

Foundations of Aural Skills

By Timothy Chenette, with contributions by Daniel Stevens
Licensed under a Creative Commons Attribution-ShareAlike 4.0 International License, 2022
Online, PDF, and EPUB versions available: <https://uen.pressbooks.pub/auralskills/>

Reviewed by JENNIFER SHAFER ENGLAND



Vision and overview

The values and goals of Timothy Chenette’s *Foundations of Aural Skills* (hereafter, *Foundations*) represent a marked departure from much traditional aural training.¹ As such, this text consolidates a wide range of aural skills research spanning the last several decades, and presents a welcome source of inspiration for instructors who desire to make their aural training more inclusive, accessible, diverse, and relevant.² The text is an Open Educational Resource (OER), freely available at <https://uen.pressbooks.pub/auralskills/>.

The introductory “What Are Aural Skills?” page provides a short but crucial philosophical underpinning for *Foundations*. As many familiar with Chenette’s other work will already be aware, the question of what (and how) we should teach in aural courses is a question to which he has devoted much thought and research.³

Here, he defines aural skills as “the core skills used by all people involved in music,” and places these skills into two categories:

- Developing “internalized knowledge and physical structures”
- Developing “habits, and especially habits of attention”

The use of the word “developing” here is perhaps as indicative of the text as the categories themselves: Emphasis is consistently placed on process and internal knowledge structures, and self-reflection/self-awareness of these processes and structures. Answering the query “Why This Book?” the authors discuss the core values of *Foundations*: empowerment, creativity, developmental inclusivity, musical

1 Timothy Chenette is the primary author of the text. Daniel Stevens is listed as a collaborator and has several pages specifically attributed to him in the text, and “we” is typically used as the authorial point of view.

2 Sources/inspirations for the book are cited here: <https://uen.pressbooks.pub/auralskills/back-matter/aural-skills-pedagogy-research/>

3 Most recently Chenette (2021).

inclusivity, and holistic assessment. The “Note to Instructors” explains some of the practical aspects of these goals, contrasting them with traditional approaches where appropriate. These goals include components such as:

- accessibility (highlighting elements such as staff notation, brain-voice connection, and others)
- aural fundamentals (skills we often assume students already have or that they will naturally build)
- connections outside of the classroom
- use of instruments
- valuing learning over (perhaps easier) “objective” judgment

Chapters 1–7 explore “aural fundamentals.” These chapters feature minimal use of notation, attempt to avoid assumptions about what students know, and carefully prepare them for the more practical applications presented in Chapters 8–15. These latter chapters include skills such as improvisation, transcription, sight reading, and ensemble work. The chapters do not need to be used in order, and internal links to earlier chapters are provided where concepts build on previous content. Various suggestions are given for implementation, ranging from full adoption to inspiration for new warm-ups, or activities within a pre-existing curriculum.

Foundations is (currently) limited to introductory-level material, appropriate to most typical first-semester aural courses at the university level, though the authors have plans for expansion.⁴

The book is most easily accessible online, though it can be downloaded in EPUB or PDF formats. These formats do not interact as easily with the various embedded playlists and other links, so the online version is the most comprehensive and is the version examined for this review. Additionally, noting that this text is an online text and therefore can be updated more readily than a traditional text, this review refers to the version available in June 2023.

Chapter design

All chapters begin with an overview of the skill(s) addressed in that chapter, with a focus on “real life” applications. The tone is conversational, speaking directly to the

⁴ There are several more advanced topics present, including introductions to concepts such as hypermeter and modulation. Given the structure of the book, an instructor could easily omit these topics, use them as time allows, or use them as extra materials for students who are curious to explore further.

student. A series of Learning Objectives are listed for each chapter, which are then closely correlated to the various activities throughout the chapter. Learning Objectives for Chapter 2 (on meter) are duplicated below.

Students will be able to:

- Identify whether there is a recurring temporal pattern in a piece of music
- Entrain to a beat in sounding music (equal or unequal)
- Identify a beat cycle (measure) in sounding music, including identifying where that cycle begins
- Entrain to a simple or compound division of a beat
- Given a tempo, conduct a beat pattern
- Internally generate a metrical framework (beat, division, cycle)
- Map felt patterns to appropriate meter signs
- Use conventional stylistic markers to identify conventional meters (popular music backbeat, waltz, etc.)
- Entrain to a hypermetric pattern using simple gestures

Embedded (and extensive!) Spotify playlists and other examples are featured throughout each chapter. Within the chapter, each page typically focuses on a single topic or skill (e.g., “Finding the Beat” or “Measures” as page titles). Most pages also feature one or more activity boxes with an associated learning goal. These activities have a wide range of designs; some examples and discussion will be provided after a content summary.

Content summary:

Aural fundamentals (Chapters 1–7)

Within the fundamentals chapters, Chapters 1 and 4 are the most non-traditional topics. Chapters 3, 5, and 6 lay the groundwork for elements of sight reading and transcription/dictation skills, and Chapters 2 and 7 focus on rhythm and meter.

In Chapter 1 (“Attention”), students practice attentional control when listening, including shifting focus to different parts of complex textures, and with special attention given to bass lines. Chapter 4 (“Music’s Materiality: Timbre, Envelope, Dynamics, Register, and Texture”) is fast-paced, devoting one page to each of the five titular subtopics. Discussion of these topics (particularly timbre and envelope) deliberately avoids technical language and visualizations and instead encourages use of metaphorical or descriptive language.

Chapter 3 (“Tonic/Collection and Solfège”) addresses internal key maps, including discussion of pitch collections and hearing tonic, and introducing solfège as a related tool. Chapter 5 (“Musical Memory”) uses cognitive and memory science research to explain both the how and the why of musical memory development. Discussions of chunking are connected to Chapters 3 and 6. Chapter 6 (“Internal Hearing and Intonation”) continues developing internal imagery, now focusing on “internal auditory imagery.” Specific skills include pitch matching, tuning of specific intervals, subvocalization, and developing “instrument-based kinesthetic imagery.”⁵

Chapters 2 and 7 focus on rhythm and meter. Chapter 2 (“Moving to Music [Meter]”) scaffolds an introduction to meter, beginning with moving to music and working up to aurally identifying meter. A few more advanced concepts (anacruses, swing, time signatures, basic hypermeter) are included. Chapter 7 (“Rhythm Skills”) is more notation-heavy and focuses on rhythmic cells, reinforcing chunking from previous chapters.

Content summary: Applications (Chapters 8–15)

The second half of the book centers on application, with spiral learning to earlier chapters built in. Though the earlier introductions focus somewhat more on mindset and concepts, the later chapters contextualize reasons for the practical usage—or developmental value—of the specific skill or topic. For instance, the introduction to Chapter 8 (“Improvisation”) acknowledges that “not all musicians will improvise in public performances,” but that, at the same time, creativity is a “fundamental right and a responsibility,” that improvisation is “one of the best ways to enrich your knowledge structures and then demonstrate mastery of them,” *and* that it is fun. Similar carefully nuanced motivations (or critiques—see Chapter 13, “Dictation”) precede each chapter.

Chapters 8, 11, and 12 focus on more performance-oriented topics, and consistently encourage a mind-ear-body connection. Chapter 8 (“Improvisation”) carefully scaffolds entry into improvisation by encouraging students to jump in and try things (without necessarily worrying about it sounding “good”), and then gradually increases the level of structure and planning that a student could utilize, concluding with a series of more structured activities. The introduction to Chapter 11 (“Sight Reading Skills”) addresses both internal hearing and practical applications

5 Students whose primary instrument is voice are encouraged in this chapter (and in some others) to use a secondary instrument to help build kinesthetic imagery.

as reasons to learn sight reading, and emphasizes that sight reading is a skill that can be learned and developed. This chapter particularly foregrounds the mind-ear-body connection and discusses strategies for both sight singing and instrumental sight reading. Chapter 12 (“Ensemble Skills”) is a fairly dense chapter, including topics such as ensemble leadership, group communication, ensemble tuning, and error detection and correction.

Chapters 9 (“Playback”), 10 (“Transcription”), and 13 (“Dictation”) bring together elements of pitch, rhythm, and memory. Chapter 9 focuses on applying these skills *without* use of notation, and uses external instruments to enhance kinesthetic auditory imagery. Chapter 10 (“Transcription”) essentially adds notation to playback capabilities. Consistent emphasis is placed on hearing, thinking, and analyzing *before* writing down or using an instrument to check work. Use of protonotation is strongly encouraged.⁶

Chapter 13 (“Dictation”) first defines dictation as “a more limited kind of transcription, most commonly done in a classroom, with a limited number of plays and a limited amount of time, and usually [focusing] only on rhythm, melody, or harmony.” The authors critique the traditional emphasis on dictation, examining not only the musical skills that dictation claims to teach/assess and the mental factors that can influence our students’ abilities to perform this type of assessment, but also the issues that tend to pervade grading of dictation. For students, *Foundations* presents strategies for developing dictation-specific skills, primarily focusing on “attention/focus and memory,” since other necessary skills (“analysis/understanding and notation”) were addressed previously.

Chapter 14 (“Closure, Repetition, and Contrast”) introduces form, focusing on three elements viewed as “relatively style-neutral: closure, repetition, and contrast.” Metaphorical and/or descriptive language is encouraged over style-specific language, with timelines as the primary tool for recording information. The topic of cadences is somewhat skimmed over when discussing closure, but students also only listen for “closed” cadences (ending on tonic) or “open” cadences (ending elsewhere) when discussing closure.⁷

6 Gary Karpinski’s methods of protonotation are used throughout most of *Foundations*; Jenine Brown’s notehead shorthand is introduced in Chapter 10. See Karpinski (2000) and Brown (2020).

7 The authors ultimately state that “If something feels like it has some level of conclusiveness, we’ll call it a cadence.” Though the authors do an admirable job of limiting the discussion to content appropriate for an introductory-level and aurally focused standpoint, the definition of cadence is something that would likely need to be addressed by an instructor.

Chapter 15 (“Listening for Chords”) approaches harmonic listening from the mindset of “what can we do with our listening?” and focuses on hearing in real time, primarily utilizing the Do/Ti test.⁸ Students are encouraged to use these methods as a way to creatively participate in the music, rather than focusing on atomistic identification tasks. Emphasis is placed on bass-line listening and on the frequently used chords of I, IV, and V (and their minor key counterparts).

Learning Activities

Much of the book’s power is centered in the broadly designed “Learning Activities.” However, as the authors note, the Learning Activities “have been designed primarily to support learning, not to make assessment easy.”⁹ For instance, in Chapter 6 (“Internal Hearing and Intonation”), many activities focus on different forms of audiation, often followed up by playing the melody after audiating it. These activities would not be straightforward to assess, but would certainly be beneficial to students. Improvisation, also perhaps less straightforward to assess, is normalized as a standard activity throughout *Foundations*, and especially in the fundamentals chapters. These fundamentals activities include:

- Rhythmic improvisation to convey a pre-determined meter to an external listener (Chapter 2)
- Pitched improvisation to convey tonic and mode to an external listener (Chapter 3)
- “Chunk” improvisation using predetermined melodic and/or rhythmic chunks (Chapter 5)
- Improvisation using rhythmic cells and identification of improvised cells (Chapter 7)

Less traditional topics feature some of the most interesting and musically engaging activities. In Chapter 1 (“Attention”), students identify eleven different layers or aural events that occur within the first 90 seconds of “drivers license” by Olivia Rodrigo, and then apply the same approach to their own recreational listening. In Chapter 5 (“Memory”), students build their “chunk library” for a specific genre or

8 Rahn and McKay (1988).

9 The authors also provide a thought-provoking segment on grading in general in the “Note to Instructors” page (<https://uen.pressbooks.pub/auralskills/front-matter/advice-to-instructors/>), and an additional discussion on grading of dictation (<https://uen.pressbooks.pub/auralskills/chapter/assessment-of-dictation/>).

style by listening extensively within the genre and applying various techniques to help them learn common patterns and improve predictive listening skills. And in Chapter 4 (“Music’s Materiality”), students download sound samples from an open-access sound library and sort them based on timbre.

Many more traditional activities are included as well, such as pitch matching, sight singing, determining whether a cadence is open or closed, identifying chord qualities, etc. Not all of these activities are wholly contained within the book itself, as many of the traditional activities require use of materials such as a sight-singing anthology or similar resource.¹⁰ But even in a more traditional activity, the mindset and goals often differ from the strictly performance-oriented or identification-oriented approach that is often the default in college-level aural skills curricula. Students are frequently encouraged to be self-reflective and assess how things sounded, how their ear was engaged, and how their brain-body connection was working (or not).

Discussion

Foundations is both deep and thorough, focusing on techniques and mindsets that are truly vital to practicing musicians. These approaches will not only help students develop skills that transfer outside of the aural classroom, but also encourage them to both understand and practice these transfers. Given that students often do not naturally develop such mindsets in our classrooms—and particularly if they enter our classroom without prior experience in traditional aural training—these approaches will help students to lay a solid foundation for their development of aural skills. For an instructor considering implementing some or all of this book in their classes, the following sections will offer some pragmatic considerations to keep in mind.

Repertoire & playlists

In addition to the wealth of Learning Activities made available in *Foundations*, the repertoire in the Spotify playlists is another treasure trove for aural skills pedagogues who wish to broaden the repertoire of their classrooms. The playlists feature a wide mixture of styles, artists, and genres, and spiral learning is a frequent feature. Playlists do vary in length and sometimes in breadth (the “Listening for Modulation” playlist, for instance, has a heavier percentage of “art music” than some of the other lists), but the lists as a whole nonetheless offer an incredible resource to instructors.¹¹ It

10 Wherever possible, the authors link to or recommend other OER aural skills resources.

11 There are a number of songs on various playlists labelled “explicit” by Spotify. Depending on the

is also worth noting that the songs on the playlists can vary somewhat in difficulty—particularly in some of the transcription and dictation work, some examples are much more difficult than others, both in terms of length and complexity.

Technical aspects

The book is cleanly laid out and easy to navigate. A drop-down menu at the top of each page accesses the table of contents, with the option to expand any single chapter to show individual pages. Text is cleanly centered, with ample white space surrounding it. Activities and examples are typically set off in colored boxes, making the text visually easy to read. As mentioned above, the EPUB and PDF versions do not as readily interact with the embedded audio examples, so the online version of the text is the easiest to work with.

(Potential) Drawbacks

Though the writing style is consistently friendly and approachable, I still found myself reflecting somewhat often that undergraduate students would likely need additional explanation and/or demonstration from an instructor. Though obviously not an inherent flaw, it will necessarily influence instructor preparation and (potentially) supplementary materials. For example, in “Improvising a Bass Line” (Chapter 8), knowledge of consonance/dissonance and dissonance resolution in a quasi-contrapuntal context are expected, but these concepts have not been discussed in any detail. Similarly, treatment of the supertonic chord and the “Te” guide tone in Chapter 15 are fairly surface-level. Based on my own experience using similar methods with undergraduate students, I would also expect students to need assistance with the arpeggiations and Do/Ti test extensions in the same chapter. I should note here that most of the text presents concepts intuitively and with exceptionally well-designed scaffolding, so examples such as those noted above stand out more than they might in a less well-crafted text.

These examples also intersect with another issue in *Foundations*, which is that the requisite background or simultaneous theory knowledge is at times unclear. For example, “Setting Up an Internal Map of Key” (Chapter 3) presents major and minor scales in staff notation with half and whole steps, but without much explanation. Scale degrees and solfège syllables are also used on this page, but are not discussed in detail until a few pages later. Similarly, Roman numerals appear several times throughout

sensitivities of both instructors and students, these songs could simply be omitted from use in the classroom and/or assignments.

the text but are not explained in any detail. Other instances of this type of issue appear elsewhere, but so long as the instructor knows what theory concepts their students can be expected to know, these can be easily mediated.

Neither of these issues significantly weakens the text. And, in some ways, these two potential issues leave the instructor with *more* freedom for the level of depth that they wish to embark upon in some of the more complex concepts (particularly helpful if using a limited implementation of *Foundations*), as well as providing a measure of flexibility in terms of how theory and aural classes may intersect (or not).

From a more practical standpoint: A small number of typos are spread throughout the text, though these are generally minor. For instance, the first of the key mapping patterns in “Setting Up an Internal Map of Key” shows “1–5–1” as scale degrees, but “do–ti–do” as solfège. Similarly, scale degree “3/mi” is referenced in a minor key context.¹² There are also a handful of broken links throughout the book; these are usually internal links, so it is fairly easy to find the correct page. Some playlists are also missing (or appear to be empty when clicked), though it is unclear whether this is a technical issue, or whether the playlist has just not been populated yet. There are also occasional references made to examples that are not present.¹³ Additionally, though the authors provide a link to a master set of playlists on the “Spotify Integration” page, not all playlists are available there at this time.

Finally, there are places where a notated example would be helpful, but none is provided; this is perhaps the biggest drawback of the book in its current form. For example, mixed meter, triplets, duplets, syncopation, and hemiola are all discussed without notation. Although these topics occur within the notation-minimized fundamentals section, I would suggest that each of these topics would benefit from a simple notated example, particularly with an eye towards later sections on transcription and dictation. In another case, when discussing chunking in the context of sight reading (Chapter 11), the authors discuss common melodic chunks and encourage students to practice visually chunking melodies, but no example is given. Of course, in any of these cases, an instructor could provide examples from their own anthology or other materials relevant to their students.

¹² Unfortunately, these mistakes recur later in the text when these same key-mapping patterns are duplicated.

¹³ For instance, “Improvising a Bass Line” in Chapter 8 states that two melodies are given below, one containing several different example bass lines, and the other to be used by the student. No melodies are present.

Practical notes (looking toward implementation)

A few practical notes for instructors considering implementing this text:

- A paid Spotify account will be of *significant* benefit when using this text, since virtually all heard examples are linked via Spotify.¹⁴ The authors explain that a free account will work, but will have ad interruptions.
- The solfège systems used throughout are movable-*do* and *do*-based minor, though other solfège systems are acknowledged in Chapter 3. Throughout most of the text, solfège is presented simultaneously with scale-degree numbers (i.e., “5/*sol*”, “1/*do*”, “5-1/*sol-do*”, etc.). There are places where this slash system is a little visually awkward, but the intended meanings are sufficiently clear.
- There are multiple rhythmic solmization systems presented in Chapter 7, though a preference is not expressed for a particular system. Rhythmic protonotation is strongly encouraged throughout.
- Where Roman numerals are used, they are usually paired with a “written” label (“one-chord,” “four-chord,” etc.). As with the double system for scale degrees and solfège, this can be a bit awkward to read at times.
- As far as I could glean, “answer keys” are not available for the various playlist exercises that are presented. Of course, many of the activities are sufficiently open-ended that an answer key could not be reasonably created, but others (such as meter identification, transcription, or tonic identification) will require the instructor to create their own keys or master lists, which will be a significant time investment.
- Finally, the text itself can be modified and adapted, pursuant to the limitations of the Creative Commons Attribution-ShareAlike licensing that the authors have utilized.¹⁵ All playlists also feature an invitation to submit a song for inclusion via a link to a simple Google form, leaving great potential for further development and expansion through the music theory community. Other OER options for aural skills are integrated throughout the text where appropriate, and a list is provided in the “Note to Instructors” page.

¹⁴ The primary exceptions are links to other OERs for dictation-style exercises.

¹⁵ Details on this type of licensing are available here: <https://creativecommons.org/licenses/by-sa/4.0/>

Conclusions and future developments

Foundations of Aural Skills represents an exciting and progressive resource for aural skills pedagogues, from the expansive playlists and creative and intentional Learning Activities to the careful coaching of mindsets and habits for the student—all grounded in current research and scholarship. Though its scope is limited at this time, the authors make clear that *Foundations* is only the beginning to a work that they intend to further expand and develop, and that they are eager to work with additional collaborators in order to do so. The “Note to Instructors” solicits feedback and lists several possible plans for future directions (expansion of repertoire, inclusion of more advanced content, and development of additional [and auto-graded] assessments), all of which promise additional valuable resources for instructors and students in the future.

Works Cited

- Brown, Jenine L. 2020. "‘Notehead Shorthand’: A Rhythmic Shorthand Method for Melodic Dictation Exercises." *Journal of Music Theory Pedagogy*: 34. <https://digitalcollections.lipscomb.edu/jmtp/vol34/iss1/5>.
- Chenette, Timothy. 2021. "What are the Truly Aural Skills?" *Music Theory Online* 27, no. 2. <https://doi.org/10.30535/mto.27.2.2>.
- Karpinski, Gary S. 2000. *Aural Skills Acquisition: The Development of Listening, Reading, and Performing Skills in College-Level Musicians*. Oxford: Oxford University Press.
- Rahn, Jay, and James R. McKay. 1988. "The Guide-Tone Method: An Approach to Harmonic Dictation." *Journal of Music Theory Pedagogy*: 2. <https://digitalcollections.lipscomb.edu/jmtp/vol2/iss1/4>.