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Alphabet Dictation: An Alternative Strategy for Ear Training

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I n many aural skills courses, students are not taught an adequate range of strategies for learning how to take dictation. In some cases (as reflected by dictation texts), students are simply provided with a methodically arranged progression of melodies and rhythms for dictation, with no instructions or advice on how to proceed. It is assumed, perhaps, that if the sequence begins at an elementary level of difficulty and progresses incrementally, then all that is needed is sufficient drill work. Among texts that do provide instructions, most advise to memorize first and then write. While this may be the ideal strategy or final goal, it is not feasible for all students. Some do not yet possess the ability to memorize internally an entire melody, and therefore are in need of an alternative approach. I would like to propose one possible alternative, which I have termed 'Alphabet Dictation' (for reasons which will be readily apparent). Alphabet dictation is a strategy for listening that involves the accumulation of discrete bits of information that can be notated during the performance of a rhythm or melody. After the performance, this information is synthesized—using one's knowledge of theory, and of the particular type of exercises being performed—to reconstruct the excerpt as a whole. In my teaching, I have found this technique valuable as both a diagnostic aid and a developmental tool.

Most aural skills texts that offer the student a strategy for dictation advocate memorization as the first step. The following are examples taken from three aural skills texts:

1. As you listen to each melody the first time, try to memorize it—in its entirety....
2. Do not write anything on the paper yet! You will learn almost nothing by trying to write too early....
5. Only after you have the entire melody memorized should you attempt to write anything on paper!

<div align="right">(Benward, Carr and Kolosick, 14)</div>

Listen to the phrase and memorize it by singing it back (silently) one or two times; only then should you actually begin notating

<div align="right">(Henry and Mobberley, 69).</div>

Listen to the melody all the way through....Do not attempt to write during the first hearing....Be sure you have memorized the melody *before* writing a single note.

<div align="right">(Ottman and Dworak, 90).</div>

Those accustomed to learning by ear (e.g., Suzuki-trained musicians) often do well with this approach; many do not. Granted, this type of internalization is an important musicianship skill that all students should strive to acquire. However, the above instructions seem to treat this skill as a prerequisite for dictation, without any suggestions for those not yet capable of memorization. Some people cannot remember anything if they wait until after a melody is played to begin writing. Furthermore, as George Miller demonstrated, our short-term memory seems to be limited to 5-9 bits of information.[1] Thus, it is not feasible to expect students to memorize instantly melodies that exceed this limit.[2] In Gary Potter's study of the

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[1]George Miller, "The Magical Number Seven Plus or Minus Two: Some Limits On Our Capacity For Processing Information," *Psychological Review* 63 (1956), 81-97.

dictation strategies of twenty-five musicians he notes that "those subjects who 'listened first to make a mental tape to play back at will' did less well than those who began writing during the first hearing" (Potter, 68).

Another pedagogical concern I have with the above approach is the emphasis placed on memorizing the excerpt in its entirety before notating anything. Of course, it is counterproductive to attempt to properly notate the melody while one is listening: standard notation is simply too slow for real time. This method produces the all-too-common result whereby one gets behind after one or two measures and gains nothing from the remainder of the performance. Complete memorization is perhaps an ideal goal but, as has been pointed out, it is not always attainable. The implicit message sent to our students is that if they do not know *everything* (and know it with certainty), then they do not know *anything*. Students who have narrowed down a note to one of two possibilities may write down nothing with the hope that the right choice will come to them, only to be still uncertain following the subsequent listening. On the other hand, by writing down their best guess, they transform the next hearing into something like an error detection exercise and are more likely to have success. Most students hear and remember a great deal of relevant information about a musical excerpt, but they are led to believe that only the final product—the pitch and duration of each note—matters. Partial knowledge is devalued, as are various forms of relative information such as contour and general motivic patterns.

The end-product of dictation is a visual representation of the music: you write down what you hear. While this is a useful musical skill by itself, it is not the sole purpose of dictation in a theory curriculum. Michael Rogers states that the purpose of dictation is "to produce a certain kind of listener who can hear sound as meaningful patterns" (Rogers, 101). As performers and teachers this is necessary for making music with others in ensembles, evaluating (and correcting) your own or other's performances, comparing different musical interpretations, as well as enjoying a

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[2]The precise amount of musical information at which the short-term memory limit is exceeded varies considerably depending on the expertise of the listener. See Karpinski (1990, 197-201) and Marple (74-93).

more complete listening experience. With the goal of aural comprehension in mind, it is shortsighted, for both student and instructor, to focus only on the end product of dictation. Students develop their ability to comprehend music aurally through the act of dictation: they learn to hear more, and hear better, by writing it down. Often, the final notated excerpt reveals where the mistakes are, but not what caused them. For the instructor, dictation should not be simply a convenient artifact for the purposes of grading, it should be a means by which students communicate their inner understanding of the music to us, a tool for assessing strengths and weaknesses that allows us to provide feedback for improvement. Imagine verbally instructing someone to write down the word 'melody,' whereupon they write down 'malady'. While it is clear that the latter is incorrect, it is not clear how the mistake was made. Did the transcriber hear the right word and spell it wrong, or the wrong word and spell it right?

ALPHABET CHANTING: PREPARATORY SKILLS

In alphabet dictation, the alphabet is used to structure the listening process and facilitate transcription. Before applying this method to actual dictation, I begin with some group preparatory exercises involving 'alphabet chanting.' First, I will clap short rhythms consisting of 5-15 notes during which time my students are instructed to follow along using letters of the alphabet to represent each note. Afterwards they are supposed to tell me on what letter we ended. For example, if the rhythm contains nine notes, they should have reached the letter 'I,' the ninth letter of the alphabet, as shown in Figure 1. The difference between using the alphabet versus simply counting numbers is that the former is monosyllabic (except for 'W'), thus allowing a one-to-one correspondence between notes and letters in real time.[3] When counting, polysyllabic numbers are often mapped onto successive notes, thus resulting in the wrong final tally.[4] Once students can consistently identify the last letter, the next step is for them to repeat the rhythm, chanting out loud with the alphabet.

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[3]If needed, a monosyllabic version of 'W' is 'dub.'

FIGURE 1: Mapping the alphabet to a nine-note rhythm.

A B C D E F G H I

The alphabet is a ready-made text that provides each note with a unique identity. For some students, having a 'text' that fits with the rhythm makes it easier to recall the excerpt. In this way the alphabet serves as a mnemonic device that can help develop memorization skills. I should point out that I also have students use rhythmic syllables (similar to those used with the Kodaly method) when sight reading and improvising rhythms. However, these syllables require a higher level of cognition than alphabet chanting and are therefore more difficult to use for imitation and dictation, especially at the beginning level. One must comprehend the relationship of a rhythm to the meter and beat, determine the proper sequence of syllables, and perform the resulting sequence accurately. On the other hand, alphabet chanting requires virtually no prior analysis, the sequence of syllables is always the same, and it is second nature to perform. Subsequent alphabet chanting exercises incorporate melodic material and conducting in addition to performing rhythms, as well as increasing the length and complexity of the excerpts to develop increased memory capacity. Once the process of linking letters of the alphabet with notes of a melody is familiar enough we can begin working on dictation.

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[4]Students often encounter a similar problem when asked to perform septuplets. They subdivide by verbally counting to the number seven, resulting in an eight syllable rhythm. I suggest substituting 'sen' for the word 'seven' (which seems more satisfactory than 'sev').

ALPHABET DICTATION

On a piece of paper, students write out the letters of the alphabet (with plenty of space) ahead of time as a framework:

A   B   C   D   E   F   G   H   I   J   K   L   M   N   O   P (etc.)

This provides a visual reference for the melody so that they can follow along (with their eye and/or finger), even on the first hearing. The letters also provide a physical location where information can be recorded for each note. A difficulty that sometimes occurs in traditional dictation is that students feel compelled to work chronologically from left to right. In his study, Potter cites the following participant's comment as being representative of many: "I don't like to write things down unless I know where they go" (Potter 1990, 60). A student may comprehend something midway through a melody but neglect to write it down because she or he has not completed all the notes up to that point, and does not know where to notate the information. Because it remains unnotated, the information is often forgotten. For this reason, Karpinski advocates the notation of rhythm first "to provide a framework in which to place the pitches." He goes on to ask: "Without any metric or rhythmic information, how much good does it do to know that 'fa' occurred somewhere in the middle of the passage?" (Karpinski, 202). With alphabet dictation, every note is already present on the page waiting to be filled in with details regardless of where in the melody it occurs. In the early stages of dictation, students often use a kind of shorthand that treats the traditional staff as a graph on which the individual sound events are plotted spatially with frequency represented on the vertical axis and time represented on the horizontal axis. In this conceptualization the staff, already laden with musical information, precedes a melody; the notes themselves (usually represented as dots) derive their meaning from their location on the graph. In alphabet dictation, it is as if each note of the melody exists *a priori* and a staff is fitted around it.

Since alphabet dictation was designed in particular for students who experience difficulty in absorbing and memorizing musical excerpts in their entirety, we begin by breaking down the process into discrete, single-task stages. When students approach each dictation hearing with specific questions to resolve they are more

likely to come up with the answers. In contrast, when they approach each hearing without any directed goals, listening for anything and everything, the results are usually less productive. Therefore, during each hearing of the excerpt, I ask them to focus on only one musical feature at a time, separating melodic and rhythmic elements from one another. Naturally, this necessitates considerably more hearings than normally provided for dictation exercises, but I have found this almost atomistic separation to be extremely beneficial, and a relatively short-lived phrase. I do not advocate this type of narrow listening as a final goal, but rather as a temporary developmental process, after which melodic and rhythmic information are combined. The following are the initial sequences I prescribe for melodic and rhythmic materials:

Melodic
1. Length: On what letter does it end?
2. Contour: Is each note above, below, or the same as the one before it?
3. Conjuct vs. Disjunct: Is each note a step (minor or major 2nd) or a leap (minor 3rd or larger) from the one before it?
4. Patterns: Do you hear any scalar segments, arpeggiation of triads, prominent scale degrees, nonconsecutive repeated notes, altered tones?
5. Specifics: Identifying specific pitches or intervals.

Rhythmic
1. Length: On what letter does it end?
2. Measures: On or between which letters does each downbeat occur?
3. Beats: On or between which letters does each interior beat occur?
4. Equal vs. Unequal Divisions: Do the notes divide each beat into equal or unequal parts?
5. Patterns: What is the general pattern (rhythmic contour) for each unequal division (e.g., longshort, or short-short-long, etc.)
6. Specifics: Identify specific durations and rhythms.

Rather than working left-to-right, completing each measure before moving on to the next, this layered approach begins with very general information about the whole melody and fills in successively finer details. Using the alphabet framework, the details are notated in a fairly simple shorthand that is translated into traditional notation at a later stage of the dictation process. While I encourage students to alter the symbols to suit their needs, I teach a uniform shorthand for the purpose of in-class dictation exercises (see Figure 2). Contour is notated by a dot above or below the space in-between consecutive letters (or within the space itself for unisons). Stepwise motion is notated by a dash (hyphen) between letters; leaps by a blank space. In places where the student cannot decide whether the interval is a space of a leap, I ask them to write a question mark. This not only prevents mistaking an unfilled space for the deliberate blank 'notated' to indicate a leap, but also highlights the specific intervals for which one should listen during the next hearing. Arpeggiation of triads is indicated by triangles; scalar passages by inclusive square brackets above the letters; non-consecutive repeated notes by connecting slurs; and non-consecutive stepwise motion by angled lines (above or below the letters depending on the direction of the interval). Chromatic tones are indicated by asterisks and additional melodic details such as intervals, scale-degrees, solfège syllables, or pitch names are added in as appropriate. The length of the excerpt is indicated by a double-bar following the letter corresponding to the last note. Barlines and beat divisions (half barlines) are placed between the appropriate letters. An equal sign or a not-equal sign indicates whether a beat is divided into equal or unequal parts. In the case of the latter, the general rhythmic contour is specified by

FIGURE 2.: Some shorthand symbols used in alphabet dictation.
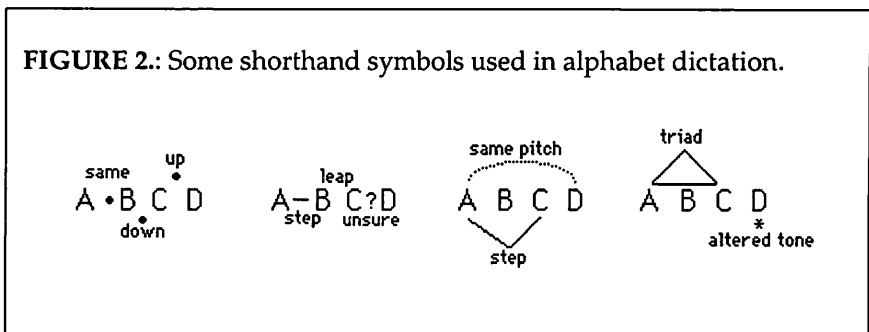
relative durations: L = long, M = medium, S = short. An important aspect of this shorthand notation is that it can be used in real time while listening to the musical excerpt (which is not possible when writing noteheads, stems, and flags). Hence, students who have difficulty remembering what they heard after the excerpt is over, can notate information while they hear it without getting behind the music. Karpinski (1990, 199) cautions against having students write while listening, saying that this will inhibit the expansion of their memory capacity. While I do not encourage 'writing-while-listening' as a final solution, I have found it beneficial when used as part of their ear training development along with tasks that develop memory. Moreover, regardless of our advice or warnings, there will always be some students who resort to 'writing-while-listening,' and it is better that they use a shorthand that is conducive to such an activity.

Separating the listening process into distinct layers such as described above also helps identify areas of weakness to which the student must attend. For example, if someone cannot easily identify the contour or direction of intervals, it is not surprising that they get the notes wrong, and it is of little value for them to continue to subsequent levels. The same applies when difficulties are encountered at any of the other levels. Students should stop and spend their practice time mastering the more basic skills before progressing further. This kind of diagnosis can be difficult to make, for both teacher and student, if based solely on the final dictation. From a graded dictation example, a student will learn which notes are wrong, but perhaps not why they are wrong nor what can be done for improvement. Using traditional dictation, even when successive listenings are notated on separate staves, it can be difficult to spot the root causes of errors, and it involves considerably more time on behalf of the instructor. Alphabet dictation can be used in the classroom to allow students to discover their own strengths and weaknesses. The instructor leads the class through sample dictations, specifying with each hearing the target musical feature for which students should listen. Before proceeding to the next level, the correct answer for the current level is provided, and students are asked to check their own work and take note if they need further practice on this skill. For the purpose of this exercise, however, they write the

correct answer on their page and continue to the next level in the same manner. Initially, alphabet dictation is more time-consuming (but perhaps more accurate) than a traditional approach, especially if one must concentrate on only one piece of information at a time. After a little practice, however, students are able to group together several features at once (melodic and rhythmic), and thus alphabet dictation can eventually employ the same number of hearings used in regular dictation.

By focusing on patterns, rather than the specific pitch and/or duration of individual notes, alphabet dictation encourages students to use their knowledge of the music and of music theory to fill in perceptual gaps and reconstruct a complete musical excerpt. In other words, even if they don't "get all the notes," students can often deduce what is missing by logically piecing together various bits of information. The first step is to combine all the information already notated in the alphabet dictation. Figure 3 shows a dictation melody in standard notation accompanied by a possible alphabet dictation.[5] For most of the melody, the alphabet dictation contains sufficient information to determine the exact pitches and rhythms. For example, since the last note 'V' is *do,* and the preceding note 'U' is a diatonic step above that, then 'U' must be *re.* Similarly, 'T' is a diatonic step above 'S,' which in turn is a diatonic step above 'U' making the entire last measure *mi-fa-re-do.* While it may seem that anyone who has perceived the aforementioned information (i.e., up/down, conjuct/disjunct, ends on *do*) would have simply heard the selection intuitively as *mi-fa-re-do,* this is not always the case. These discrete pieces of information may have been gathered during separate performances of the excerpt and not perceived as an integrated melodic unit. Using similar deductive methods it is possible to reconstruct all the notes from Figure 3, except 'C' and 'Q.' Regarding the latter, given that it is part of an arpeggiation of a triad that starts on *do* and ends on *mi,* there are only two options: *la* or *so.* If there were an additional hearing available, the student is more likely to

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[5]The alphabet dictation shown in Figure 3 is not intended to represent the final stage of a dictation process. There are still some details missing from this alphabet dictation that would make it impossible to reconstruct the complete melody.

FIGURE 3: A melody accompanied by a possible alphabet

be successful if consciously listening for which one of these two pitches occurs, rather than listening without such expectations. Even if there were no more hearings available, the odds of guessing correctly the intervening pitch are vastly improved with only two possibilities.

A further means of deducing or intelligently guessing missing information is to draw on knowledge of the style in which the excerpt was composed. While most students learn the melodic and harmonic conventions that underlie tonal melodies in theory courses, they do not often apply this information while taking dictation. For instance, by determining the implied harmonic progressions and cadences of a given melody, students can make an informed decision regarding the plausibility of a particular pitch or set of pitches. In measure one (Figure 3), one might infer the note 'C' to be *re* because it would outline a V7 chord in beat one resolving to an implied I chord in beat

two.[6] This type of theoretically-informed decision making should, of course, be encouraged in any dictation scenario, with or without the use of alphabet dictation. However, since alphabet dictation is more conducive to the notation of partial information, the results are usually more fruitful. With traditional dictation strategies, students more typically notate all-or-nothing: the first two measures may be completed notated, while the third measure is left completely blank. It is obviously rather difficult to reconstruct a measure with no clues.

Besides following general stylistic conventions, the musical materials employed in ear training texts and courses are usually introduced in graduated levels with well-defined boundaries. This provides a succession of finite musical styles within which students can develop their expertise before progressing to a larger, more complex set of possibilities. Students can take advantage of these graded levels to guide their listening and decision-making strategies. Let us suppose that the level of rhythmic complexity in Figure 3 was limited to the second division of the beat (i.e., sixteenth notes) without the use of syncopation or borrowed divisions. In that case, the information provided regarding equal and unequal divisions of the beat (along with the general rhythmic contour) would be sufficient to determine the duration of each note. Moreover, this approach encourages listening for recognizable patterns, rather than trying to measure the length of each duration as it is heard. Melodically, we may be working only with leaps from the tonic, subdominant, and dominant-seventh chords, and thus the note 'Q' could not be *la* since it would then outline a submediant chord.

In my experience, it is often difficult for students to become accustomed to thinking in this theoretically deductive manner while in the midst of taking dictation. I therefore find it helpful to practice this kind of analytical deduction apart from regular dictation. In one type of exercise I precede the playing of an example by providing a fixed set of five or six melodic and rhythmic patterns from which a melody will be derived. This is similar to using the stylistic

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[6]In addition, one might infer the missing pitch is *re* because in tonal melodies consecutive leaps within the same beat unit usually outline a single chord.

boundaries described above, but less overwhelming and less abstract. By actually being able to see all of the possible patterns written down, it is easier to compare and apply them. In another type of exercise, I provide a (mostly) complete alphabet dictation of a melody and/or rhythm from which the students must reconstruct the original melody and translate it into standard notation. This is not a listening exercise, but rather is intended to offer practice in the kind of reasoning that should take place in between or after listenings. When they have finished notating the completed melody, I play the excerpt for them to check their work. Figure 4 shows an alphabet dictation from one of these exercises that focuses on pitch alone and incorporates arpeggiations of secondary dominant seventh chords.

Alphabet dictation (and chanting) was developed to provide an alternative approach for teaching dictation. Most students will probably not rely exclusively on alphabet dictation, but will add these new skills and ways of thinking to their existing repertoire of techniques. There is no single method that will best suit the preferred learning and processing styles of all students. While we may believe that rote memorization and internal performance are ideal and essential musicianship skills, we cannot assume that all our students will be predisposed to this mode of cognition. Instead of processing a melody as a complete unit or a series of contiguous (but complete) segments, alphabet dictation promotes listening for general information and patterns across the entire melody, to which successively finer details are added. In the beginning, this layered approach allows students and teachers to diagnose specific areas of weakness that are not always discernable from the finished product of dictation. Moreover, this individual diagnosis can take place within a group classroom setting. By providing a mechanism for notating partial information (e.g., melodic and rhythmic contours and patterns), alphabet dictation also validates this as meaningful information, which in turn provides a positive reinforcement to students who might otherwise become frustrated by producing only blank measures. Finally, alphabet dictation helps promote the application of theoretical knowledge to guide and interpret the listening process.

FIGURE 4: Alphabet dictation used for reconstruction exercise. (Answer appears in footnote 7).

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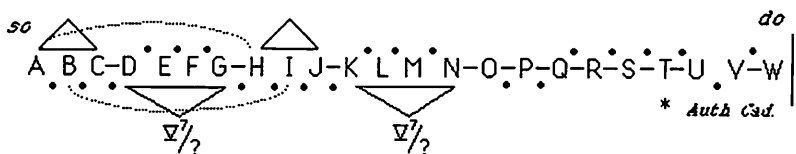
[7]The following is the solution to Figure 4:

A   B   C   D E F   G   H I   J K L   M   N O P Q R   S T U   V W
So mi do ti ri fi la so mi ti la di mi so fa mi re mi fa fi so ti do

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