Teaching Christian Chant in a Jewish Music Context

Reba Wissner, Montclair State University

For many undergraduate music majors, one of the most daunting courses in the music history sequence includes early music, specifically of the Medieval and Renaissance periods. Most students have little to no exposure to this music and its foreign sound is unlike anything that they have ever heard before. Not only are students unfamiliar with this repertoire, but they are also often unfamiliar with the liturgical practices of the Christian church, compounding the pedagogical challenges. As Douglass Seaton has pointed out, music history texts are, at best, only supplements for course materials and instructors should venture beyond that which is contained within their pages.1 While many may feel that the music history sequence is already bloated, there is something to be said for adding material on Jewish music to the survey. The idea of exhaustive coverage in the music history classroom is a myth; therefore, we can make room in the survey for material we value.

Christian chant is often taught as if it is a self-contained genre; most music history textbooks discuss its dependence on Jewish traditions only tangentially and relegate the Jewish roots of early Christian music to at most one paragraph. Perhaps music history teachers feel that they do not know enough about Jewish music to contextualize early Christian chant in this way, or perhaps these contexts are not covered because an example of early Jewish music is not included in the anthology of scores. In my view, however, it is important for students to understand the ways in which Jewish musical liturgy and cantillation gave rise to Christian musical liturgy and chant so that they can get a fuller picture of the missing link in the history of Western Christian music. This article describes how one might place early Christian chant into a Jewish context so that students can better understand the ways in which the latter helped give rise to the former. We can use Hebrew chant as a starting point to study music that

Special thanks go to Sara Haefeli, Dov Rosenschein, and John Spilker for giving comments on drafts of this article and to Sara Haefeli for encouraging me to write it.

came after it and to create a historico-cultural context. By giving students a sense of historical continuity for that which they study and by placing it into its proper historical context, we can help students to broaden the music that they study. While Douglass Seaton also advocates for this kind of contextualization of early Christian chant, I go beyond his recommendation by arguing for the study of Jewish music not simply as predecessor of Christian music, but also as a foundation for other music that the historical survey will cover later on, as I will discuss below.2

Christian chant’s kinship to Jewish liturgical music can hardly be ignored. As J. A. Smith explains, “Christianity grew initially from within Judaism, and given this Jewish background, it is reasonable to assume that the singing of the earliest Christians originated in Jewish singing.”3 There have been various attempts to examine the similarities between Hebrew cantillation and Christian chant dialects, such as B. Elan Dresher’s 2008 article in the *Toronto Working Papers in Linguistics.*4 His article addresses the issue of whether these two types of music should be classified as singing or speaking and discusses them from a phonological perspective.

Other articles draw parallels between cantillation and early Christian chant.5 Some older books, such as Solomon Rosowsky’s *The Cantillation of the Bible,* are only dedicated to the cantillation of the Hebrew Bible.6 The first—and up until now the only—book-length study on the connections between Christian and Jewish chant is Eric Werner’s tome, *The Sacred Bridge.*7 Although these sources discuss the links between Jewish and Christian repertories, they do not discuss these materials from a pedagogical perspective. There is a pedagogy of teaching cantillation to children, specifically for performing life cycle rituals such as bar and bat mitzvah, but no guidelines for using it to create a

---


context in the music history classroom.⁸ Most music history instructors tend to avoid talking in any detail about Jewish cantillation, especially in tandem with Christian chant dialects.

Providing students with this information is helpful for them to understand not only the development of the early Christian liturgy, but also to learn about the historic Jewish traditions that have long since been forgotten. For example, some very specific elements of the Christian liturgy emanated from Jewish practices. One of these liturgical elements was the incorporation of the jubilus, which first came from the embellishments of the Hebrew cantillations of the word “Alleluia.” Later, during the development of the Christian liturgy, this embellishment was moved to the final syllable of the Alleluia and became the jubilus.⁹ The ambitus of chant has a parallel in the specificity of range in nusach, or the musical style or tradition of a specific community. The parallelism of the psalm texts informs the structure of both Jewish and Christian psalmody.¹⁰ Drawing attention to the common elements in early Jewish and early Christian liturgical musics helps students understand that the traditions of Christian sacred music did not emerge in a cultural background, but were closely connected to other musical and liturgical practices.

Most music history teachers are trained in early Christian music traditions, including various chant dialects, but are hardly ever—if at all—exposed to historical Jewish music. But by eliminating this information from the classroom, we are not only depriving students of vital information about the history and development of Western music but we are also ignoring important musical practices. In order to set an appropriate context for the music on which a large part of the semester’s focus will lie, it is important for students to realize not only that early Christian chant was not created in a vacuum but that it derived from a very long and complex history of Jewish liturgical music. However, it is most worthy of study on its own and not only within the context of being a predecessor to more canonical repertoires. History in itself is not entirely orderly; therefore, we should not need to qualify music as being worth of study simply because of what students may or may not use in their careers. The Western musical canon as it appears in texts such as the Norton Anthology of Western Music reflects not only old world biases but also outmoded assumptions about the repertoire that students will be performing and conducting. But old ideas

---


¹⁰ Parallelism is a Hebrew poetic structure that is akin to balanced repetition in English poetry. It is used in all 150 of the psalms in which the main lines are followed by secondary lines. These secondary lines expand on an idea presented in the main lines or repeat them.
about the canon may no longer be valid.\textsuperscript{11} As we consider how and what we teach, we should remember that music and its study is constantly changing.\textsuperscript{12}

As Melanie Lowe argues, it is important to make the things that we teach in the music history survey relevant to the students who we are teaching.\textsuperscript{13} Engaging students with early liturgical music is difficult in general, and the key, as Patrick Macey, Russell Murray Jr., and Melanie Lowe have written, is finding a way to connect students’ lived experiences with this music from that past.\textsuperscript{14} This seems to be easier for Christian students, as they find some kinship with the repertoire of the early church, but less so for the Jewish students who often feel that throughout the music history survey, their musical heritage is ignored, despite its significance as the foundation for the development of music in Christendom.

This essay will present an overview of Jewish cantillation, followed by a model lesson for teaching this repertoire that is clearly focused on student learning outcomes. My goal is not merely to provide pedagogical tools for music instructors to approach this repertoire, but also to suggest ways in which we might teach materials that lie outside of the standard canon. Opening up the canon, I will argue, will help all students to feel represented and will help to create a more flexible and inclusive approach to the music history curriculum.

\textbf{Why Teach Jewish Chant?}

Mark Evan Bonds illustrates how the musical trajectory of Church music works, moving from plainchant to the motet and parody mass, and remarks on the importance of teaching students how these connections work and why they are important.\textsuperscript{15} To this, however, I would include filling in one more gap that precedes plainchant: Jewish liturgical music, specifically cantillation. By exam-

\textsuperscript{11} For example, see the roundtable panel, “The End of the Undergraduate Music History Sequence,” this Journal 5, no. 2 (2015), 49–76; http://www.ams-net.org/ojs/index.php/jmhp/issue/view/19


\textsuperscript{15} Mark Evan Bonds, “Selecting Dots, Connecting Dots: The Score Anthology as History,” this Journal 1, no. 2 (2011), 78–9.
ining what we can think of as the missing link, we can illustrate for students how this practice works and have them understand how it functions in worship in a similar way to how they learn the function of liturgical elements of the Christian Church; for example, the Mass. As Douglas Shadle notes, “Important musical and cultural elements animating early sacred music are still present in contemporary Roman Catholicism, although they are not always readily apparent.” Indeed, the same applies to Judaism, if not more so than Christianity, because Jewish worshippers still chant the Hebrew Bible to some degree in all sects of Judaism today.

Scripture was chanted to a system of melodic formulas based on phrase divisions of the text (cantillation) and are indicated by a system of notation called tropes; the act of cantillation is also sometimes referred to as troping. Cantillation is still widely used. Cantors in many traditions are now using the melodic cantillation formulae to improvise the chanting of religious texts and are even trained to do this to suit their own musical stylistic preferences. In fact, certain branches of Judaism, such as Reformed, increasingly do this in order to revive the liturgical traditions. Some congregations even use the cantillation symbols as a guide to chant the scriptures in English rather than in Hebrew. But there is a long history of debate about exactly how Jewish cantillation gave rise to the various dialects of early Christian chant.

Despite the historical importance of Jewish cantillation for the history of Christian music, instructors are often reluctant to teach this topic. Few music history teachers are familiar with Jewish cantillation, and much of this reluctance probably stems from the simple fear of being outsmarted by one’s students. As teachers of a wide breadth of material, we sometimes find ourselves learning the material for the first time prior to teaching it, and in this sense, all of us are to a certain degree “content novices.” Many instructors believe that they must teach from the position of expertise, and yet there is simply not enough time for us to become experts in every subject that we must teach in a

19. Ibid., 80.
20. Most notably, see Helmut Hucke, “Toward a Historical View of Gregorian Chant,” Journal of the American Musicological Society 33, no. 3 (1980), 437–67. To be clear, the Jewish chant practice to which I refer in this article is the Orthodox practice, which has a stronger connection to the ancient past than do other branches such as Reformed and Reconstructionist.
typical survey course. The idea that the instructor is always the expert, moreover, sets up a dynamic that potentially disempowers students from engaging in scholarly inquiry. In teaching that with which we are unfamiliar, we can model for our students how to learn while exploring something new.

Some instructors are also apprehensive to teach unfamiliar and complex material for fear of confusing the students. But, as recent research has shown, confusion can be a valuable learning tool, placing both students and instructors outside of their comfort zones. Indeed, we all have some body of knowledge, but we should not feel limited in what to teach by what we do and do not know. There is also a multitude of material that the non-specialist could use to aid in their incorporation of this topic in their survey that will appear in the footnotes of this article.

A Short History of Jewish Chant

First, a note about the history of Judaism: Rabbinic Judaism only emerges after the sixth century C.E. This means that before the emergence of Rabbinic Judaism, which has its own sets of laws and interpretation of Jewish law dictated by rabbis, what was in the Torah strictly dictated Jewish worship practices. The Christian liturgy derives from Judaic worship practices, both independently and interdependently. In fact, the practice of chanting both psalms and canticles in Christianity derived directly from the same practice in Judaic worship. In the earliest eras of the Christian Church, Judaism does not exist in the way that we think of it now.

Halachic law, or Jewish religious law, dating back to the Babylonian Talmud (ca. 500 C.E.), commands Jews not simply to read the Bible, but to chant it. This rule was upheld by the rabbis, thus creating the origins of Hebrew cantillation. Like early Christian chant, Hebrew cantillation was not originally notated. Rather, it was wholly an oral tradition. Before a system of notation

24. An example of this is Judaism by birth. Before the emergence of Rabbinic Judaism, one’s Jewishness was patrilineal. However, after Rabbinic Judaism emerged, it became matrilineal; anyone with a non-Jewish mother would not be considered Jewish and have to undergo conversion to be considered Jewish.
was established, there was a system of manual accents used called chironomy (the craft of moving the hands). Like neumatic notation, chironomy served as a mnemonic device to indicate melodic direction. But unlike neumatic notation (which did not indicate precise intervals or notes), chironomy does indicate pitch, but through the rising and falling motion of the fingers or the stretching of the palm to indicate the direction that the music would move (Figure 1). This is similar not only to neumatic notation in the Christian tradition but also that of the Guidonian Hand. Some music educators may liken it to the Kodály system.

**Figure 1**: Chironomy in Jewish Music

*Figure 1* are notated with tropes, or cantillation signs, to guide the reader to the proper musical motif. These motifs have very limited musical ranges, often no more than an octave. The tropes are called *niggun* (*neginot*, plural), from the Hebrew word for tune or melody. Hebrew cantillation symbols convey three pieces of information to the person chanting—syntax, phonetics, and music. Cantillation is considered logogenic; that is, its music is determined by the natural patterns of speech. In terms of syntax, the cantillation symbols divide Biblical verses into smaller units of meaning, accomplished by the use of various conjunctive signs (which indicate that words should be connected in a single phrase) and a hierarchy that subdivides each verse into smaller phrases that can be compared to the function of punctuation. Most of the cantillation signs provide phonetic information as well, indicating the specific syllable where the accent falls in the pronunciation of the word. For example, some accents in the text would warrant specific melismas. The cantillation signs have musical value, such that reading the Hebrew Bible with cantillation becomes a musical chant, where the music itself serves as a tool to emphasize the proper accentuation and syntax.

Within the Hebrew texts there are two similar yet unique systems of cantillation symbols, or tropes: one used for the literary portions of the Bible and one used for the Psalm manuscripts, the book of Job, and Proverbs. For the book of psalms, there are a series of ten symbols (see Figure 2), which allow the psalms to be transcribed into musical notation. For these tones, there is a one-to-one correspondence between the individual note and the symbol. There are also cantillation signs in which one symbol indicates a pattern of various notes, some of which, depending on the context, can be excised—those are the notes shown in Figure 3. There are conjunctive or disjunctive trope symbols, in which conjunctive tropes must go with the trope that follows (known sometimes as a helper trope) and disjunctive tropes must be separated from the tropes that follow.32

Additionally, there are also two different systems of chanting depending on whether the chanting is from the Torah (the Five Books of Moses or the Old Testament) or the Haftarah (readings from the Book of the Prophets). There are also different melodic formulae when chanting from the Talmud (legal commentary on the Torah) that were mainly performed through a system of memorization, though this practice has largely fallen out of fashion.33

Figure 2: Ten Tones for Hebrew Psalms

The musical value of the cantillation signs serves the same function worldwide, but the specific melodies vary between different communities. If someone

32. For more on this, see page 6 of Temple Beth Sholom Adult Torah Trope Class, http://www.hazzanmenes.com/hazzan/adulttrope/adult_trop_class_packet.pdf.
33. For more on this, see Yosef Fagin, “The Function of Talmudic Chant and Cantillation,” Journal of Jewish Music & Liturgy 30 (2009), 15–32.
first learns the symbols in one area of the world, each symbol could—and likely will—have a new meaning elsewhere (see Figure 4). On a smaller level, each individual community may also have derivations of the cantillation symbols, such that each community—even as far down as the synagogue or seminary level within the same city or town, even within the United States—may have variants. In this way, the symbols are very similar to that of non-diatamatic neumes in the Christian chant tradition. There are two components to the music in these symbols: the core, which is the accented portion, and the pick-up, which precedes the accented portion. The former is notated with beams or stems while the latter is notated only with note heads. Bar lines are only notated at the ends of words and durations of notes are fluid; the person chanting can choose the rhythmic lengths that they prefer.

Figure 4: Cantillation Variants (left) and Figure 5: Early Jewish Music Notation, ca. 1102 C.E. (right)

35. This is known as ekphonetic notation.
36. Jacobson, Chanting the Hebrew Bible, 430.
Within this tradition there are variants, usually divided into two geographical traditions: Ashkenazic and Sephardic. Current Jewish practice is often eclectic within Conservative and Reformed congregations. The Sephardic tradition is used in the Middle East, north Africa, southern Italy, France, the Balkans, Asia Minor, and Spain, while the Ashkenazic tradition is used in many other parts of the world such as the United States and Canada. However, families with heritage from one tradition or the other may continue to follow those traditions, regardless of where they live. Each of these traditions is based upon different musical scales.38

A set of symbols above and below a Hebrew text indicates how to pronounce its words. Text from the Five Books of Moses and other books of the Bible include an additional set of symbols called a trope (Yiddish) or te'amim (Hebrew); te'amim derives from the Hebrew word that means to make sense of a word, but it can also derive from the root word “ta'am,” which in Classical Hebrew can mean “taste” or “reason.”39 This latter root word indicates another function of these te’amim, which is to add inflection and create a performance according to one's taste.40 Te’amim evolved from a series of punctuation, but only later did various communities assign a melodic tradition to the tropes. There are six systems of te’amim based upon their liturgical function: Torah, Haftarah, Lamentations, Festivals, The Book of Esther, and High Holidays.41 There are 28 tropes for the Old Testament alone.


40. Jacobson, Chanting the Hebrew Bible, 12.

Before the destruction of the Temple in Jerusalem, synagogues were centers for readings and homilies rather than worship. Readings were assigned to particular days or festivals, parallel to early Christian worship, and some elements of Christian observances derive from Jewish traditions, such as the chanting of scripture and the singing of psalms (poems of praise from the Hebrew Book of Psalms). The chants can also change depending on who is chanting, the day of the week, the festival, and the time of day that the chanting occurs. Within Judaism, the Book of Psalms is divided into five parts, parallel to the five books of the Hebrew Bible. It is further subdivided into seven parts, one for each day of the week and further divided into 30 divisions for each day of the month. In the Judaic tradition, the psalms were sung in front of the Tabernacle before and during the reign of King Solomon, they were sung from the steps of the Temple and accompanied the animal sacrifices at the Second Temple of Jerusalem (destroyed by the Romans in 70 C.E.). Ritualistic sacrifice of an animal (usually a lamb) was an integral part of worship services. During the sacrifice, a choir of Levites (members of the priestly class) sang psalms and also played trumpets and cymbals. Priests and sometimes worshipers ate some of the offering, depending on the occasion.

The history of Psalm cantillation is much more complex than my brief overview can allow, especially regarding its musical representations of the diatonic and pentatonic scales through the use of a melodic deciphering system. The title of each psalm has a meaning. For example, some of the titles given to the psalms in their ascriptions suggest their use in worship. Several of the psalms have the Hebrew designation shir, which means they should be performed with the flow of speech in a straight line or in a regular strain. Some contain the designation mizmor, which is a lyric ode or song set to music; a sacred song accompanied by a musical instrument. Some bear the designation tehillah, meaning a song of praise; a song of prominent thought of the praise of God. Several have the title michtam, referring to the title of something that someone carries with them at all times; these are the psalms that have meaning pertinent to that specific day in the Hebrew calendar. One psalm features the title shigaoyon, which has three potential meanings: a prayer meant to redeem oneself, the type of a musical instrument, or a song of longing. Understanding the meaning of these psalm titles is important because they not only relay the purpose and function of the psalm but also the manner in which they should be performed musically.

Student Learning Outcomes

At its most broad, student learning outcomes are a set of skills and knowledge that students should possess at the completion of any course or program: a list that guides the trajectory of learning. It goes without saying that every college and university, department, course, and instructor has a different set of student learning outcomes. However, they do tend to share some similar goals, and my list of outcomes for this course has much in common with others. First is the ability to communicate effectively. Second, students should be able to think critically and engage with any material with which they are presented. Third, they should be able to engage with diversity along many different axes, including race, ethnicity, gender, and sexuality. Fourth, I seek to widen the breadth of the survey so that students will learn how to engage with material outside of that presented in the sequence. Finally, they should somehow be able to use the material that they study in class to engage with the world around them, in or outside of the classroom.

These student learning outcomes are often considered in tandem with choosing what to teach and what to leave out in the time allotted. I hope that by the end of the survey my students will be able to identify the various genres of music and trace their development through the major historical periods; analyze representative works and evaluate how music was shaped by broad political, cultural, and economic trends and by the values of the society that produced it; and to evaluate the impact of past musical developments on present-day musical practices. Teaching students the way that cantillation works supports my student learning outcomes in that it widens the breadth of the survey, giving students new perspectives on music that they not have considered or studied previously. It also allows students a chance to evaluate the development of later Jewish music and how it impacted present day Jewish music (something that I will discuss shortly).

I expect students to learn to analyze material and create connections between them. After I teach the lesson on cantillation, for example, I expect students to be able to see the relationship between Judaic traditions and early Christian traditions, including the music. They will also be able to use this information to analyze and evaluate the use and influence of music in secular Western music, both classical and popular, as I will discuss shortly. In this context, there is no better place for this to happen. Classrooms in general are low-risk places for experimentation; students often feel more comfortable making a mistake or false assumption in the classroom rather than out in the world.

More colleges and universities are incorporating multicultural studies into their curriculum. According to the standards of the National Association of Schools of Music (NASM), multicultural materials can be broadly interpreted
to mean anything outside of the students’ primary culture. In the section on cultural pluralism, the authors of the standards write that “Changing demographics and world conditions demand that equal emphasis be given to the value and viability of all musical cultures. To accomplish this, Western traditions must be de-emphasized. Western classical, or ‘high art,’ music must be placed on a par with the achievements of other cultures, not above them.”

“Music study invariably reflects cultural biases,” the writers of the NASM report continue, “since education in any society emphasizes the dominant culture. However, many trends in the United States and the world underscore the importance of broader knowledge of, and respect for, the musical legacy of other cultures.”

The writers of the report further note that “[m]usic study enables immediate artistic, intellectual, and emotional involvement with all cultures, places, and times. Through performance and study, it is possible, for a time, to actually be in different cultures. This involvement is richer than only learning about other cultures.”

In the music history classroom, this all means engaging with the music hands-on, something that the study of cantillation allows students to do, both transcribing and performing this music (which I describe below), as well as learning about its context and the ways that it influenced both historical and contemporary music.

NASM also spends a considerable time articulating learning outcomes, specifically those that concern the cognitive skills that students should possess; among these are the ability to work with symbols and the unfamiliar, creative and interpretive thought, and conceptualization. By engaging with Jewish music, students are able to work with symbols (something not entirely different from learning to read Medieval musical notation), interpret those symbols and the music they represent, and conceptualize how they were and continue to be used, both in and outside of Western art music.

When studying Jewish music, students are able to understand, as Ralph Locke writes in reference to the Sabbath songs of Chassidic Jews in Brooklyn: “repertories that are widely understood as being intertwined with and shaped by concrete aspects of people’s non-musical lives in different societal contexts.” By including Jewish music in the music history curriculum, we minimize the risk of students perceiving Jewish music as an “Other,” or isolated culture (some-
thing which frequently happens to Jewish music in the survey classroom by examining it tangentially, if at all) while also contributing to this multicultural curriculum. In essence, teaching students about Jewish music also introduces them to musical practices of a religious community that recently faced acts of violence in their cemeteries in various cities throughout the United States and a resurgence of racism in general. Learning this material can help students build empathy for other religious groups and ethnicities that stand outside of the mainstream in the United States.

Teaching Jewish Chant

A comparison of early Christian and Jewish chant unfolds during a single class meeting, usually lasting approximately 75 minutes. I have taught this lesson to music students over the course of four years in several conservatories, schools of music, and liberal arts colleges, both public and private, each of which enroll students of different skill levels, concentrations, and interests within the music major, and it has always worked well. My students are music majors or minors or interested non-majors with a music background, but their areas of concentration have included music performance, music education, music technology, music business, music composition, and music therapy. Depending on the composition of the class, the lesson can be slightly altered to make it relevant for each population.

Joshua R. Jacobson’s textbook on Jewish cantillation, while tailored to cantorial and Rabbinical school students, contains a section on cantillation pedagogy. I use a specific activity from his textbook that I adjust for use in this lesson. I begin the lesson with playing recordings of Jewish cantillation, Christian chant from various repertories, and Muslim prayer cantillation for the students. We then discuss issues of rhythm and whether they think the words or music came first, and then compare the qualities of the different modes and scales.

A short word about my approach to teaching music history in general is necessary, as this will help the reader understand the ways that I teach Jewish and Christian chant. I use a tiered approach that contains three parts that I call “listen,” “see,” and “act.” In the “listen” portion, I give a lecture about the topic and include discussion. In the “see” portion, I demonstrate the content of the lecture through videos, musical examples, or images such as photos, manuscripts,

or scores. The culmination of the tiered approach, the “act” portion, has the students engaged in a hands-on activity that allows them to internalize the lesson. Higher education pedagogy literature features many studies about the benefits of active learning and the music history pedagogy literature is no exception. J. Peter Burkholder notes the benefits of using what he calls peer learning in the music history classroom. He notes that peer learning allows students to engage with the components of a lesson hands-on through working in groups.52 I have adopted this model for the instruction of this historical practice.

When teaching early chant, I spend a good portion of the class explaining the way that both the Jewish musical liturgy and cantillation work; this is the “listen” portion. Students often do not anticipate is the complexity of Jewish music. The class opens with an overview of both Christianity and Judaism and a discussion of the similarities and differences between the two religions and their liturgical practices. For some students, these similarities are obvious, but for some they come as a surprise. After laying out these similarities, the students discuss some ways that one religion’s music might be able to influence another’s. They then consider, more specifically, the ways that Jewish music may have influenced Christian music. From here, they learn about chant.

I then draw parallels to the Christian liturgy before moving on to the origin of Christian music, with an explanation that much of the Mass includes rituals similar to early Judaic practice. The Last Supper that is commemorated in the Mass, for example, is a symbolic sacrifice and was the Passover meal, which was traditionally accompanied by the singing of psalms. The fact that the Mass also includes psalm singing thus forms an obvious link with Jewish practice. Indeed, the melodic formulae used for singing psalms likely derived from the practice of Judaic cantillation. In both traditions, moreover, notation developed in order to allow those singing to remember the melody.

I play examples of both Jewish and Christian chant and have the students describe how they sound and if they can find any similarities or differences (aside from language) between them; this combines both the “listen” and “see” portions of the lesson. Then students are shown examples of early Jewish music notation (Figure 5), which we eventually compare to heightened neumes. The students are then shown an example of neumatic notation, the Viderunt Omnes, from our textbook, the Grout/Burkholder/Palisca A History of Western Music (Figure 6). By using this specific example, the students can connect the dots between the material in the textbook and that which is not. In fact, the word neume can even be traced back to the Hebrew word for the signs of the tropes, neimot.53 Neimot is the verb for chanting, but its root is the Hebrew

word for “tune” or “sweetness.” I will return to this information during the part of the lesson that focuses on the development of music notation in early Christian chant.

The best way for students to internalize this information is through interactive activities: the “act” portion of the lesson. First, I provide students with chironomy diagrams, such as the one in Figure 1, and have them try to replicate them. For the benefit of the non-music education students, I demonstrate the Kodály hand signals, explain their use, and have a short discussion with the students, usually no more than five minutes, about how they are different from and similar to the chironomy hand gestures.

After the chironomy exercise, I give the students handouts of the troping symbols for the Old Testament and an example of something that would be troped (Figure 7). I tell them that the troping symbols are above the Hebrew letters and the marks below them, for the most part, represent the vowels. I present the students with a key of what the vowels look like so that they can differentiate them from the troping symbols. I then assemble them into small groups—usually no more than three to four students, depending on the class size—and they transcribe the symbols into a melody. Since pitches are absolute, the class agrees on a key for the transcription for uniformity’s sake.

Figure 7: Example of Troped Text for In-Class Transcription

Because few, if any, students read Hebrew, I tell them not to worry about the text underlay; however, I do give them a translation of what they are transcribing. This transcription activity helps the students to engage with the material and learn first-hand how the notation indicates pitch. The notation also specifies


its rhythmic connection to the text and its relationship to the musical contour of the chant. Then, once we review teach group’s solution, the students in each group sing the melody together on a neutral vowel based on the rhythms and durations of their choice. This is all part of the initial assessment process and creates a discussion of performance choice and how the translation of the text played directly or indirection into their choice. To gauge how much material the students retain, the midterm exam includes an example of troping symbols and their musical notation (for example, the image from Figure 3 or that from Figure 7). I ask the students to describe the example, identify it, and to discuss how it relates to music that comes after in a short essay.

I do not limit the cantillation lesson to only the first days of the early music history survey. Later in the semester, we use this topic as a basis for a discussion of other Jewish music traditions in both the Renaissance and Baroque periods. For example, we examine how Salomone Rossi conceives of Jewish music, especially in the context of cantillation and how he utilizes the musical formulae of hymns, cantillation, and prayers in his own compositions. We then examine his perspectives on this in the context of one of his Songs of Solomon. I return again to Jewish cantillation in the music after 1900 course for music majors and we examine its use in modern music, specifically by composers such as Steve Reich, who studied cantillation. I assign students in this course an article that breaks down cantillation, and how it influenced Reich’s compositional practice in such pieces as Tehillim (1981), Different Trains (1988), The Cave (1990–1993), and Eight Lines (1993).

This line of inquiry can open a discussion about other uses of Jewish chant. A particularly fruitful set of examples in this regard is the large number of works that use the Hebrew chant for Yom Kippur, Kol Nidre. We can conduct a study of the Kol Nidre chant melody in popular, concert, and religious music by backtracking from its use by John Zorn in his Kol Nidre string quartet (1999), The Electric Prunes on their album Release of an Oath (1968), to the settings by Bruch (1880/1) and Schoenberg (1938). More broadly, the melody in the opening of the sixth movement of Beethoven’s C-sharp String Quartet, Op. 131 (1826) is quite similar to the Kol Nidre chant, which also seems linked to a chant found in two Medieval Catholic antiphonaries. The origins of the melody seem to lie in Germany between the eleventh and fifteenth centuries. In this way, we can reverse the process of “connecting the dots” that Mark Evan Bonds

56. For more on this see Don Harrán, “Salomone Rossi, Jewish Music in Renaissance Italy,” Acta Musicologica 59, no. 1 (1987), 46–64.
57. The score for these pieces can be found here: http://imslp.org/wiki/Hashirim_asher_leSholomo_(Rossi,_Salamone).
describes.\textsuperscript{59} Other examples of Hebrew cantillation—and there are plenty!—could be treated in a similar manner.\textsuperscript{60}

Conclusion

Although not all aspects of early Christian chant emerged specifically from Jewish cantillation practices and despite the fact that we are unable definitively to connect the outgrowth of the former to the latter, the early Christian liturgy certainly derived from Jewish worship practices. It is crucial to note that there are problems in teaching Judeo-Christian musical interdependence. More than likely, the practice of chanting the Bible came from Judaism, though the musical formulae themselves did not. Given what we know about the relationship between Jewish and Christian chant traditions, it is important for students to realize that these traditions are heavily intertwined.

Through this discussion, it becomes clear that there are benefits to widening the breadth of study in the early music survey and giving students the ability to analyze later music with this new knowledge. In addition to highlighting the importance of Jewish cantillation, it is my hope that this article has given readers enough background to feel comfortable giving students an introduction to the ways in which Jewish music influenced the Christian chant repertories, as well as ideas on ways to link it to other important topics and repertoires, both in and outside of the early music history survey.

\textsuperscript{59} For more on some of these uses of the Kol Nidre melody see A. Z. Idelsohn, “The Kol Nidre Tune,” Hebrew Union College Annual 8/9 (1931–1932), 493–509.

\textsuperscript{60} Norman Lebrecht discusses some of these issues in his blog post “A Defining Anthem for Half The Jewish People,” Slipped Disc (19 September 2015), accessed 13 July 2017, http://slippedisc.com/2015/09/a-defining-anthem-for-half-the-jewish-people/.