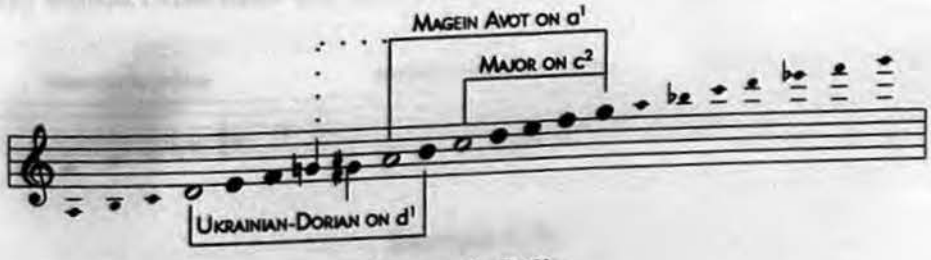


Example 5.6a

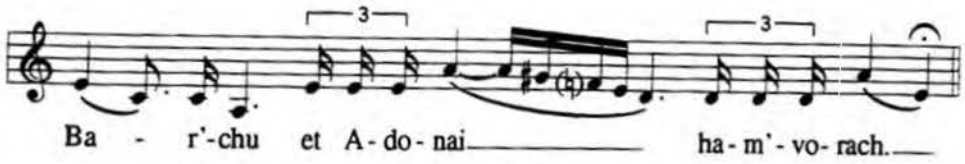
Pay special attention to the gs. Notice that they can fluctuate between $g^{\sharp}$ and $g^{\flat}$. The $g^{\sharp}$ is part of the Ukrainian-Dorian scale (and would also serve as the leading tone for the minor scale on a). The $g^{\flat}$ is the lowered seventh scale degree of Magein Avot on a as well as the fifth degree/dominant of Adonai Malach/major on c (g→c is a common way to introduce Adonai Malach/major; see measure 8). As a phrase modulates across these three scales, the g is raised or lowered accordingly.

This excerpt shows the fluid movement between Ukrainian-Dorian on d^1 (which uses the same notes as Ahavah Rabbah on e^1), and Magein Avot on a^1 along with its relative major on c^2. We therefore identify this recitative as set in Magein Avot with a Ukrainian-Dorian tetrachord below:



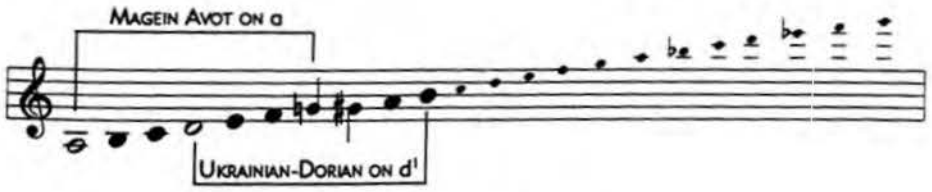
Example 5.6b

Now let's look at the Bar'chu for the eve of the Festivals:



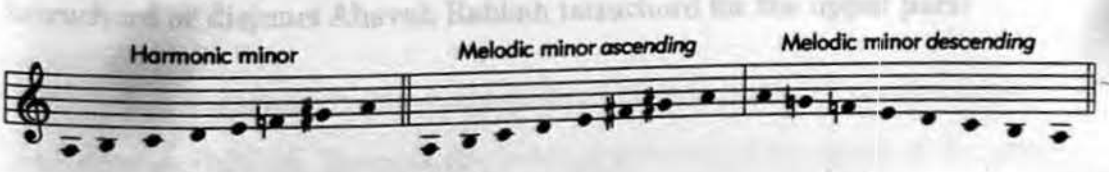
Example 5.7a

Notice that it opens with a Magein Avot/minor triad on **a**, but in the upper part of the range uses the Ukrainian-Dorian mode on **d**^{1}.



Example 5.7b

Why, you ask, is this not simply the harmonic minor on **a**? The harmonic minor scale serves a specific purpose: to raise the seventh degree of the minor scale so that the triad on the dominant chord is major. But Jewish liturgical chant is melodic, not harmonic. Therefore, the **g**$^\sharp$ must result from a melodic component of the nusach. Note also that the tonally-oriented melodic minor scale (which adjusts for both tonal harmony and the smooth flow of the melody) would raise *both* the sixth and seventh scale degrees -- and only in

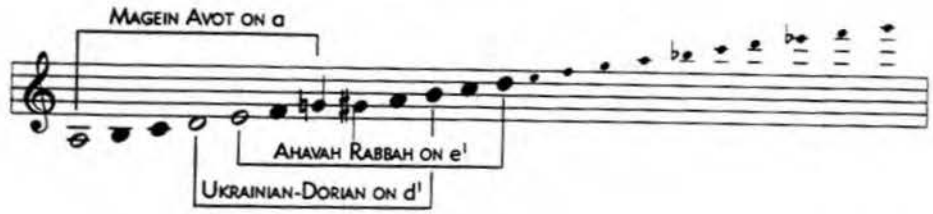


Example 5.7c

ascending figures — so that the melody would incorporate the raised leading tone for the major dominant chord while at the same time avoiding the awkward (in Western tonal music) augmented second. The *descending* melodic minor scale lowers both the seventh and sixth scale degrees (or, returns them to pitches of the natural minor scale — see example 5.7c). The raised seventh scale degree doesn't serve as a leading tone in downward melodic motion. As the name implies, "leading tone" points toward another note. A raised leading tone serves that function only when it leads upward or serves as a lower neighboring tone to a note being emphasized. In fact, the Jewish modes make use of a lowered leading tone: a lowered second scale degree which emphasizes the tonic (see the g♭s in example 5.13a below).

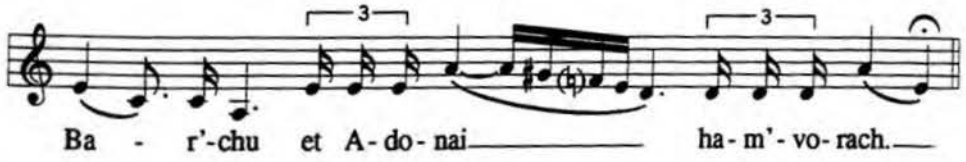
A more difficult question is whether the notes in the upper part of the octave represent Ukrainian-Dorian on **d** or Ahavah Rabbah on **e**. After all, the descending scale moves to **d** but the cadence is on **e**. I suggest that the more stable Ahavah Rabbah and its less-stable Ukrainian-Dorian counterpart are so intimately bound together that they work in tandem. That is to say, both modal tonics — **d** and **e** — play a significant structural role in the Festival nusach.

The festival evening nusach uses a Magein Avot tetrachord for the lower part of the principal octave, and either a conjunct Ukrainian-Dorian tetrachord or disjunct Ahavah Rabbah tetrachord for the upper part:



Example 5.7d

The relationship between these three modes of the Festival evening nusach have even broader implications for Jewish modal theory. Look again at the opening phrase of the *bar'chu*:



Example 5.8a

The cadence is a variation of the closing motive to the fifth degree in Magein Avot which we saw in Chapter 2 (see example 2.2a). The outline below shows the structure of the *bar'chu*: an opening triad in Magein Avot on a which moves to a cadence on the fifth scale degree by way of the fourth.

Example 5.8b

This 1–4–5 outline gives the tonic notes of Magein Avot, Ukrainian-Dorian and Ahavah Rabbah. Because the lowered subtonic is the mark of the pre-concluding phrase in Ahavah Rabbah, it should be no surprise that this 4–5

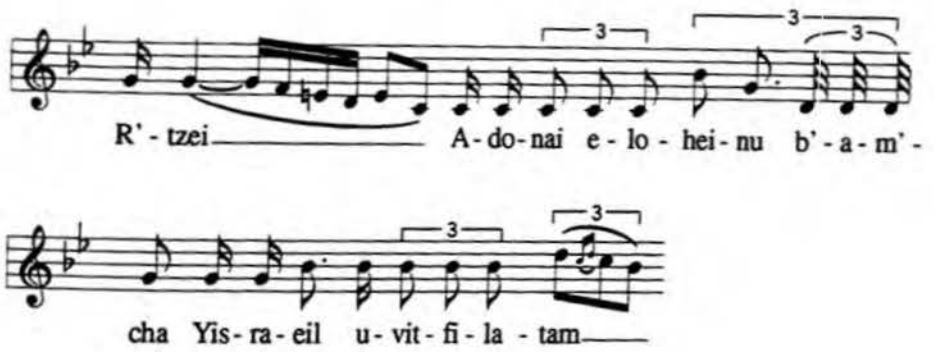
ending — (sutonic to tonic in Ahavah Rabbah) implying a major triad of Ahavah Rabbah on the fifth degree of Magein Avot — does sound conclusive. While it is tempting at this point to suggest that Ahavah Rabbah can be viewed as a kind of dominant in Magein Avot, this is a dangerously tonal concept when talking about modal music. Yet it does explain the phenomenon of a concluding phrase to the fifth degree in Magein Avot.

Referring back to example 5.6b, notice that the Festival morning *nusach* uses the same modes as the evening *nusach*, but with Magein Avot on top instead of on the bottom. Why is this significant?

One of the most difficult identifying phrases to explain is the Three Festival *shacharit* cadence  which begins on the tonic and descends to the fifth and then fourth scale degrees. (We saw an example of this in example 5.6a. There is a second, less problematic version of this cadence in which the final note is the tonic. I will address that variation later in conjuntion with the High Holiday morning cadence at example 5.17b.) What is particularly troubling is the lack of finality that this final cadence seems to have. But by referring back to the three modal scales which form the basis of the Festival morning *nusach* (example 5.7d), we discover that this cadence is not so enigmatic. Magein Avot is the basis of this *nusach* with the Ukrainian-Dorian/Ahavah Rabbah tetrachord below. This Festival *shacharit* cadence is merely an outline of those three modes given by their tonic notes. The reason this figure is not entirely satisfying as a final cadence is that it concludes with the tonic of Ukrainian-Dorian — the least stable of the three modes. Of

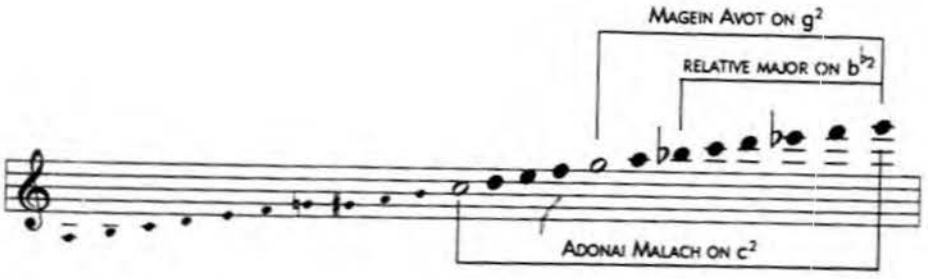
course this explanation addresses only the theory behind this enigmatic cadence and not the aesthetics.

One continuing excursion remains. Look at the following excerpt from the *shacharit* service for the Three Festivals.



Example 5.9a

The opening words (*"R'tsei Adonai eloheinu"*) appear to be set in Adonai Malach mode on c^1. But the mode quickly changes and remains in Magein Avot on g^1, with the clear setup coming with the d→g figure at *"b'am'cha."* How are these two modes related? Remember that one of the salient features of the Adonai Malach mode is the non-repeating octaves: the primary octave is similar to the major scale but with a lowered seventh degree; however the second octave contains a minor tenth (in contrast to the major third in the primary octave). Returning to our composite scale, that non-repeating octave pattern results in overlapping Adonai Malach (on c^2) and Magein Avot (on g^2) scales; or, as it applies to the Three Festival morning *nusach*, demonstrated in example 5.9a, Magein Avot mode with an Adonai Malach tetrachord below.



Example 5.9b

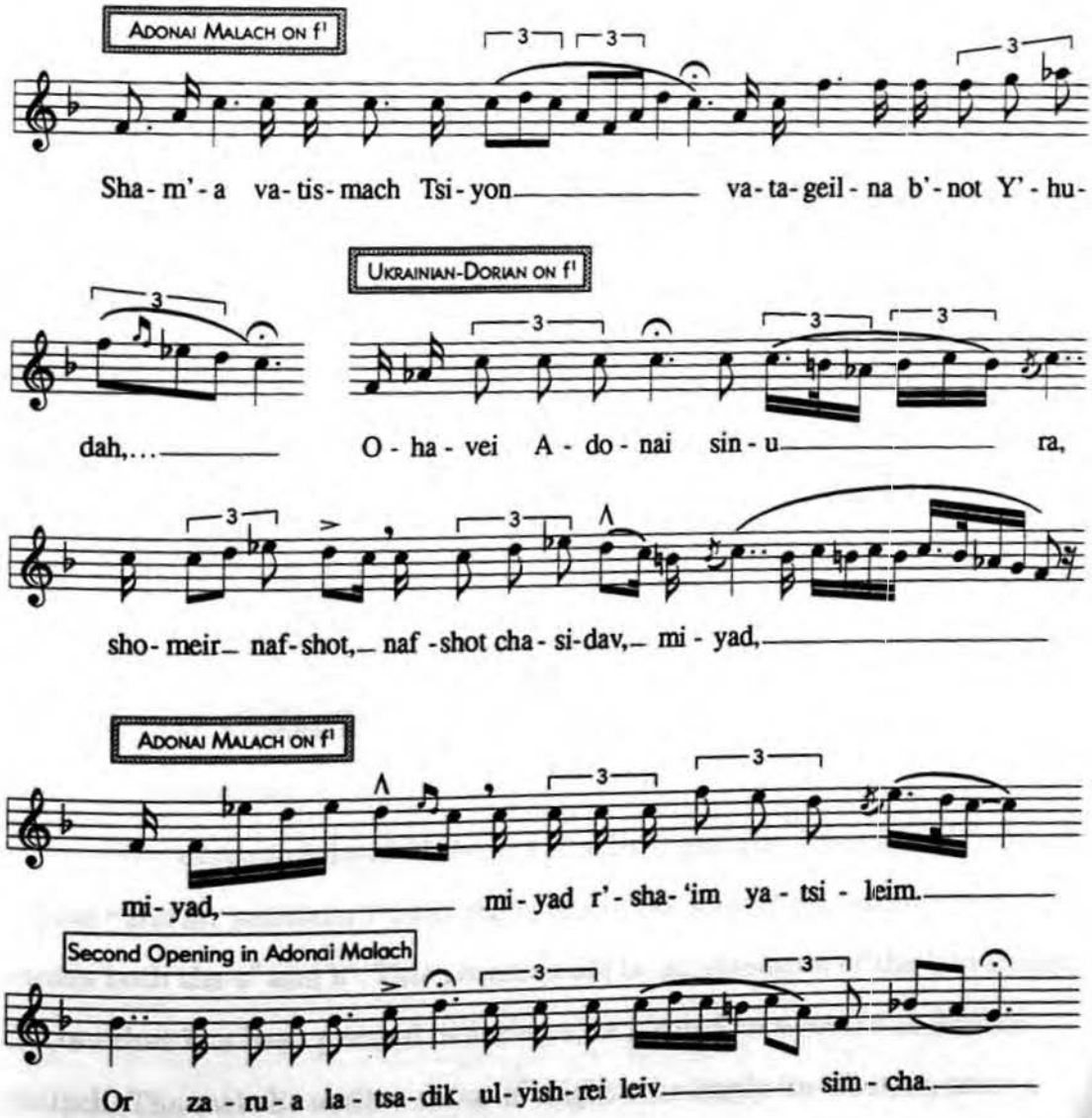
An opening in Adonai Malach which then settles in Magein Avot a fifth higher is a characteristic move for the morning service of the Three Festivals.

❖

We now shift our attention to the **contrasting excursions**. These are the shifts of mode which bring a sudden change of color, akin to the shift from minor to parallel major in a tonal composition. These excursions catch the ear and draw the listener's attention to the chant, highlighting a particular phrase of text. Because this move is highly coloristic and temporary, these contrasting shifts tend to be almost exclusively excursions rather than full-fledged modulations.

The first example comes from the psalms of *Kabbalat Shabbat*. It is customary to chant Psalms 95–99 in Adonai Malach mode. Psalm 97 speaks to the glory of God's reign. Near the end, the psalmist cries *"Ohavei Adonai sinu ra"*/"O lovers of Adonai, hate evil." Here the *hazzan* will frequently paint the word *"ra"*/"evil" by momentarily replacing the Adonai Malach scale with

Ukrainian-Dorian built on the same tonic, as in this setting by Adolph Katchko.

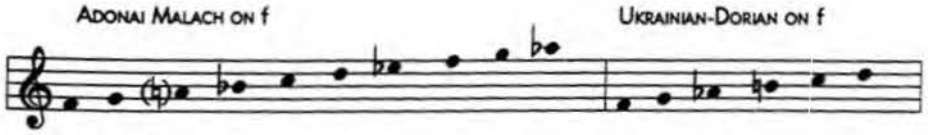


Example 5.10a

Note the classical opening for Adonai Malach: the ascending major triad with a recitation tone on the fifth scale degree. In the second phrase,

the identifying minor tenth and minor seventh are heard at the word *"Y'hudah."* The next several lines — omitted in this example — continue in a dramatic rendering of the text in the Adonai Malach mode.

The way in which the Ukrainian-Dorian mode is introduced is masterful. The minor triad at *"Ohavei Adonai"* parallels the opening of the recitative. While the a♭ signals the change in color, it is not completely foreign: the same note an octave higher is part of the mode. It is not until the second half of the phrase — at *"sinu"* — that we hear the b♮→a♭ combination which is the characteristic sound of Ukrainian-Dorian on f.



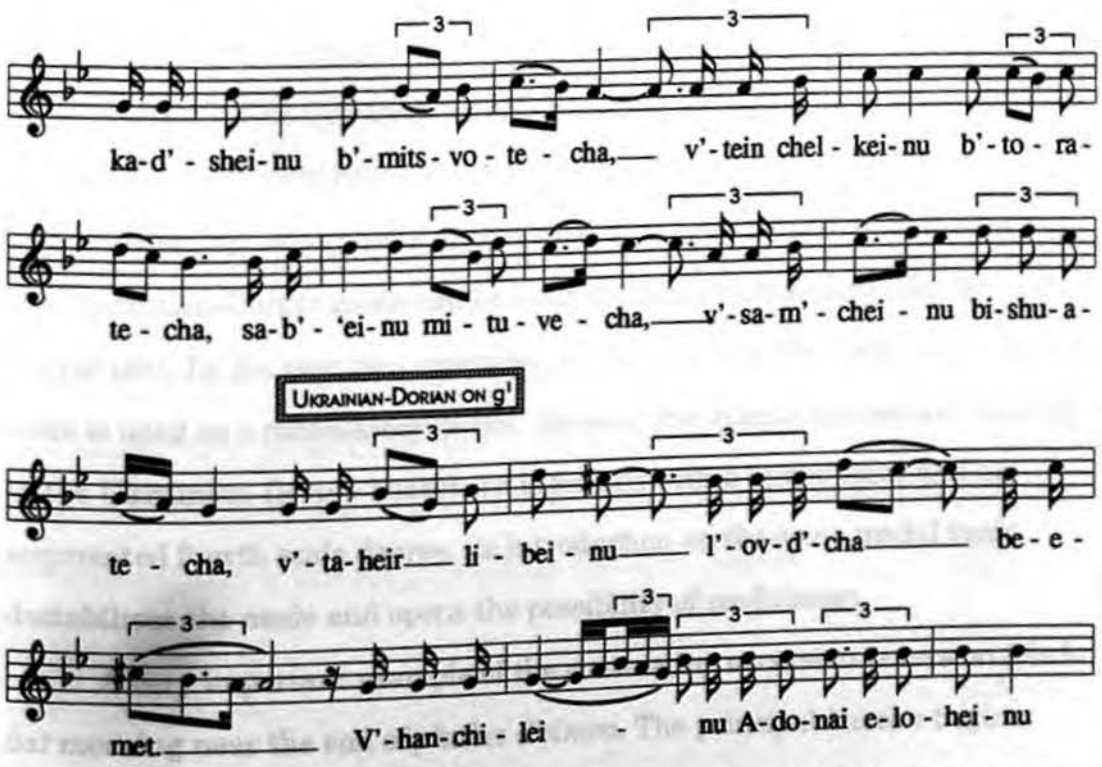
Example 5.10b

The way in which Katchko let's the "evil" sound of the augmented second creep in is insidious.

The return to Adonai Malach is equally ingenious. The phrase *"miyad, miyad r'sha'im yatsileim"*/"from the hands of the wicked He rescues them" avoids both the a♭ and b♮. This phrase could be an extension of the Ukrainian-Dorian that has been planted in our ears; or it could be a return to Adonai Malach. The melodic outline of f–c–e♭ might even imply (to Western ears) a dominant seventh of B♭. Indeed, when the tone of the text changes in the next phrase, Katchko gives us a dramatic, sudden modal color change again with the b♭ (which contradicts the b♮ of the Ukrainian-Dorian mode) on *"or"*/"light." He reinforces this modal shift by restricting the text *"Or zarua latsadik"*/

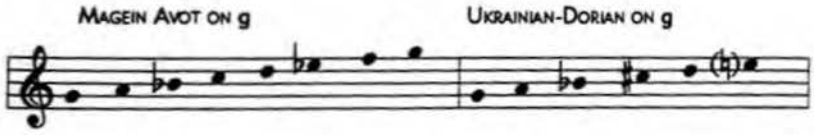
"light is sown for the righteous" to the opening pitches of the **B♭ Major** scale: **b♭–c–d**. Thus, the return to Adonai Malach is made by way of the major on the fourth scale degree — the secondary opening in Adonai Malach (see example 4.1a). On the word *"leiv"*/"heart," Katchko teases us with a return of the **b♮**, now used as a lower neighbor tone in what amounts to an ornament on **c**. The contrasting excursion from Adonai Malach to Ukrainian-Dorian artfully paints this fragment of text in a psalm speaking of God's majesty and power.

A similar shift occurs less frequently between Magein Avot and Ukrainian-Dorian on the same tonic. In this setting of *"V'hasieinu"* by Israel Alter, the composer adheres to the tradition of highlighting the text *"v'taheir libeinu l'ovd'cha be'emet"*/"purify our hearts to serve You in truth."



Example 5.11a

The *hazzan* will often chant these words with heightened emotion and intensity. The move from Magein Avot on g to Ukrainian-Dorian on g is less dramatic than the shift from Adonai Malach to Ukrainian-Dorian we saw in example 5.10a in which a significant color change takes place when the third is lowered from major to minor. When moving from Magein Avot to Ukrainian-Dorian on the same modal tonic, it is only the fourth scale degree which changes: it is raised to produce the augmented second.



Example 5.11b

Nonetheless, this temporary shift to Ukrainian-Dorian gives the *hazzan* the opportunity to color this traditionally highlighted piece of text. After the brief excursion, the *hazzan* returns to Magein Avot.

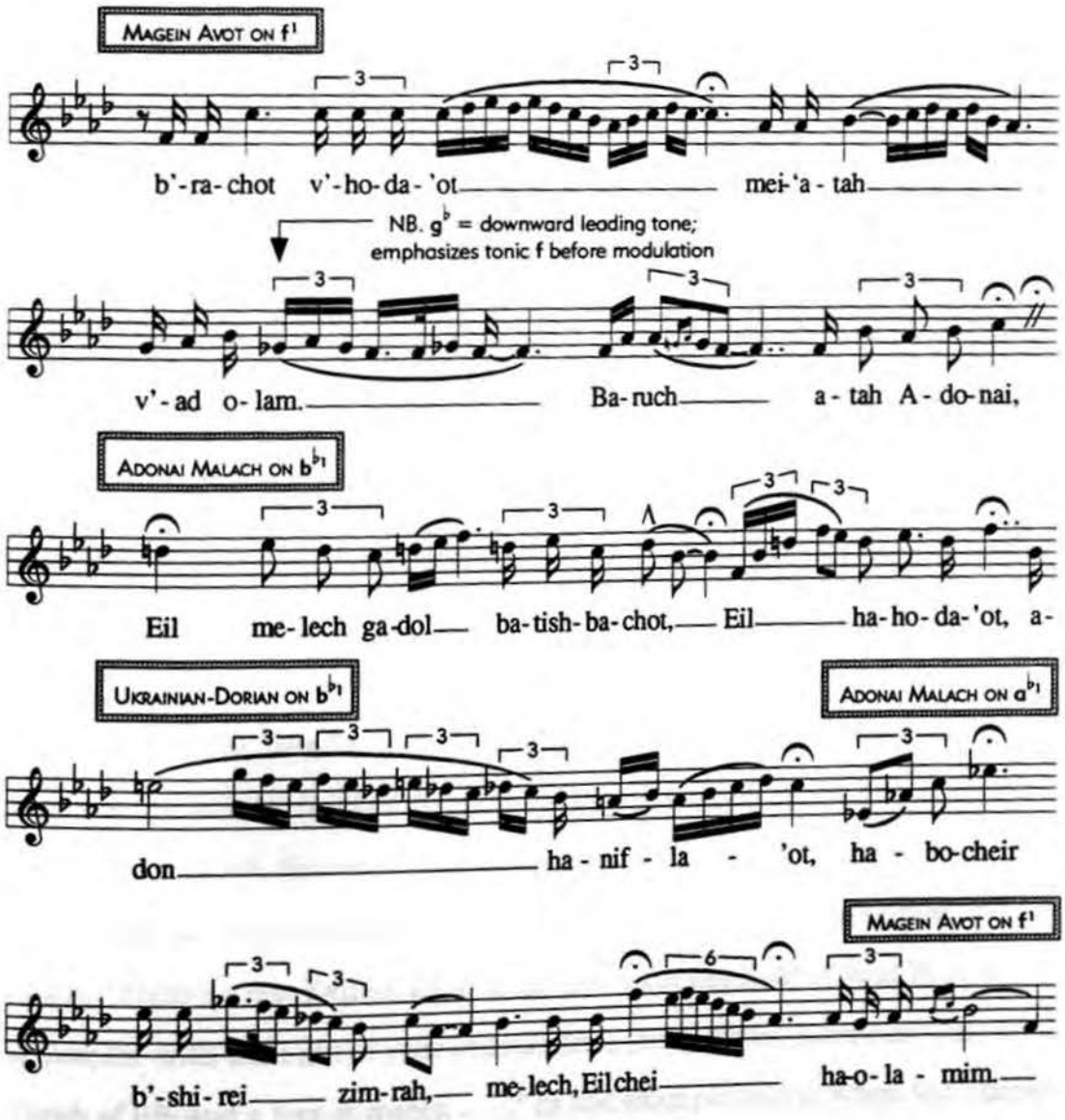
These two examples of contrasting excursions have demonstrated how the Ukrainian-Dorian mode can be used to dramaticize a particular phrase of prayer text. In the next two examples, we will see how the Ukrainian-Dorian scale is used as a modulatory device. Because the augmented second interval in the Ukrainian-Dorian hexachord is formed with a minor third and an augmented fourth scale degree, its introduction on the same modal tonic destabilizes the mode and opens the possibility of modulation.

A very important example of the contrasting excursion occurs on *Shabbat* morning near the end of *p'sukei d'zimra*. The principal *hazzan* begins chanting on *Shabbat* morning at *"Shochein ad marom."* At this point, we are

in the Magein Avot mode. This mode continues into the paragraph "*Yishtabach shimcha . . . b'rachot v'hoda'ot mei'atah v'ad olam.*" In example 5.12a by Adolf Katchko, we arrive at "*Baruch atah Adonai*" still in Magein Avot on f. The congregation responds "*Baruch Hu uvaruch sh'mo!*" on the same note on which the *hazzan* finished "*Baruch atah Adonai*" (in this example, on c — represented in the music by 𝄐). The *hazzan* then moves to the Adonai Malach/major on the fourth scale degree (b♭).

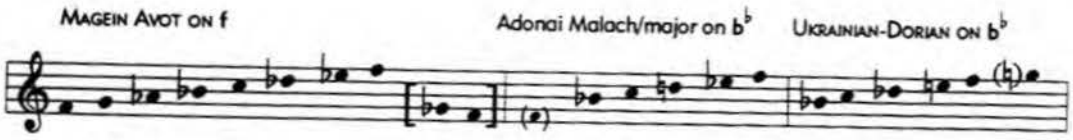
This sudden, bright color change is a result of the minor sixth degree (d♭) of Magein Avot being suddenly raised to form the major third (d♮) of the new mode. To return to Magein Avot, the *hazzan* first substitutes Ukrainian-Dorian for the major mode. The augmented fourth (e♮) destabilizes the tonic b♭, and the return to d♭ changes the color of the B♭ mode from major to minor. By using the augmented second of Ukrainian-Dorian to negate the major mode, the *hazzan* is able to return to the original Magein Avot.

Notice that in this particular example, Katchko moves from Ukrainian-Dorian first to Adonai Malach on A♭ (or, the relative major of Magein Avot on f: A♭ Major) on "*habocheir*" before settling back in the original mode. The reason we identify this as Adonai Malach instead of major is because of the g♭ at "*b'shirei.*" It is particularly interesting to note that the g♭ is used an octave lower at "*v'ad olam*" as a *downward* leading tone to emphasize the tonic f of Magein Avot just before the modulatory excursion begins.



Example 5.12a

This contrasting excursion from Magein Avot to Adonai Malach/major on the fourth scale degree and returning to Magein Avot via Ukrainian-Dorian is characteristic of the *Shabbat* morning service, and has been dubbed the "Yishtabach maneuver."[4] The related scales are given in example 5.12b:



Example 5.12b

The Yistabach maneuver comes in the *b'rachah* which concludes a long section during which we proclaim that the righteous and pious shall exalt God's name. (This idea is set up in the last sentence of paragraph beginning *"Nishmat kol chai."*) The sudden musical shift of color adds dramatic emphasis to this blessing (required by *halachah* to be proclaimed out loud) before the morning service proper begins at *bar'chu*.

The next and final example of a contrasting exursion is sometimes referred to as the **"Sim Shalom maneuver"** because it occurs in the final paragraph of the *shacharit amidah* which begins with those words. Beginning with the *k'dushah*, the remainder of the *Shabbat* morning *Amidah* is chanted in the Ahavah Rabbah mode. In the second sentence of this paragraph we chant, "Bless us, our Father, all of us as one, with the light of your countenance; for with the light of your countenance you gave us, Lord our God, a Torah of life and a love of mercy, ..." In the example below, when the *hazzan* begins *"ki v'or panecha*/for with the light of your countenance," Israel Alter moves from Ahavah Rabbah on d to the major on the fourth degree (G Major). The brighter modal color here is, of course, a play on the word "light." By implementing a contrasting excursion at this phrase, the *hazzan* emphasizes the concept that we receive blessings in the "light" of God's presence.

Here, the major mode on g first becomes Ukrainian-Dorian on g with the $b^{\flat}$–$c^{\sharp}$ augmented second obliterating the sense of a tonic on g. By the conclusion of the word "*chesed*," we have returned to Ahavah Rabbah on d with this pausal phrase that ends on the fifth scale degree.

Here, then, are the contrasting excursions we have examined in this chapter:

Contrasting Excursions

Ukrainian-Dorian on the same tonic

- Adonai Malach to Ukrainian-Dorian
- Magein Avot to Ukrainian-Dorian

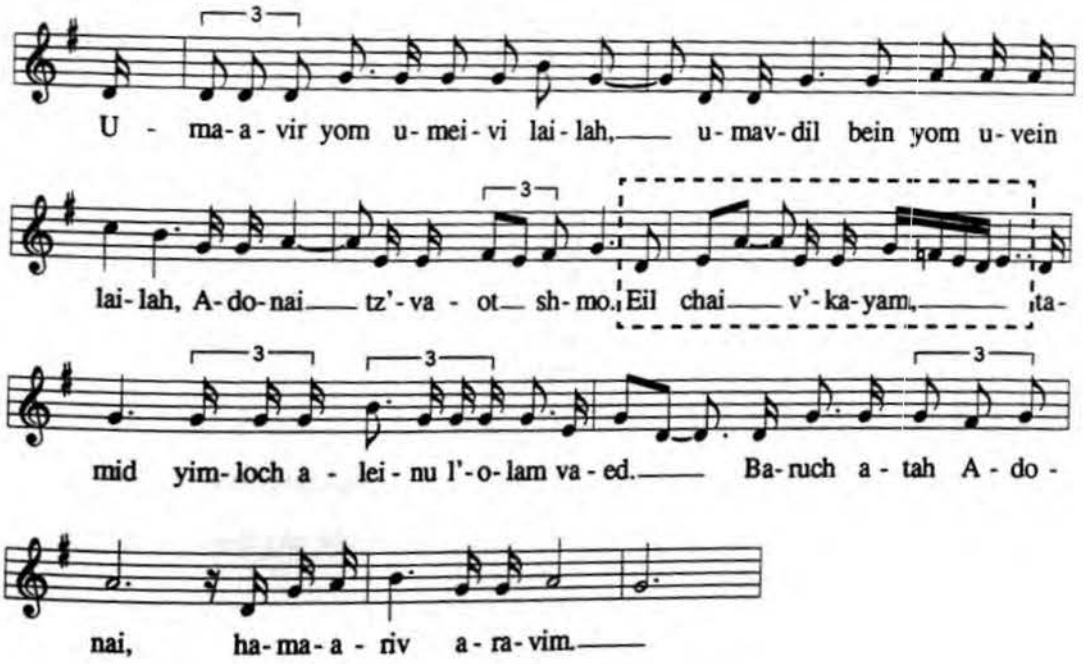
Major on the fourth scale degree (returning via Ukrainian-Dorian)

- Yishtabach maneuver
- Sim Shalom maneuver

In this final section, we will examine the **characteristic phrases** which, when heard by the knowledgable worshipper, immediately identify the time and day of the week, the service, or the holiday. While their absence does not necessarily negate the validity of the worship experience, they are part of the repertoire of the competent *ba'al t'fillah*.

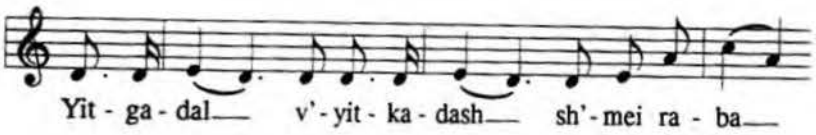
Let's begin with a phrase from the Friday evening liturgy. It occurs during the *chatimot* — the final sentences — in the two blessings before the

sh'ma. The first acknowledges God as Creator; in the evening liturgy, God is referred to as the One Who separates day from night and "brings on the evening"/"*ma'ariv aravim*." The phrase occurs at the words "*Eil chai v'kayam*"/"God Who lives and endures":



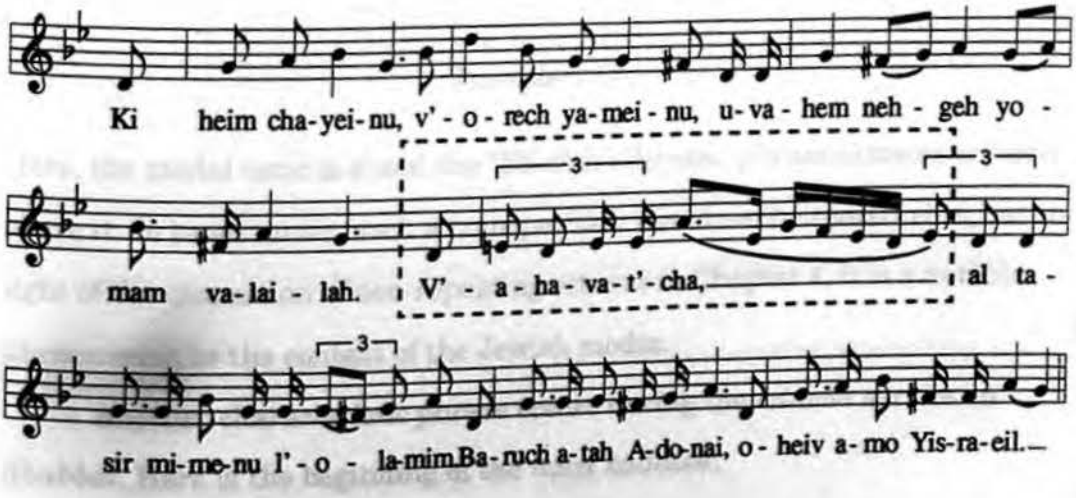
Example 5.14a

The phrase is built on the pitches  , the fifth and sixth scale degrees below the tonic, and the second degree above the tonic. Notice that the intervals — although not the scale degrees — are the retrograde of the Three Festival cadence we saw in example 5.6a (see also the discussion on page 92). These intervals of "*Eil chai v'kayam*" also reappear in a different context as one of the primary motives of the *Yom Kippur N'ila* service:



Example 5.14b

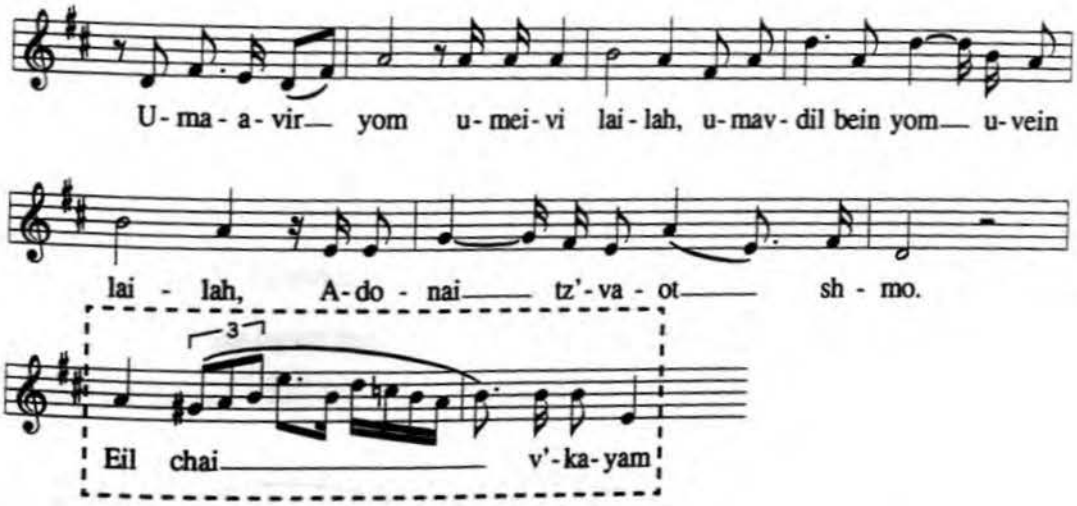
This phrase is used again in the second blessing before the *sh'ma*, which acknowledges God as the One Who showed love for the people Israel through the revelation of Torah. It occurs on or beginning with the word *"V'ahavat'cha"*/"And Your love." If you recall, we said in Chapter 4 that there are multiple traditions for the *nusach* of Friday evening. Among them is a Western European tradition that *davens* the *ma'ariv* service in Major/Adonai Malach, and an Eastern European traditions that uses minor/Magein Avot. Both traditions, however, make use of this same phrase in the two blessings before the *sh'ma*. Example 5.14a showed how it is used when *davening* in major. Example 5.14c shows the same phrase in the context of the minor mode.



Example 5.14c

Pay particularly close attention to the fact that the sixth scale degree below the tonic remains major, regardless of the modality of the surrounding prayer. In fact, all of the intervals of this motive remain the same regardless of the modal context.

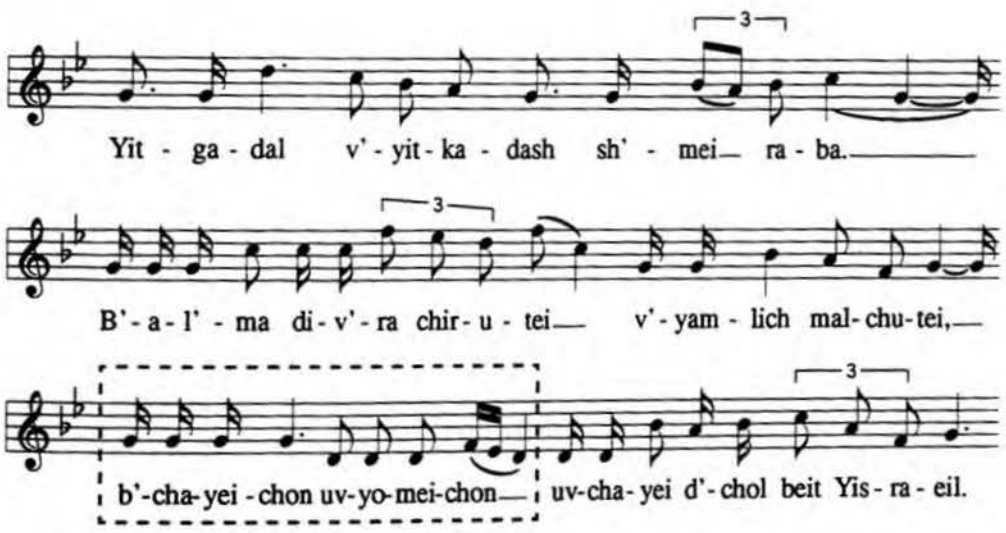
When the modal tonic sits lower in the vocal range, the *"Eil chai v'kayam"* phrase can also occur in the octave above the modal tonic, as in the following example:



Example 5.14d

Here, the modal tonic is d and the *"Eil chai v'kayam"* phrase remains entirely above it. In tonal music, such a transposition would not be remarkable; but in light of the discussion of non-repeating octaves in Chapter 4, it is a notable phenomenon in the context of the Jewish modes.

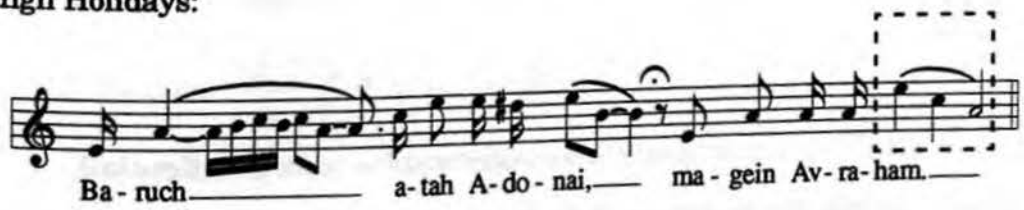
Another characteristic phrase occurs during the *mincha* service on *Shabbat*. Here is the beginning of the *hatzi kaddish*:



Example 5.15

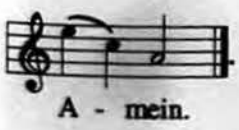
This phrase can be set to a variety of different texts and serves as the *leitmotif* for the *Shabbat mincha* service.

One of the most familiar *leitmotifs* is this cadential formula from the High Holidays:



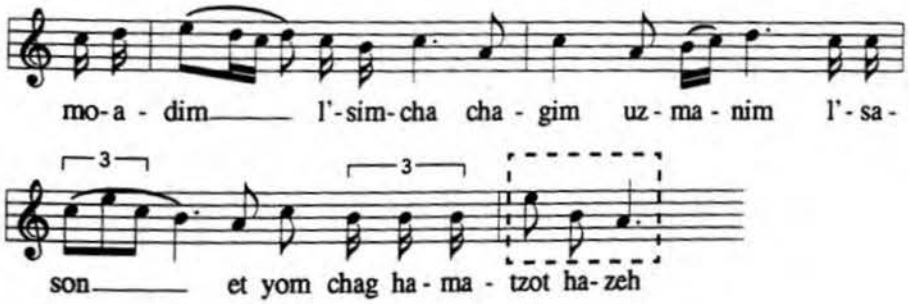
Example 5.16a

The descending minor triad at the end elicits the congregational response:

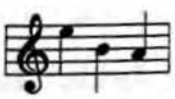
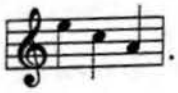


. Even worshippers with minimal synagogue experience will tend to associate this phrase with the High Holidays.

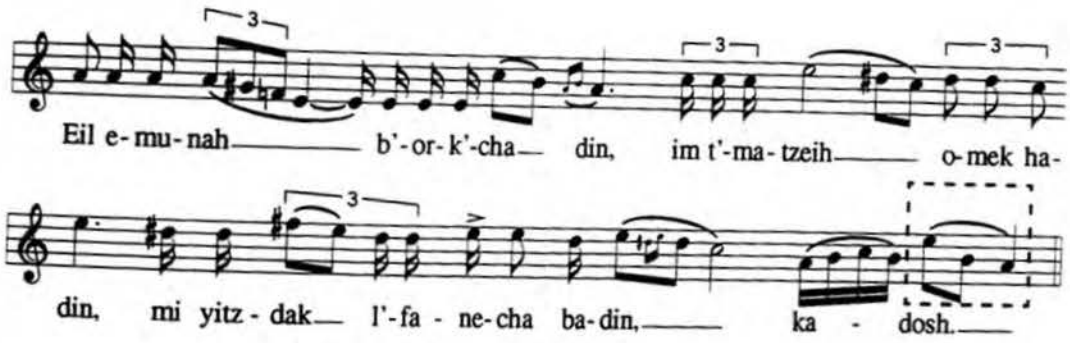
Cantor Noah Schall says that there is speculation that the High Holiday and Three Festival *nusach* were, at one time, the same.[5] This would account for a number of similarities between the two. One interesting parallel is the Three Festival cadence which ends on the tonic:



Example 5.16b

Compare this with example 5.6a, in which the cadence *begins* on the tonic and comes to rest on the fifth below. Of course the version that ends on the tonic is identical with the High Holiday cadence of example 5.16a, except for the middle note:  versus  .

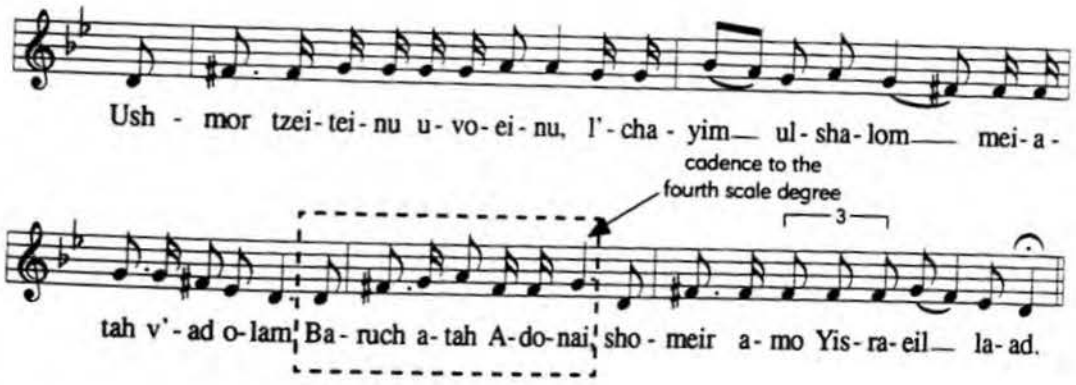
Naturally, we must acknowledge immediately that this "small" difference is not insignificant. But we are moved to ponder its significance when we encounter the following phrase in the High Holiday liturgy:



Example 5.16c

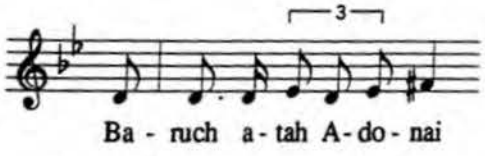
The same phrase (5–2–1) ending on the tonic, is present in both the Three Festival and High Holiday *nusach*. Is it possible that these were, at one time, interchangeable? Is the descending minor triad simply a more harmonically stable and acceptable cadence for ears accustomed to Western tonal music? While it is not possible to draw any definitive conclusions about the relationship between these two motives, the question remains one of interest.

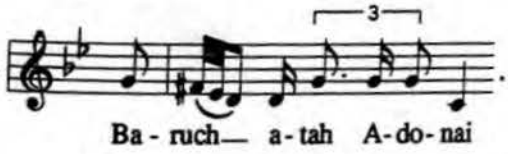
Finally, we come to a subtle but important phrase: the *chatimah* for the weekday *ma'ariv* service. The rubric of the *sh'ma* and its blessings is *davened* in Ahavah Rabbah, just like the weekday morning and afternoon services. The one musical change comes at the *chatimah*: the words *"Baruch atah Adonai"* are chanted so that they end on the fourth scale degree. Here is the end of the weekday *"Hashkiveinu"* chanted at the evening service:



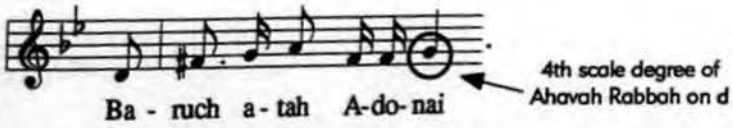
Example 5.17

In the weekday *shacharit* and *mincha* services, the *chatimah* may begin:



leading to the third scale degree, or as a pre-concluding phrase to the lowered subtonic: 

. In the weekday evening service, the phrase should always lead to the fourth scale degree:



In conjunction with an understanding of the modal structure of *nusach hat'fillah* (the Jewish prayer modes), the characteristic modulations and phrases presented in this chapter are part of the basic tools of *ba'al t'fillah* — the one who guides worshippers in prayer. As we said at the outset, the transmission of oral tradition combined with regional and personal differences

means that neither strict adherence or consistent application of this material is either demanded or expected. Yet, the *ba'al t'fillah's* consistent rendering of *nusach* in the synagogue binds music and liturgy so firmly together in the minds, ears, and hearts of the congregation that, over time, a musical phrase will elicit an automatic emotional association in the listener — even if it hasn't been heard in a year's time. These basic tools of *nusach*, when combined with the sincerity and artistry of a prayer leader, can enhance the affective worship experience and heighten the *kavannah* of the Jew in prayer.

Notes

Forward: The Sound of Sacred Time

1. Neil Gillman, *Sacred Fragments* (Philadelphia: Jewish Publication Society, 1990), 235.
2. Abraham Joshua Heschel, *The Sabbath: its meaning for modern man* (New York: Farrar, Straus and Young, Inc., 1951), 6, 8.
3. We can see the smallest divisions of fractions of a day and annual cycles grouped into 50-year (the Jubilee Year) spans of a lifetime.
4. Gillman, *Sacred Fragments*, 233-34.
5. The *hazzan's* repetition of the *musaf amidah* on the first day of Passover begins with *T'fillat tal*, the prayer for dew.
6. *Siddur Kol Yaakov — The Complete ArtScroll Siddur: Nusach Ashkenaz* (Weekday, Sabbath, Festival), Rabbi Nosson Scherman and Rabbi Meir Zlotowitz, eds.. transl. and commentary Rabbi Nosson Scherman (Brooklyn, NY: Mesorah Publications, Ltd., 1990), 702.
7. Known in Hebrew as פרדס (Pardeis), an acronym for the four levels of understanding: פשט, the plain sense; רמז ("hint"), the first level associative meanings; דרש, a learned interpretation; and סוד ("secret"), the mystical interpretation.
8. Lawrence A. Hoffman, *The Art of Public Prayer: not for clergy only* (Washington, D.C.: The Pastoral Press, 1988), 19. Dr. Hoffman explains those qualities which make a symbol: 1) It must evoke its response automatically. 2) Verbal description of a symbol's significance is by definition both superfluous and inadequate. 3) In a ritual that deals with group experience, the symbol's significance must be shared by the members of the group. 4) True symbols, being immediately apprehended, seem self-evident, so people frequently hold to them with considerable emotional tenacity. (p. 20)
9. Hoffman, *The Art of Public Prayer*, 32.
10. Hoffman, *The Art of Public Prayer*, 262.
11. Hoffman, *The Art of Public Prayer*, 262.
12. Lawrence A. Hoffman, "What Is a Liturgical Tradition?" in *The Changing Face of Jewish and Christian Worship* (Notre Dame, IN: University of Notre Dame Press, 1991), 11.
13. Hoffman, *The Art of Public Prayer*, 27.

14. Eugene B. Borowitz, *Liberal Judaism* (New York: Union of American Hebrew Congregations, 1984), 415–16.

Chapter 1: Overview: Structure and History of the Synagogue Modes

1. Hanoch Avenary, "The Concept of Mode in European Synagogue Chant: An analysis of the *Adošem Malāḳ Shtejger*," *Yuval* 2 (1971): 11. Dr. Mark Kligman points out that early efforts to analyze the synagogue prayer modes were likely an attempt to organize local practice rather than to establish a global theory.
2. See Francis L. Cohen, "Music, synagogal," in *The Jewish Encyclopedia* (New York: Ktav, 1906; reprint, 1964), 123.
3. See Joseph A. Levine, "Toward Defining the Jewish Prayer Modes with Particular Emphasis on the *Adonay Malakh* Mode," *Musica Judaica* 3, no. 1 (5741/1980–81): 32.
4. See Max Wohlberg, "The History of the Musical Modes of the Ashkenazic Synagogue, and Their Usage," In *Procedings of the Seventh Annual Conference Convention of the Cantors Assembly held in Highmount, New York June 1954*; reprint *Journal of Synagogue Music*: 46; Avenary, "The Concept of Mode in European Synagogue Chant," 11.
5. Hirsch Wieintraub, *Shirei Beit Adonai oder Tempelgesänge*, Königsberg, 1859.
6. Samuel Naumbourg, "Etude historique sur la musique des Hébreux," *Agudat Shirim, Recueil de chants religieux et populaires des Israélites* Paris: 1874.
7. Josef Singer, "Die Tonarten des traditionellen Synagogengesanges (Steiger), ihr Verhältniss zu der Kerchentonarten un den Tonarten der vorchristlichen Musikperiode" Vienna, 1886. This was a refinement of a theory that Singer first proposed as part of a series of articles in 1880 while he was still a cantor in Nurnberg (See Wohlberg, "The History of the Musical Modes of the Ashkenazic Synagogue, and Their Usage," 47.)
8. Wohlberg, "The History of the Musical Modes," 47–52. For ease of comparison, I have transposed all scales given by Cantor Wohlberg to c.
9. Eric Werner, *A Voice Still Heard . . .* (University Park, PA: The Pennsylvania State University Press, 1976), 47.
10. Cantors Alois Kaiser and William Sparger, "Preface," *Songs of Zion: A collection of the principal melodies of the synagogue from the earliest time to the present* (1893).

motives of cantillation and the Adonai Malach mode must be questioned. In his chart he claims that the motives of the Adonai Malach *steiger* of Eastern Europe are taken from cantillation motives drawn from each of the six systems of trope (Torah, Haftarah, High Holidays, Song of Songs/ Ruth/Ecclesiastes, Esther and Lamentations) plus the special chant for *Shirat HaYam* in traditions from Eastern and Western Europe and the Middle East to the north of Africa. The *te'amim* dictate the grammar of the text; the motives of the prayer modes certainly suggest it. It does not make sense that the group of motives which make up one mode in a single tradition could be culled from so many systems of cantillation, each with its own internal logic.

25. Levine, "Toward Defining the Jewish Prayer Modes,": 14.
26. Lieb Glantz, "The Musical Basis of Nusach Ha-Tefillah," In *Procedings of the Fifty Annual Conference Convention of the Cantors Assembly May 1952;* reprint *Journal of Synagogue Music*: 34.
27. See Wohlberg, "The History of the Musical Modes," 52–55.
28. Avenary, "The Concept of Mode in European Synagogue Chant," 12.
29. Dr. Eliyahu Schleifer, Lectures, master classes, and private study (in notes of the author), Hebrew Union College–Jewish Institute of Religion, Jerusalem, 1994–95.
30. See Max Wohlberg, "The Hazzanic Recitative," *Musica Judaica* 10, no. 1 (5749/1987–88): 40–51.
31. Levine, "Toward Defining the Jewish Prayer Modes,": 23.

Chapter 2: The Magein Avot Family

1. Cohon, "The Structure of the Synagogue Prayer-Chant,": 28.
2. Cantor Noah Schall, Lectures, master classes, and private study (in notes of the author), Hebrew Union College–Jewish Institute of Religion, New York, 1995–98.

Chapter 3: The Ahavah Rabbah Family

1. The augmented second between the sixth and seventh scale degrees of the harmonic minor scale is not a melodic interval; rather it is a harmonic adjustment so that the dominant triad in the minor mode remains major. See example 5.7c.
2. Schleifer, Lectures, 1994–95, HUC–JIR, Jersualem.

Chapter 4: The Adonai Malach Family

1. Charles Davidson, *Immunim Be-Nusach Ha-Tefillah: A Study Text and Workbook for the Jewish Prayer Modes* (Elkins Park, PA: Ashbourne Music Publishers, Inc., 1996), 7.
2. *Anu Azei Fanim* is the paragraph immediately before the *Vidui* and makes the transition into it; *Tavo l'fanecha* ("*Eloheinu veilohei avoteinu, tavo l'fanecha . . . .*") is the introductory paragraph and is followed by *Ashamnu*, the alphabetical list of our sins.
3. Schall, Lectures, 1995–98, HUC–JIR, New York.

Chapter 5: Modulations, Excursions, and Identifying Phrases

1. Davidson, *Immunim Be-Nusach Ha-Tefillah*, 29.
2. Schleifer, Lectures, 1994–95, HUC–JIR, Jersualem.
3. Schall, Lectures, 1995–98, HUC–JIR, New York.
4. The term "Yishtabach maneuver" is taught by Dr. Eliyahu Schleifer to the first-year cantorial students at HUC-JIR, Jerusalem; it is attributed to faculty at the New York campus.
5. Schall, Lectures, 1995–98, HUC–JIR, New York.

List of Music Examples

The names of sources listed below have been abbreviated for convenience in this table. The full citations may be found in the "Musical Works Consulted" section of the **Sources Consulted** at the end of this document. The number following the source is the page number in the score. If no source is listed for a chanted text, the example has been created by the author from traditional practice. All other examples are by the author as well. **ArtScroll page #** refers to *Siddur Kol Yaakov*, the *siddur* for Weekdays, Shabbat and Festivals (see "Prayerbooks Consulted" in **Sources Consulted** for full details) — except where the number is followed by MS (indicates *Machzor Eretz Zvi*, the *machzor* for *Shavuot*), MP (*Machzor Bais Aharon*, the machzor for Passover), RH (*Machzor Zichron Lipa*, the *machzor* for *Rosh Hashanah*), or YK (*Machzor Chaim Yechezkel*, the *machzor* for *Yom Kippur*).

Ex. No.	Description	Source	Notes	ArtScroll page #
Chapter 2: The Magein Avot Family				
2.1a	*"Shochein ad"*			404
2.1b	*"Shochein ad"* motives			
2.2a	*"Shochein ad"* variant			404
2.2b	*"Shochein ad"* variant motives			
2.3a	*"Eilu d'varim"*	Spiro, *Weekday Service*, 5	transposed	16
2.3b	*"Eilu d'varim"* motives			
2.4a	*Morning blessings* – excerpt			20
2.4b	*Morning blessings* motives			
2.5a	*"Vaychulu hashamayim"*	Ephros, vol. 4, 166		166

Ex. No.	Description	Source	Notes	ArtScroll page #
2.5b	*"Vaychulu hashamayim"* motives			
2.6	*Morning blessings* – excerpt			16
2.7	Catalogue of motives			
2.8	Magein Avot Family scale			
Chapter 3: The Ahavah Rabbah Family				
3.1	*"Ham'chadeish b'tuvo"*	Katchko, *Thesaurus*, vol. 1, 21		412
3.2	*"V'sham'ru"* – *Shabbat* morning	Alter, *The Sabbath Service*, 34		424
3.3	*"Vahavienu l'shalom"*	Alter, *The Sabbath Service*, 27		414
3.4	*"L'dor vador"*	Alter, *The Sabbath Service*, 33		423
3.5	*"V'lo n'tato"*	Alter, *The Sabbath Service*, 34		424
3.6	Sequential phrases			
3.7a	*"R'tseih"* – *Shabbat* morning	Spiro, *Shabbat Service*, 74	transposed	426
3.7b	*"R'tseih"* motives			
3.7c	*"R'tseih"* motives			
3.8	*"T'hilot l'Eil elyon"*	Schall, *Sabbath*, 62D	transposed	418
3.9	*"N'kadeish et shimcha"*	Schall, *Sabbath*, 67,	transposed	422
3.10	*"Yismach Moshe"*	Alter, *The Sabbath Service*, 33		424
3.11	*"L'dor vador Hu kayam"*	Katchko, *Thesaurus*, vol. 1, 22		422
3.12	*Hatzi Kaddish* – weekday	Spiro, *Weekday Service*, 42		82
3.13	*"Malkeinu melech avoteinu"*	Katchko, *Thesaurus*, vol. 1, 23		418

Ex. No.	Description	Source	Notes	ArtScroll page #
3.14	*"R'tseih" – Shabbat* morning	Alter, *The Sabbath Service*, 36	426	
3.15	*"Sim shalom"*	Alter, *The Sabbath Service*, 42		428
3.16a	*"Tzur Yisraeil"*	Katchko, *Thesaurus*, vol. 1, 23		420
3.16b	*"Tzur Yisraeil"*	Bloch, *Sacred Service*, 21	transposed	420
3.16c	*"Tzur Yisraeil"*	Alter, *The Sabbath Service*, 29		420
3.17	*Birkat Cohanim*	Schall, *Sabbath*, 85	transposed	426
3.18a	*"Ham'chadeish b'tuvo"*	Katchko, *Thesaurus*, vol. 1, 21		412
3.18b	*"Ham'chadeish b'tuvo"* motives			
3.19	Pre-concluding phrase and dominant preparation compared			
3.20	*"Vahavienu l'shalom"*	Katchko, *Thesaurus*, vol. 1, 21–22	414	
3.21	*"Eloheinu . . . r'tzeih"*	Alter, *The Sabbath Service*, 35		424
3.22	*"Az b'kol"*	Spiro, *Shabbat Service*, 67		422
3.23	*"V'techezeinah eineinu"*	Katchko, *Thesaurus*, vol. 2, 59		426
3.24	Catalogue of motives			
3.25	Ahavah Rabbah Family scale			
3.26	Ahavah Rabbah tetrachords			
	Chapter 4: The Adonai Malach Family			
4.1a	*"Adonai malach"*	based on Idelsohn, *Thesaurus*, 9		320
4.1b	*"Adonai malach"* motives			
4.2a	*"Na'aritz'cha"*	Idelsohn, *Thesaurus*, 25		464

Ex. No.	Description	Source	Notes	ArtScroll page #
4.2b	*"Melech al kol ha'aretz"*	Janowski, *Kiddush L'Rosh Hashanah*		94RH
4.2c	Sequential phrase			
4.3	*"Adonai eloheinu atah anitam"*	Spiro, *Shabbat Service*, 7	transposed	312
4.4	*"Na'aritz'cha"*	Katchko, *Thesaurus*, vol. 1, 50	transposed, ed.	464
4.5	*"Bachatzotz'rot"*			312
4.6	*"Adonai eloheinu atah anitam"*	Schall, *Sabbath*, 9	transposed	312
4.7a	*"Arba'im shanah"*	Schall, *Sabbath*, 7	transposed	308
4.7b	Secondary opening – Polish tradition			
4.8	*"L'chu n'ran'nah"*			308
4.9a	*Avot – Shabbat* morning	Katchko, *Thesaurus*, vol. 1, 24	transposed, ed.	420
4.9b	*Avot* motives			
4.9c	*Avot* motives			
4.9d	*Avot* motives			
4.9e	*Avot* motives			
4.10	*Musaf hatzi kaddish*	Schall, *Sabbath*, 115	transposed	460
4.11a	*Akdamut*	Idelsohn, *Jewish Music*, 156		266MS
4.11b	*Akdamut* motives			
4.12a	*Kiddush* – Three Festivals	*New Union Haggadah*, 99		52MS
4.12b	*Kiddush* – Three Festivals	Schall, *Three Festivals*, 11	transposed	52MS
4.13	*"Mi she'asah nisim"*	Idelsohn, *Thesaurus*, 24	transposed	452
4.14	Catalogue of motives			

Ex. No.	Description	Source	Notes	ArtScroll page #
4.15a	Adonai Malach scale			
4.15b	Adonai Malach tetrachords			
Chapter 5: Modulations, Excursions, and Identifying Phrases				
5.1	Composite scale			
5.2a	*". . . ga'al Yisraeil"*			420
5.2b	*". . . ga'al Yisraeil"*	Schall, *Sabbath*, 64		420
5.2c	*Y'hi ratzon* – excerpt	Schall, *Sabbath*, 107–108	transposed	452
5.3	*"V'taheir libeinu"*	*Songs and Hymns*, 101		424
5.4a	Composite scale			
5.4b	*"Mim'kom'cha"*	Schall, *Sabbath*, 69–70		422
5.5a	Composite scale			
5.5b	*"L'Eil shimurim"*	Katchko, *Thesaurus*, vol. 2, 108		44MP
5.6a	*"V'hasieinu"*	Baer, *Ba'al T'fillah*, 177–78		326MP
5.6b	Composite scale			
5.7a	*"Bar'chu"*	Katchko, *Thesaurus*, vol. 2, 106	transposed	42MP
5.7b	Composite scale			
5.7c	Minor scales compared			
5.7d	Composite scale			
5.8a	*"Bar'chu"*	Katchko, *Thesaurus*, vol. 2, 106	transposed	42MP
5.8b	*"Bar'chu"* melodic outline			

Ex. No.	Description	Source	Notes	ArtScroll page #
5.9a	*"R'tzei"*	Katchko, *Thesaurus*, vol. 2, 133		344MP
5.9b	Composite scale			
5.10a	*"Sham'a vatismach"*	Katchko, *Thesaurus*, vol. 2, 2–3		310
5.10b	Adonai Malach/Ukrainian-Dorian compared			
5.11a	*"Kad'sheinu b'mitzvotecha"*	Alter, *The Festival Service*, 29–30	344MP	
5.11b	Magein Avot/Ukrainian-Dorian compared			
5.12a	*"B'rachot v'hoda'ot"*	Katchko, *Thesaurus*, vol. 2, 35–36	404	
5.12b	Yishtabach maneuver scales compared			
5.13	*"Bar'cheinu avinu"*	Alter, *The Sabbath Service*, 42–43	428	
5.13b	Sim Shalom maneuver scales compared			
5.14a	*"Uma'avir yom"*	Katchko, *Thesaurus*, vol. 1, 7–8	transposed	330
5.14b	*N'ila Kaddish*	Alter, *High Holy Day*, 138		712YK
5.14c	*"Ki heim chayeinu"*	Ehpros, *Sabbath Service*, 21	transposed, ed.	330
5.14d	*"Uma'avir yom"*	Baer, *Ba'al T'fillah*, 97		330
5.15	*Shabbat Musaf Kaddish*	Spiro, *Minchah*	transposed, ed.	460
5.16a	*". . . magein Avraham"*	Katchko, *Thesaurus*, vol. 3, 39		310RH
5.16b	*"Mo'adim l'simcha"*	Alter, *The Festival Service*, 28	transposed	344MP
5.16c	*"Eil emunah"*	Katchko, *Thesaurus*, vol. 3, 42		476RH
5.17	*"Ushmor tzeiteinu"*	Spiro, *Weekday Service*, 177		264

Glossary

afternoon service — [see *mincha*]

amidah — literally, "standing." Central portion of the worship service in seven sections, each ending with a *b'rachah* (blessing): the first three are *Avot* (Patriarchs), *G'vurot* (God's might), and *G'ulah* (Redemption); the last three are *Avodah* (Worship), *Hoda'ah* (Thanksgiving), and *Shalom* (Peace). The fourth (central) blessing is specific to the service and is called *K'dushat hayom*, the Sanctification of the Day. On weekdays, this consists of 13 petitionary prayers; all other times, this *b'rachah* has a single focus.

arvit — [see *ma'ariv*]

ba'al t'fillah — literally, "master of prayer." The leader of a prayer service.

bar'chu — the call to worship; the prayer leader commands the congregation to praise God. This begins the main portion of the worship service.

bichot hashachar — morning blessings. The first part of the preliminary prayers of the morning service; originally said at home upon arising and before coming to the synagogue for *shacharit*.

b'rachah — "blessing." In synagogue liturgy, the formula begins "*Baruch atah, Adonai . . .*"/"Blessed are You, Adonai."

Call to Worship — [see *bar'chu*]

cantillation — the chanting of the books of the Hebrew Bible.

cantor — a clergyperson whose principal responsibilities are the music and liturgy of the worship service.

chol — "ordinary" The term describes the weekday (as opposed to Sabbath, Festival, or High Holiday) service, or the intermediate days of the Festivals of Succot and Passover.

daven (*davens, davening*) — to pray out loud or in an undertone.

evening service — [see *ma'ariv*]

freigish (*fraygish*)— from "phrygian," the ecclesiastical mode that has features the interval of a half step between the tonic and second scale degrees. In the synagogue modes, it is synonymous with Ahavah Rabbah.

gust — from Latin, *gustus*, "taste." Term used in France to refer to *steiger*.

hatzi kaddish (sometimes *Chatzi Kaddish*, *Half Kaddish*) — one of five forms of the *kaddish* prayer. The *hatzi kaddish* is the shortest form and functions as a liturgical divider. Musically, it often provides the *nusach* for the portion of the service which follows.

hazzan (*chazzan*) — cantor.

hymn — a metered, strophic tune.

ma'ariv — the evening worship service; from the blessing which proclaims God as "*ma'ariv aravim*"/"the One Who makes evening fall."

maqam (pl., *maqamat*) — the Arabic term for "mode." The Arabic *maqamat* system has some common features but is by no means synonymous with the Jewish modal system.

Mi Sinai (*Missinai*)— literally, "from Sinai." Tradition holds that the "ancient" most entrenched melodies of the worship service were communicated to Moses at Mt. Sinai at the same time the Torah was revealed. There is much debate over what actually constitutes a *Mi Sinai* tune; however it can be safely said that none are much more than 800 years old.

minchah — the afternoon service, corresponding to the afternoon offering in the Temple.

minhag — "custom." The term to describe the ritual practice of a community, synagogue, or household.

morning blessings — [see *birchot hashachar*]

morning service — [see *shacharit*]

musaf — the "additional" service for sabbath, high holidays and festivals, corresponding to the additional offering in the Temple on these sacred holy days.

niggun — "tune." The term is used in a special sense in the Hassidic community and is often a melody without words.

nusach (pl. *nuschaot*)— literally, "version." The term was first used to refer to the version of liturgical prayers that were used by a community (e.g., *nusach Ashkenaz* in the European community). It was later used to speak of the music of the worship service. [see *nusach hat'fillah*, below]

nusach hat'fillah — the melody of prayer. The term refers to the collection of motives (a mode) that is used to chant each portion of a worship service.

parlando — Italian, "speaking." In Jewish music, the term refers to (rapid) declamation of text on a single note (recitation tone), or within a very limited range of pitches.

Pesach (*Passover*) — one of the Three Festivals. *Pesach* celebrates the liberation of the Israelites from Egyptian bondage.

p'sukei d'zimra — verses of song. The second part of the preliminary prayers of the morning service; mostly consisting of psalms.

rubric — a major liturgical division. The two central rubrics of the Jewish worship service are "the *sh'ma* and its blessings" and "the *amidah*."

scarbove (*skarbove*)— term used in Slavic countries to refer to *steiger*.

Shabbat (*Shabbos*) — the Sabbath, the seventh day of the week; the day of rest (Genesis 2:2–3). *Shabbat* begins at sundown on Friday and continues until sundown on Saturday.

shacharit — the morning service, corresponding to the morning offering in the Temple.

Shalosh R'galim — the Three Festivals: *Pesach*, *Shavuot*, and *Sukkot*. These were the three pilgrimage festivals during which Jews were supposed to go to the Temple in Jerusalem (*r'galim* means "legs") to make offerings.

Shavuot — Feast of Weeks, Pentecost, Festival of First Fruits. One of the Three Festivals, celebrating the revelation of Torah to Moses at Mt. Sinai.

sheliach tzibbur (abbrev., ***shatz***) — messenger of the people. The one who transmits the prayers of the people to God. While often used interchangeably with *hazzan* or *ba'al t'fillah*, the term carries with it the implication of the responsibility of the prayer leader to inspire the congregation in sincere worship before God.

Simchat Torah — the "joy of the Torah." The festive celebration marking the end of the cycle of reading the Torah and the beginning of the next cycle in a never-ending stream of learning.

steiger (also, *stayger*, *shtejger*) — the German term for "mode" or "scales." The most common term for the synagogue modes.

Sukkot — Succot, Festival of Booths. One of the Three Festivals, marking the end of the harvest season. *Sukkot* ends with (or is immediately followed by) *Simchat Torah*.

Tanach — an acronym for the three parts of the Hebrew Bible: ***Torah***, ***N'vi'im*** (Prophets) and ***K'tuvim*** (Writings)

t'fillah — literally, "prayer." Also used as the name of a liturgical rubric. [see *amidah*]

te'amim — the melodic motives of biblical cantillation.

Three Festivals — [see *Shalosh R'galim*]

Torah — the Five Books of Moses: B'reishit (Genesis), *Sh'mot* (Exodus), *Vayikra* (Leviticus), *Bamidbar* (Numbers) and *D'varim* (Deuteronomy).

trope — [see *te'amim*]

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