

THE GUIDE-TONE METHOD: AN APPROACH TO HARMONIC DICTATION

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Harmonic dictation is a central discipline in the formal training of Western musicians—a discipline that can provide an auditory point of entry into salient aspects of concert music in the common-practice period (c. 1600-1900) and to several styles of folk music, popular music, and jazz. In various respects, harmonic dictation is an ideal skill to teach. Students and instructors alike can be highly motivated to achieve accurate results, and the results can be checked objectively. However, the potential techniques for teaching harmonic dictation are quite diverse, and vary considerably in effectiveness and efficiency.

POSSIBLE APPROACHES

At one extreme of the continuum are certain methods that might be termed *reductionist*. According to this approach, students might arrive at a conclusion about the whole (a chord or a chord progression) on the basis of its smallest, most detailed parts (the individual notes of the chord or the individual lines of the texture). Students might, for example, examine every simultaneity (every set of simultaneously sounding notes), analyze it atomistically (e.g., C3, C4, E4, and G4; cf. the second chord in Figure 1), compare these parts with the prevailing tonality (e.g., G major in Figure 1), and arrive at a functional conclusion concerning the chord in question (e.g., “IV”). Alternatively, students who adopt a reductionist approach might undertake melodic dictations of all the lines in a texture (e.g., B3, C4, A3, B3 for the tenor line of Figure 1), and on comparing the diverse lines, they might arrive at an overall conclusion concerning the chord progression (e.g., I-IV-V-I in Figure 1).

At the other extreme is a method that might be termed *holistic*. According to this approach, students might be encouraged to leap directly to a conclusion concerning a chord or chord progression merely on the basis

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of its overall sound (e.g., that the chords in Figure 1 sound like the progression I-IV-V-I without any reference to the individual notes of each chord or the individual lines).

Figure 1.



Each extreme has its pitfalls. According to a reductionist approach, more detail than necessary is sought, and an isolated mistake concerning a part might have a drastic effect on the assessment of the whole. Moreover, students who are asked to perform multiple melodic dictations might make a relatively slight slip in melodic dictation only to find they have introduced an enormous error with regard to harmonic dictation (e.g., by hearing the C4 in the second chord of Figure 1 as B3 or D4). According to the holistic approach, students might entirely miss the identity of a chord (e.g., by identifying the second chord as V rather than IV), for a “hit” might be very narrowly defined in comparison with the relatively wide definition given to a “miss.”

Clearly, a middleground between these two extremes would be desirable—a middleground in which slight mistakes are not unduly amplified and in which degrees of accuracy are acknowledged. Such a middleground is provided, we feel, by the so-called *guide-tone method* for harmonic dictation. Accordingly, the remainder of this study is largely devoted to outlining this method and to pointing out its strengths.

THE GUIDE-TONE METHOD

What follows is based on the authors’ experience in applying and refining the guide-tone method over a twenty-year period. The method seems to have circulated among various universities in North America for several decades. (The authors themselves learned the method in the 1960s through Canadian composer John Weinzweig who picked it up while he was a student at the Eastman School of Music, 1937-38). Because the method appears to have travelled largely by word of mouth, it is difficult to

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determine very precisely its origin and lines of distribution. We are aware the guide-tone method has been employed at Eastman, the University of Toronto, York University, and the University of Oklahoma, and it would be interesting to find out more about the manner and extent of its spread. But more importantly, since the method seems to have been disseminated informally and appears to have been successful wherever it has been used, we feel a published account would be valuable now.

Since there might be local variants of the method, we should emphasize the account that follows represents merely the version we have been using at York University, and we would accordingly welcome any comparative notes that others might send our way. In the meantime, we hope our account will make clear its advantages with respect to various approaches to learning. In particular, we are concerned to point out the guide-tone method is consistent with: a) the orthodox pedagogical progressions from known to unknown, from simple to complex, from the concrete to the abstract, as well as the notion of a learning spiral; b) the behaviorist view of learning as a process of operant conditioning subject to differential reinforcement; and c) the general conviction that different skills in a multifaceted subject matter (e.g., tonal music theory) are best learned according to an integrated rather than a piecemeal approach.

THE FIRST GUIDE TONES

On their first encounter with the guide-tone method, students are not even asked to identify chords as such. Instead, they are merely asked to identify whether the first degree of the scale (tonic or *do*) or the seventh degree (the leading tone or *ti*) is present in the texture. One should note that chords not including *do* or *ti* (e.g., ii or the Neapolitan triad) should be excluded at this point (see, however, below).

Harmonic progressions can be presented at the outset in block chords. In such a format, the simple texture of rhythmic unison leaves no doubt where one chord ends and another begins (cf. Figure 1), so, as far as the students are concerned, there is no ambiguity about the temporal boundaries of a given chord. At first, the students are asked to sing, as a class, *do* or *ti* for each chord. Later they are asked to sing *do* or *ti* as individuals. And ultimately, they are asked to determine, without recourse to overt singing (silently or sub-vocally), whether *do* or *ti* is present and to record the results in writing. In the later stage, it is generally valuable to let the students know ahead of time how many chords are in a given progression so they can check the number of syllables.

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ADVANTAGES OF THE FIRST STEP

There are several advantages implicit in the first step of the method. Most significantly, students are not required to make registral distinctions; recognition of the mere presence or absence of *do* or *ti* at any location in the texture is sufficient. Furthermore, from their first involvement in the guide-tone method, students are concretely and actively engaged in strong, overt behavior, namely singing, before they are asked to undertake the weaker, private activity of sub-vocalization or hearing with the inner (musical) ear. Since their responses, at the beginning, involve singing as a class, the students' consensus can be self-correcting. Often, the teacher need not indicate whether an answer is right or wrong, for the correct answer is evident from the response of the overwhelming majority. Indeed, in a typical guide-tone session, much of the communication is truly musical rather than verbal or notational.

In the earliest stages, students are encouraged to be open and extroverted in their responses to chords rather than private, reticent, and introverted. In this way, harmonic dictation can be established as a truly participatory classroom activity—an activity in which students learn to a certain extent from each other, rather than a largely private activity that merely happens in the context of a group.

The initial distinction (between *do* and *ti*) is binary, as are many of the distinctions in the method. This inherent binarism simplifies the application of the technique, for at any given point there are only two types of answers: right or wrong. All the same, the method acknowledges at later stages *degrees* of right and wrong depending on the hierarchical level of the distinction. In other words, certain answers are more correct to the extent that more of the binary distinctions involved in the answer are correct. As will become evident below, the format of a largely binary hierarchy is potentially encouraging to the students, and helps both the student and teacher to isolate the part(s) of the hierarchy where perception has gone astray.

From the outset, students are introduced to one of the central skills in harmonic dictation: hanging on to *do*. This ability becomes increasingly difficult to sustain as distractions of chromaticism and modulation are introduced (in the more complex harmonic situations that arise in relatively advanced stages of the method). But from the first, students have been gaining skill in this area of musical perception. In addition, the students are introduced, at the very earliest stage, to a central distinction in the major-minor system: the distinction between *do* and *ti*; this distinction underlies the entire traditional study of harmony from the first chord progressions

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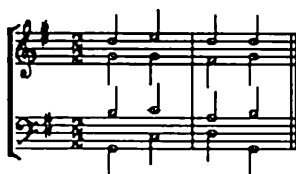
and cadences to the most advanced topics concerning modulation, elided resolution, and chromaticism. In this way, students are exposed in a concrete manner to the notion that the leading tone is a *leading* tone, for in their initial singing of *do* and *ti*, the leading tone always leads to tonic. Furthermore, a mistake is immediately evident, for not only is the singing of a wrong response (e.g., *do* instead of *ti*) not reinforced by a note or notes sounded on the keyboard instrument, but also the note sung, if it is wrong, conflicts strongly with the note being played because a semitone dissonance is formed.

In light of the wide variety of diatonic and chromatic chords that include either *do* or *ti*, students can gain an appreciation of the vast resources of harmonic coloration that await a later and more detailed study. In this way, their appetite for harmonic complexity might be whetted and their confidence in being able to handle complex situations established firmly. Moreover, if all else fails at later stages of the method's application, one can often return to the initial distinction between *do* and *ti*.

As soon as students have achieved a fairly good response rate for identifying *do* or *ti*—normally this takes only a few minutes of class time—one can make the stimulus more complex. For example, one can introduce open voicings so students will be involved in aural analysis of the chorale style they undertake in their formal part-writing exercises (see Figure 2). One can also introduce simple homophonic pieces in which the melody is played by the right hand and the accompaniment appears in simple block or broken chords in the left hand, or textures in which the left hand plays the bass of a homophonic setting and the right hand presents the melody and two middle voices, or textures in which the left hand plays a figure that has a given rhythmic and melodic profile for each chord. Such arrangements might be made of the folk songs and classical themes found in such anthologies as Tom Mainous's edition of *Melodies to Harmonize With*.¹

Employing arrangements in various strict and free styles can integrate the students' studies of harmonic dictation with their studies of keyboard harmony and writing. Other possibilities include realizations of figured basses in standard texts,² and unless the harmonic rhythm is too fast to be grasped in real time (i.e., as the music is being played), one can also introduce simple homophonic excerpts from the standard repertoire.

Figure 2.



The main restriction in the first stages of the guide-tone method is that the pieces to be described by the students should contain only chords that include *do* or *ti*, but not both (e.g., a major tonic seventh chord). This is not a great restriction, however, and students can quickly learn to recognize with a high degree of reliability the presence of *do* or *ti* in pieces that have considerable harmonic complexity. Moreover, at this point students can learn to recognize the presence of *do* or *ti* in recorded examples of such pieces by singing along to passages on tape; in this way, if the harmonic rhythm is not too fast to allow an immediate vocal or written response, students can be encouraged to have an overt, active, and real-time involvement in the harmonic structure of many styles and listening contexts. By being given some rudimentary tools for dealing with so many styles and situations, students can gain an immediate sense of confidence in their abilities to undertake harmonic dictation, and this sense of confidence can be an important foundation for a more elaborate and detailed superstructure.

THE FIRST CHORDAL PATTERNS

As soon as students distinguish between *do* or *ti* with a fair degree of reliability, they can proceed to chordal identification *per se*. At this point, it seems wise to restrict the harmonic vocabulary. In fact, at the outset, the tonic, dominant, and subdominant chords will suffice.

For the tonic chord, students are asked to listen for the other notes (beyond *do*). Invariably, if they have had some experience in using movable *do*, they respond spontaneously by singing *do*, *mi*, and *sol* in major and *do*, *me* (*ma*), and *sol* in minor. The teacher can point out that for their present purposes it is desirable to begin and end one's vocal pattern with the guide tone in question; thus, for a tonic triad in major, they are asked to sing "do-mi-sol-mi-do," thereby beginning and ending their vocal pattern with the

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guide tone, which in this case is *do*. Students can then be taught to sing “ti-re-ti-sol-ti” for the dominant triad. When these sol-fa patterns are mastered, the students can learn to respond to extended chord progressions involving only the tonic and dominant chords in various harmonic rhythms (e.g., I-V-I-V-I-V-I; and I-V-V-I-I-V-V-I). If necessary, the students can respond to a chord progression the first time through using only the guide tones *do* and *ti*, the second time through using the more extended sol-fa patterns (do-mi-sol-mi-do; and ti-re-ti-sol-ti), and thereupon identify each chord as I or V. In this way, the teacher can isolate where the problems are (i.e., in the guide tones, in the patterns, or in the chord names).

As soon as fluency is achieved, students can leave out a step or two, and proceed eventually to a direct, unmediated identification of the chord in question. An immediate, spontaneous response is desired, and with a restricted vocabulary (at this point consisting of only two chords), a quick and accurate response is possible. In essence, the students are only making a binary distinction (is the chord I or V?), and they quickly become so fast and accurate in recognizing the tonic chord that a number of intermediate steps (or crutches) can soon be removed entirely.

Thereupon, students can be introduced to the sol-fa pattern “do-la-fa-la-do” for the subdominant in major and “do-le-fa-le-do” in minor. As before, the guide tone, in this case *do*, is the first and last note of the pattern. And with this third chord, students have concrete examples of all the triadic patterns they will ever use in the method. In each case, the notes they sing form a broken triad in root position—a stack of thirds, as it were. Students try to determine whether a given member is present or not by singing in thirds—first upward, if possible, and then downward, if necessary, and returning at the end of the pattern to the initial guide tone (see Figure 3a). Because the pattern is arranged as a stack of thirds, students can readily identify the root, in each case, as the bottom note of the stack and proceed directly to identifying the chord as I, IV, or V.

Figure 3.

1)	2)	3)
		
a) doh-mi-sol-mi-doh b) 1 - 3 - 5 - 3 - 1	ti-re-ti-sol-ti 3-5-3-1-3	doh-la-fa-la-doh 5 - 3 - 1 - 3 - 5

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Within the guide-tone method, the only patterns possible for triads are: 1) up-up-down-down (as in do-mi-sol-mi-do for the tonic triad in major); 2) up-down-down-up (as in ti-re-ti-sol-ti for the dominant triad in major and harmonic minor); and 3) down-down-up-up (as in do-la-fa-la-do for the subdominant triad in major). These patterns are outlined in Figure 3a. Moreover, particularly where students have perfect or absolute pitch (or are employing a fixed-do system in their other studies), it is often desirable at this point to restrict them to examples in C major. If students wish to use other keys, they can avoid potential confusion by singing the pitch-class content (or what might better be termed the "chord-member content") of chords that have the up-up-down-down pattern by using the following numbers: "1-3-5-3-1" to indicate the root, third, and fifth of the chord in question; similarly, students can be taught to sing "3-5-3-1-3" for the up-down-down-up pattern and "5-3-1-3-5" for the down-down-up-up pattern (cf. Figure 3b).

ADVANTAGES OF THE SECOND STEP

Advantages implicit in the second step of the guide-tone method (i.e., where chords are identified) are quite similar to those in the first step. Again, one can employ a wide variety of simple progressions and pieces, though there is a considerable, but temporary, step backwards with regard to the complexity of the harmonies that can be handled when one proceeds from merely identifying the guide tone to identifying chords as such. Students soon learn to telescope the many sub-steps. Gradually they need not identify the guide tone separately from the sol-fa pattern; also, the sol-fa pattern can soon be ignored in favor of the numerical pattern; and eventually, students can proceed directly to chordal identification of Roman numerals without any preliminary steps at all.

Once again, the essential distinctions are binary. At this point, a given chord is either a do-chord (I or IV in major; or i or iv in minor) on the one hand, or a ti-chord (i.e., V, in major or minor). And if it is a do-chord, it is either the tonic chord (I or i) or the non-tonic chord (IV or iv). In addition to the simplicity of this format, note that the singing of the sol-fa and numerical patterns is relatively easy in that the range (from low fa to high sol) is only a ninth, well within the tessituras of a classroom filled with music students exposed to singing. Because of the ease and simplicity of this second step, it generally takes only a few minutes to half an hour for students to master.

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MORE ADVANCED STAGES

In more advanced stages students can be introduced to secondary triads, particularly vi, iii, and ii in major, and VI in minor. The submediant triad in major is sung to the pattern do-mi-do-la-do (or 3-5-3-1-3 from a guide tone of *do*) and in minor, do-me-do-le-do. The mediant chord in major can be efficiently introduced by way of ti-sol-mi-sol-ti (or 5-3-1-3-5).

Generally, it seems best to introduce the ii chord by surprise. One can play a long progression asking students to identify whether *do* or *ti* is present, and then suddenly introduce a ii chord (where neither *do* or *ti* is present). After a moment of consternation, students seem spontaneously to identify *re* as the guide tone, and without any help or prompting, they produce re-fa-la-fa-re (or 1-3-5-3-1), because they have already assimilated the model implicit in previous patterns. By now, students seem to comprehend clearly the all-pervasively binary nature of the system, for as it turns out, within the set of diatonic common chords all non-do chords are either ti-chords or re-chords. An added bonus is that ii is the only re-chord at this point; accordingly, any non-do chord that does not contain *ti* has to be a re-chord in general, and at this point in particular, it has to be a ii chord. Accordingly, students learn to recognize ii very quickly and accurately, and the otherwise difficult problem of distinguishing ii from IV is largely averted.

From a solid foundation where common chords in major and minor are recognized quickly and accurately, one can proceed by various paths through traditional diatonic and chromatic harmony. We emphasize that several paths are possible depending in large measure on the teacher's preferred ordering. Indeed, it seems pedagogically desirable to move fairly freely from a sub-topic in one large area to a sub-topic in another, for such an approach produces a learning spiral (old topics are continually reviewed and amplified in new, more advanced contexts).

One should also note that throughout the study of harmony, the guide-tone method can provide a springboard for discussing topics in theory, writing, and analysis. Indeed, it seems pedagogically worthwhile in many instances to present a new topic in aural form initially, thereby allowing students time to puzzle out their auditory responses to a new harmonic resource before the teacher undertakes a more formal discussion of the problems in theory, writing, and analysis that emerge with the introduction of the added feature. In this way, one can proceed in the time-honored progression from the concrete to the abstract.

The leading-tone triad in major and minor (vii^0) can be introduced quite efficiently once the ii chord has been mastered. Generally, if this is

done, students do not confuse vii^0 with ii , even though *re* is present in both. If they do, one need only point out that one searches for *do*, *ti*, and *re* as guide tone *in that order*. This directive may have later ramifications for constructing chord progressions in general, but all that is necessary at this point is that if a chord does not include *do*, one searches first for *ti*, and only if *ti* cannot be found, does one search for *re*.

Various chromaticisms can be dealt with early on. The melodic minor scale provides a point of departure in the traditional pedagogical progression from known to unknown. The minor dominant triad in major (v) provides the occasion for a new guide tone, which students seem to identify—appropriately, and with little prodding—as *te* (or *ta*). One can deal very early with the flattened supertonic triad (bII : *ra-fa-le-fa-ra*, the Neapolitan), which introduces another guide tone (*ra*), and the V-of-V-of-V in major (*di-mi-di-la-di*, or 3-5-3-1-3), which introduces the very last guide tone students will normally need.

In a further extension of the guide-tone method, one can introduce seventh chords, inversions, and non-chord tones through listening. Seventh chords involve four-note arpeggiations like the three-note arpeggiations for triads, and depending on the voicing of the chord, students might be encouraged to determine whether certain notes of a chord (e.g., the fifth of a dominant seventh) are present in a given context. Recognition of inversions depends on which note of an already identified chord is in the bass, and seems to come easily if students have already been exposed to dictation of species counterpoint. Further, students who have already studied counterpoint seem to recognize the functions of non-chord tones when simple, unadorned examples are presented first and then elaborated. In addition, such an approach opens up the possibility of dealing fairly early in dictation with pieces such as Bach's chorales. And such an approach to dictation lays the groundwork for so-called "layer dictation" and the introduction of Schenkerian principles, which might have been anticipated by one's treatment of inversions and non-chord tones.³

Although the guide-tone method might seem relentlessly vertical and biased towards an archaic, Roman-numeral approach rather than a more modern, linear approach, we see no particular danger in using the method and no necessary conflict with a Schenkerian outlook. Indeed, Heinrich Schenker himself presupposed a knowledge of his relatively old-fashioned *Harmony* as a prerequisite to his more advanced *Free Composition*, and such followers of Schenker as Felix Salzer, Carl Schachter, Edward Aldwell, Allen Forte, and Steven Gilbert have either presupposed or explicitly

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advocated a thorough study of harmony before one undertakes a more advanced, Schenkerian approach.⁴ Moreover, the structure of the *Ursatz* is unabashedly harmonic at certain points, and it is important to recognize Roman-numeral chord functions from time to time in applying Schenker's methods.⁵ By and large, as inversions, non-chord tones, modulation, and certain chromatic resources are introduced, it seems wise to introduce Schenkerian notions, but this does necessarily mean that a vertical approach needs to be abandoned as soon as horizontal topics are broached. Instead, the two approaches can be employed in tandem and can coexist in a dialectical interplay. Indeed, insofar as we want our students to receive a higher education in music, we would argue that such an end is better achieved, not by dogmatically insisting on a single approach, but rather by allowing them to deal with situations in which two interpretations, or two styles of interpretation, can be applied to the same subject matter.

NOTES

¹Englewood Cliffs, N. J.: Prentice-Hall, 1978, esp. Chapters One and Two on tonic, dominant and subdominant triads.

²e.g., R. O. Morris, *Figured Harmony at the Keyboard* (Oxford: Oxford University Press, 1933, renewed in U.S.A., 1960).

³See Gerald Warfield and Richard Brooks, *Layer Dictation: A New Approach to the Bach Chorales* (New York: Longman, 1978).

⁴See Heinrich Schenker, *Harmony*, ed. by Oswald Jones and trans. by Elizabeth Mann Borgese (Chicago: University of Chicago Press, 1954), and the same author's *Free Composition* (*Der freie Satz*), ed. and trans. by Ernst Oster (New York: Longman and the American Musicological Society, 1979); see as well, Felix Salzer, *Structural Hearing: Tonal Coherence in Music*, 2 vols. (New York: Charles Boni, 1952); Edward Aldwell and Carl Schachter, *Harmony and Voice Leading*, 2 vols. (San Diego: Harcourt Brace Jovanovich, 1978); Allen Forte, *op. cit.*; and Allen Forte and Steven E. Gilbert, *Introduction to Schenkerian Analysis* (New York: W. W. Norton, 1982), esp. pp. 1 and 7.

⁵See, for example, Schenker's *Free Composition*, and Forte and Gilbert's *Introduction*, *passim*.