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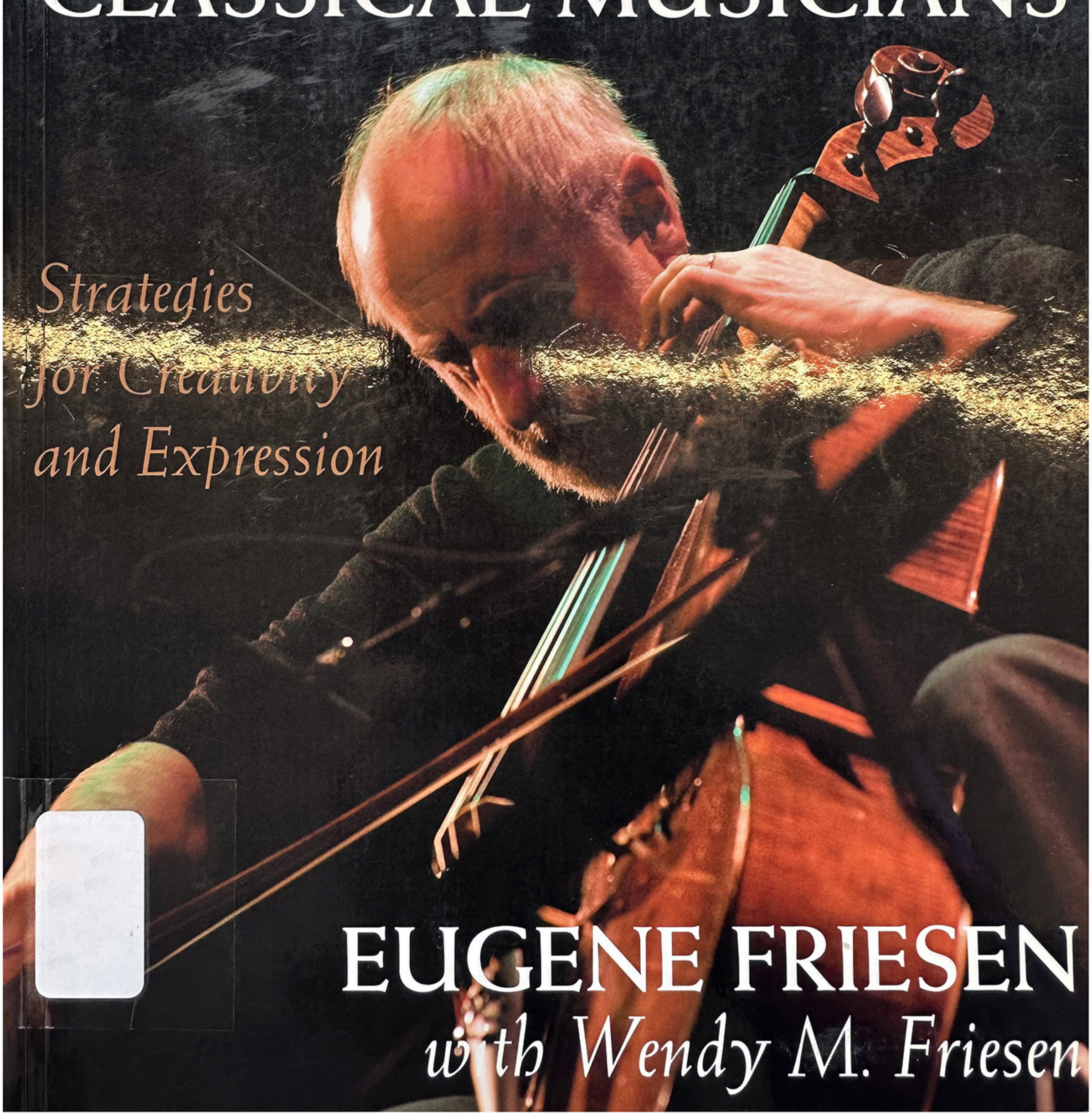
IMPROVISATION *for* CLASSICAL MUSICIANS

Strategies for Creativity and Expression



EUGENE FRIESEN

with Wendy M. Friesen

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IMPROVISATION *for* CLASSICAL MUSICIANS

Strategies for Creativity and Expression

Edited by Jonathan Feist

EUGENE FRIESEN
with Wendy M. Friesen

Berklee Press
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Managing Editor: Jonathan Feist
Editorial Assistants: David Hume, Ben Scudder, Won (Sara) Hwang
Cover Designer: Kathy Kikkert
CD Mixing/Mastering: Tom Bates

Play-along tracks feature Eugene Friesen, cello; Joel A. Martin, keyboard; and Glen Velez, frame drum

ISBN 978-0-87639-129-7

berklee press
1140 Boylston Street
Boston, MA 02215-3693 USA
(617) 747-2146

Visit Berklee Press Online at
www.berkleepress.com

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MILWAUKEE, WISCONSIN 53213

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2	Night Sounds
3	Waterphone
4	Opening Box of Chocolates
5	C Drone Improv Demo
6	C Drone
7	F Drone
8	B♭ Drone
9	E♭ Drone
10	A♭ Drone
11	D♭/C♯ Drone
12	G♭/F♯ Drone
13	B Drone
14	E Drone
15	A Drone
16	D Drone
17	G Drone
18	C Progression Improv Demo
19	C Progression
20	F Progression
21	B♭ Progression
22	E♭ Progression
23	A♭ Progression
24	D♭/C♯ Progression
25	G♭/F♯ Progression
26	B Progression
27	E Progression
28	A Progression
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ACKNOWLEDGMENTS

My career-long experience with improvisation has been influenced significantly by Paul Winter. Paul's love for symphonic instruments and the world's folk music and jazz not only brought me into contact with a huge variety of great and eclectic artists, but helped me to appreciate the unique improvisational instincts of classically trained players. Thank you, Paul, for three-plus decades of collaboration.

Other musical giants in my world deserve mention: Howard Levy, Glen Velez, Jamey Haddad, Mark Carlson, Matt Glaser, Greg Hopkins, and Tim Ray have each served as colleagues and mentors. I thank them for their brilliance and friendship. Dave and Iola Brubeck have served as life-long role models of excellence, generosity, and fidelity. I extend to them my heartfelt thanks for a life of inspiration.

This book was born from sketches on a paper placemat in a diner in New Hampshire following an inspiring weekend at the Heifetz International Music Institute. To our friends Sophie and Geoffrey Menin and Daniel Heifetz, I say thank you for the spark to write this book.

Thank you to Jonathan Feist at Berklee Press for his gifted insights, editing, and enthusiasm for this project. I am fortunate to teach at Boston's Berklee College of Music and benefit every day from the stimulating creative atmosphere that abounds there. I'd like to acknowledge Matt Marvuglio, Melissa Howe, and Mimi Rabson, my Berklee colleagues, and the very innovative and forward-thinking teaching staff, administration, and students for the opportunity to put these ideas into practice.

My wife, Wendy, has been the source of constant and loving momentum behind this project. Her clear-sighted organization, thoughtful suggestions, and elegant writing and editing are in evidence throughout. The family we've created and nurtured is at the heart of what makes me want to make music, and this book is for them.

PREFACE

As performers of classical music, we share some important musical traits. Beyond the basics of intonation and sound production, we've sensitized our ears to stylistic details and developed our sense of phrasing. We use a broad range of dynamics and articulations, read notation fluently at sight, can function in large and small ensembles, follow a conductor through numerous and even wildly fluctuating tempos and meters, and more. These are remarkable skills that will always remain the mark of fine musicians.

The world of music is rich with tradition. Every genre of music has famous masters who defined the forms, and audiences that associate sounds with names of composers, players, and groups. Many genres are associated with a place or time in history. Think of bluegrass, bossa nova, the kora, balalaika, and the blues, and certain cultural images, landscapes, and associations—even specific locales—come to mind. Sometimes we believe that "authentic" practitioners of these styles must come from that specific locale.

But you can travel nearly anywhere in the world today and find someone who shares your taste for x, y, or z. And you can find great players of a certain style quite far from the source of that style.

The world of classical music has devotees in every country of the world. It is surprising how many college music majors and conservatory graduates find satisfying musical lives teaching and performing in every corner of the world. You can also find these musical beings in a multitude of professions not associated with music at all.

This worldwide community of classical music lovers, students, and artists shares a tremendous vault of experience. Stories of our great composers, exalted performers, famous instrument makers, and devoted teachers, combined with years of finding solace, inspiration, and meaning in music that we all know, give us a commonality that is deep and draws us together into a kind of global mega-ensemble.

As musicians from the world of classical music, we have a unique orientation to musical creativity. The formative listening and practicing we've done have shaped us, of course, but we've also lived our lives with classical music as our inner soundtrack. When we lift our instruments to play spontaneously, we draw upon the centuries of music we've studied and have been moved by. It's part of us. We each personify the culmination of classical music history.

For too long the realm of classical music has fostered a divide between the creative giants—composers —and performers. While there is plenty of creativity that goes into either of these roles, it's the composers who have the exclusive ability to create and alter forms, shape notes into expression and inspiration,

and sequence harmonies and melodies to dramatic effect. We players have largely forfeited that incredible elation, the self-discovery, the flat-out fun of making our own music, and making our own music with friends. This music—what Paul Winter calls "homemade music"—does not need to fit into categories. Your music may have a total of one global practitioner: you!

This program will not teach you jazz, bluegrass, flamenco, or klezmer, but it will help you apply the elements of music to your instrument and devise creative methods to integrate them. In the process, you'll begin to shape the sounds that convey your attitude and values. If your head is full of jazz, bluegrass, flamenco, or klezmer, you will find your music veering into those realms. If you don't like those, you have the opportunity to fill your mind and ear with something different.

There are unique musical stories in all of us. Despite our shared respect for the great masterpieces of Western music, we can all make a personal sound, respond to musical stimuli spontaneously, and have fun without comparing ourselves unfavorably to Beethoven, Mozart, or Coltrane.

We hope this method can serve as a solid first step towards a fulfilling, creative approach to music-making.

INTRODUCTION FOR STUDENTS

If you're considering studying this method, it could be because you've discovered the fun of improvising and you're looking for a methodical path toward further development.

Or it might be that you've heard a little voice in you saying, "I am unique. I have something to offer the world that's different from anything out there. I have ideas and energy that I'd like to share, and I believe that people could benefit from them." You want to get busy discovering your personal voice and musical mission.

Or maybe you're looking for a little shift in musical perspective that could help you hear music in a fresh way, imbue your performances with deeper feeling, and trigger enhanced communication and creativity in your repertoire.

Whatever the reason, you may also have become aware that the musician you are today is the culmination of specific musical and life experiences you've had, and you might see a connection between the work you've done as a player and where you are today as an individual. This is an exciting insight, because it follows that you have the ability to design your musical abilities. You get to decide what kind of musician you want to be.

I love the scene in *The Muppet Movie* (1979) in which Orson Welles asks his secretary to "prepare the standard rich-and-famous contract" for Kermit, Miss Piggy, and the others. And, in fact, some music students have exactly that in mind: "Spare me the details. I wanna be a star!"

I would not rule that out, of course, but I suggest that you pay attention to the people and music you are drawn to and carefully examine the craft and art they practice. In so doing, you will learn more precisely what it is that you find beautiful, and how you are inclined to adjust it to your own tastes and values.

There is no "downside" to studying improvisation. If you are a brilliant bluegrass player, you will not find your skills or personality tarnished in any way! If you are an accomplished Bach specialist, you will likewise find your skills and specialties unmolested. The techniques and concepts here are not intended to supplant your skills with something entirely new. Rather, I hope you will engage them in new ways, build on them and alter them in your own way, and possibly come to appreciate them with a fuller awareness of their characteristics.

In a way, there's always a risk in learning. Learning does change us. Studies upon studies report how positively the brain responds to new stimuli. Some of the material here will make your brain tired. That's a good thing! Lie down for a

few minutes, or come back to it later, or tomorrow. It gets easier as you hang in there consistently with new information. You learn how to learn.

Each of us learns at a different pace. Part of our growth lies in knowing how we learn, and catering our self-tutoring accordingly. Just like an improvisation, if you're not enjoying yourself... change it! You're the one driving. Just choose your destination, then go as quickly or slowly as you like.

Along with specific musical and technical studies, this book will also encourage your creative intuition. There's a word sometimes used by artists to describe their way of finding a sense of flow that seems to come from a special source: **surrender**. Beautiful, serene, and effortless-sounding, surrender requires belief in your intuition, positive intentions, and consistent practice. Surrender may be the very soul of music. And it can be achieved by those who seek it.

In improvisation, surrendering means moving from the remembering side of awareness to an experiencing side. The player may feel vulnerable at first, especially in public, as the intent and focus one is accustomed to donning is put aside in order to sink into the unknown present. But when this happens, it becomes clear that existing musical abilities, as they are, will serve to make the performer a full participant in that moment.

So, why practice if all one needs is to be able to access this special source? Music integrates the sound, style, and depth a player is comfortable with. Yes, sometimes a player will seem to transcend his or her abilities, but it remains all about those abilities. That reality is the prompt to create a daily workout that exercises the building blocks essential to truly creative expression, and that is the subject of this book.

These lessons will take you to a new place. And in the same way that there's no way to describe the difference in your finger/mind confidence from the first repetition of a musical passage to the hundredth, it's difficult to describe how you will be changed by the perceptions gained through integrating the message presented here. But some of the most profound changes are the result of what "feels" like small shifts. This book is designed to offer a series of opportunities for just that: small, incremental leaps of perception and craft that add up to enhanced confidence, involvement in whatever you're playing, playing by ear, concentration, listening, and perhaps most importantly, self-knowledge.

INTRODUCTION FOR TEACHERS

Classical players today work in a world that is vastly different from the world our teachers lived in and prepared for. And our students will inhabit a musical world that is far different than our own.

With the growing prevalence of sounds, instruments, and styles from the world over, the tastes of contemporary listeners change quickly. Our students, even the most diligent, are not immune from the listening habits of their peers and are themselves deluged by a new world of music through games, radio, television, and the Internet.

Music that may have inspired us to become musicians—music from the noble pantheon of Western composers and beyond—is today simply one color of the dazzling musical palette surrounding us.

While most responsible teachers have never promised even the most hard-working students a challenge-free musical career, it's even more challenging today. As the listening habits of audiences become increasingly varied and continue to shift quickly with contemporary trends, musicians must become more innovative and creative to expand their repertoires and stylistic abilities.

Even young students know this. They know the excitement they feel when they hear a song from their favorite movie or video game. This is music that defines their peer group, music that ushers them into a world of imagination.

This book was born from three core beliefs. First: **Integrating the elements of music through our instruments playfully will lead to a more versatile and creative musician.** Throughout this book, the student will be encouraged to engage and participate with the material in his or her own way. The suggestions regarding play-alongs can be part of a weekly assignment, or alternatively, can be demonstrated and enjoyed in a lesson or class with two or more participants... including you.

Second: **A player's affection for *any* music will motivate him or her to explore, learn, and develop.** There is something to learn from any piece of music, whether it is notated or not. Folk song, pop song, rock classic, video-game theme—it's all music, and if a student loves it, it's good music. If you can engage your students' curiosity about music through their love for certain songs or themes, you will be recognizing their tastes as valid, creating a bond and possibly igniting a creative musical spark.

The third belief underlying this book is that **the best, and perhaps the only way, to motivate a student is through modeling our love and curiosity about music.** There is power and importance in the relationship between a teacher

and a student; the student is learning far more than you're expressing in words. The teacher's attitude, speech, thought process, mode of dress, and humor are all being paid attention to in subtle ways. By rolling up your sleeves and working out the creative challenges and suggestions in this book with your students, you are demonstrating the working process of a creative musician. If you can do so with humor, humility, patience, and respect, you are modeling some of the virtues that are the marks of great artists and craftspeople everywhere.

Classical music will never die, nor should it. The musical footprints of the masters are, and forever will be, treasured and studied by thoughtful listeners and musicians alike. Likewise, the many etudes and virtuoso pieces from the classical literature are responsible for the incredible growth of instrumental facility in the last century, and will be always revered and utilized.

As hinted above, our role as contemporary players and creative musicians is to use what we've cultivated to imbue new music and repertoire with expressive beauty. With the rebirth of improvisation through blues, jazz, rock, and many emerging world music styles, contemporary players have many more opportunities to participate creatively. The player who is comfortable in these settings will have more fun and more playing opportunities, generally, than one who is not.

Players who dedicate their lives to performing written music will always serve an important role in musical culture. The world needs and will support musical specialists in many genres. These musicians can also benefit from the creative application of the musical elements in this book. All players will notice enhancements in their ear training, ensemble skills, rhythm, and harmonic awareness, and will benefit from the increased confidence that comes with it.

CHAPTER 1

Your Voice

In order to play an orchestral instrument with beauty, we learn to evaluate the sound we make, and we apply technique to improve or change it.

When we hear music, we apply what we've learned about composers and style to provide a cultural context to what we're hearing. Memory supplies added meaning to our listening experience.

When we lift our instruments to make a sound, we are not alone. Also in attendance are teachers, role models, and audiences we've encountered or imagined. We might consider these imaginary entities to represent our personal standards of performance, but they can also be a source of distraction. At worst, they can inject a kind of mental separation from the music we're playing—and from our feelings. Our constant evaluating and judging can be like internal chatter that becomes louder than the music we're playing.

This distracting inner monologue may be inevitable, and perhaps even useful as we perfect our instrumental skills, but the critics need to be sent offstage when we make music. They will need to learn to respect creativity and the imperfections that may clothe it.

Some of those inner voices are the disparate characters we've encountered in our lives—personalities we might associate with certain viewpoints, attitudes, or moods. As we develop focus in our improvising, the relationships we've enjoyed or endured throughout our lives become a bank of experiences we can channel into our musical role-playing. Sometimes bringing to mind the memory of one of these characters can ignite a unique musical statement. They connect us to something we feel.

Our sound, our music, is most effective when it grows out of a feeling. In theater, this concept is known as "motivation," connecting performance to the inner drive that yearns to speak out.

This chapter is about accessing and practicing that connection.

> *"The artist must summon all his energy, his sincerity, and the greatest modesty in order to shatter the old clichés that come so easily to hand while working, which can suffocate the little flower that does not come, ever, the way one expects."*
>
> —Henri Matisse

As musicians, we are taught to aspire toward virtuosity. Since virtuosity and virtue share the same Latin root, let's consider one of the virtues for a moment: sincerity.

It's easy to tell when someone behaves in a way that's true to their values, feelings, thoughts, and desires. Sincerity can be described as a kind of freedom: a freedom from deceit, hypocrisy, grandeur, and a host of other negative qualities.

The great American choreographer Martha Graham said, "Freedom to a dancer means discipline. That is what technique is for—liberation." We musicians might conclude then that freedom—and sincerity—is something that can be cultivated through practice.

A sound that is sincere can have a greater power of communication than a sound that is "correct." And further, making a sincere sound, an expressive sound, a sound that is authentic to you, is something that can be developed. Starting right now.

Freedom also is a word often associated with expression, and this might be our ultimate goal as musicians: acquiring the ability to use music to express our emotional reactions to a wide variety of stimuli. For a musician, freedom has two basic dimensions, both of which are lifelong pursuits:

1. Integrating musical technique, theory, and history, and
2. Directly sourcing the full range of inner emotions.

Musical training is full of the former—technique, theory and history—but the connection to our emotions is not talked about much. And, really, how can you teach it? An expressive performance of a written composition can be studied and imitated, but in improvisation sound, music, and emotional message are completely connected. In fact, when you improvise, *you* are the music.

How do you get there?

> *"Trust yourself. You know more than you think you do."*
>
> —Benjamin Spock

Our actual voices are a good place to begin. Since we're cultivating our instruments to be our voices, let's remember that the human voice is the first instrument.

The ways we shape our vowels, the manners in which our language and life experiences have refined the muscles in our throats, how we hold tension, our habits of breathing—all these affect the sounds we make when we speak and sing. We have worked our entire lives on our vocal sounds, and they reflect our experiences, memories, confidence, ambition, and focus. The voice is a sonic snapshot of who we are, and it is a direct conduit to our emotions.

It takes no effort, practice, or planning to express a spontaneous outburst of joy or pain, and that electric, reflexive response is something to notice and value in everyday life. Take that impulse and channel it into abstract sound, take that response and make it into music. Then, take that feeling and tell a story about it.

The ability to convey drama begins with a sense of storytelling in our music, something you've probably noticed when reading to a child, delivering an oral report, or addressing an audience. The rise and fall of your voice is directly related to the ebb and flow of music. The use of dramatic pauses, dynamics, sound color, pacing, and articulation are all devices of good storytelling and good music.

You can start "playing" with these powerful musical elements, these musical art supplies. Make some unaccompanied solo improvisations in the safety and privacy of your own home. Private practice is where musical voices are born and developed. Here there is no external pressure, no conductor, no teacher. There is only an abundance of a musician's most precious commodity: silence.

In *Zen and the Art of Archery*, Eugen Herrigel describes beautifully the moment an archer releases the arrow. The archer develops strength to maintain tension on the drawstring, holding the tension while breathing steadily and achieving focus. When dictated by an inner prompt, the archer releases the arrow. Hitting the target is not the aim; the aim is to locate and honor the impulse to release the bow.

The master Japanese calligrapher kneels before a parchment on the floor, his brush at his side. He contemplates the empty paper before him, visualizing the image he will create and patiently waiting for the impulse to create it. In one fluid motion, he takes hold of the brush, wets it with ink, and creates the image. The calligraphy is a performance. The image is a record of this performance and of the evolving relationship of the artist to his craft, but is not the point of the craft. The point is to become one with the image, to dissolve any separation between the artist and the art.

Birds seem to express their freedom by flight; the open sky is their parchment. Dancers express their relationship to gravity by their motion; space is their parchment.

Silence is our parchment. We create shapes, textures, and colors on silence with an infinite variety of dynamic inflections and shadings. Our music speaks and resonates with listeners who feel they are being addressed personally.

At its essence, music is simply vibrating air. We have a wide range of instruments that color those vibrations, some that specialize in low frequencies, others in high. As we begin to create our own vibrating air patterns, let's explore visualizing some shapes and responding to an inner prompt.

As we progress to longer improvisations, it won't be necessary to imagine the completed shape of your sound-drawings but rather to focus on breathing, and honing in on one of the myriad musical launching pads inside yourself.

ACTIVITIES

Here are some simple suggestions for beginning to experience your "voice" in a new way. These suggestions may help you to redefine your daily practice. What you might have once considered diversions, or wasting time, you can now think of as creative study or a kind of sonic journal-keeping, a time in your day when your emotional response to your real life is allowed its say.

Before you begin, though, a few notes:

1. Your musical utterances need not be profound. There is no need to compare their quality to any music you've known.
2. Your improvisations need not be impressive technically. In fact, at times, instrumental dexterity can conceal rather than express.
3. Your improvs need not be a certain length, conform to any form, be in a key, or be in tune.
4. Spontaneity can feel uncontrolled, but that's okay. Creativity can come with imperfection. Any mental chatter about "good" or "bad" is irrelevant to the music you are making. Notice your inclination to evaluate or judge yourself and re-enter the realm of music repeatedly. This is a major aspect of your practice.
5. Your voice—your actual singing voice—is your first instrument. Singing is our most direct route to our music and our emotions. The voice is our very model of expression, and we have much to learn from it, and from singers. It is essential that singing be a part of your daily creative life, and the suggestions below reflect that.
6. The sole criterion for the success of your improvisation is that it's yours. You created it.

The following activities are intended to be recorded. Listening back to your music is integral to your self-discovery. You will recognize moments, passages, or entire improvisations that have a quality that feels true to you. Pay attention to that recognition! You may be encountering your sincere musical presence for the first time. You are meeting your inner sound-shaper that knows you better than you know yourself, and who speaks in the language of music.

My first such encounter was in a huge cathedral, St. John the Divine in New York. I had the opportunity to record some improvised cello solos in that vast space. Even now, many years later, I recall the sound of my cello rising up into the vaults. I felt I was listening to it more than playing it.

The value of an acoustically reverberant space in which to improvise, especially at first, is that it helps you to focus on the sound in the room instead of on your technique. If possible, try to find an inspiring place to improvise—somewhere outside your usual practice spaces. Find a location that awakens your imagination, either in the atmosphere of the place or the acoustics. Churches, chapels, halls… there are as many possibilities as there are places. Or just light a candle and send a message to yourself that you're trying something new.

A note for those who may be new to recording: Take some simple steps to be sure you're making a pleasant-sounding recording of yourself. Experiment with the placement of your microphone or device so that when you listen back, you can enjoy what you hear.

Suggested activities:

1. Improvise a series of short, unrelated solo voice and instrumental pieces. Think of them as abstract mobiles in a contemporary art gallery, or pieces of a mosaic that you'll put together later, or a group of voicemails that you're leaving for a variety of your acquaintances, or a bunch of opening lines you'd try at a cocktail party, or sonic Halloween costumes.
2. Create short vocal and instrumental improvisations responding to scenarios or specific emotions: a train, breeze through the woods, foreboding, newborn child or animal, specific color, intimacy, regret, ambition, arrogance, fire, water, view from a mountaintop, anger, yearning.
3. Make a series of five vocal pieces and five instrumental pieces, each representing a musical element:
   a. Melody
   b. Rhythm
   c. Harmony
   d. Sound Color
   e. Texture
4. Create a vocal improvisation leaving long spaces between your phrases. Then play along with your recording, filling in the spaces, responding to your earlier calls by imitating them or answering them.
5. Experiment with singing along in unison with your playing. Blend your voice and all its instinctive dynamics and phrasing with your instrument. Use this voice/instrument sound to explore familiar melodies, too, and continue to develop and utilize your voice in your practice.

CHAPTER 2

Responding Reflexively

While playing solo is an important way to connect with your sound, phrasing, and instincts, the art of improvisation is made easier when playing in a group. In a group setting, just like getting together with friends, your spontaneity is triggered by immediate and changing stimuli.

Imagine walking through an orchard at harvest time. Everywhere you look, there is something fresh and appetizing! You wander through and pick delicious fruit with both hands; you're surrounded by generosity. You can't help feeling a sense of wellbeing, of abundance, in such an environment.

In a group of friends or musical colleagues lies an abundance of wit, irony, sarcasm, stories, and insight that makes shared time pass quickly and prompts memories, stories, observations, and responses from you that may be surprising. Such gatherings are important, first, because they're fun. But they also help us to learn more about our friends and to integrate our own life experiences in the process.

Similarly, in a musical setting, your responses to unexpected offerings from fellow players may surprise you, but they will be consistent with the experiences in music you've had. For example, if a sax player rips a blazing bebop lick at you, your response will differ according to who you are as a musician. If you're a classical player, you might just stare at him with outrage! Or perhaps let fly a devilish passage from Paganini. Or maybe you'll improvise an abstract equivalent of a primal scream on your instrument, a double *fortissimo glissando* followed by the loudest staccato notes you've ever played.

If you're fortunate enough to be playing with someone with whom you have some shared musical history, you may still be surprised by an audacious opening salvo, but you may find that you have a shared vocabulary that allows you to respond in the same musical language.

The musical language we speak has everything to do with who we are, what we listen to, and, of course, how we practice. This is an obvious point, but it has some wonderful ramifications that will be repeated throughout this book, namely: *We get to choose what kind of musicians we are. And we get to choose what kind of musicians we will become.*

No matter what style of music you are most drawn to, there is an important commonality that was touched on in the last chapter: *motivation*, the drive inside you that urges you to speak out in sound. Cultivating your motivation requires substantial courage for some, courage to confront habits of self-judgment and fears of vulnerability and criticism.

For those not accustomed to creativity in the musical sense, there may also be discomfort with the extraordinary range of options open to you at any moment. How do you *decide* what note to play and how to play it? How do you *decide* what style to play in, what tempo, what key, what meter?

The answer of course, is that you don't decide at all, you just know. But it may be in a corner of yourself that you're not accustomed to hearing from. And, just like it takes time to understand a foreign language or a new software program, it may take awhile before you can allow your instrument to be guided by this special source.

Another dimension to this discussion, one often mentioned in the context of philosophy or spirituality, is the quality of *presence* you bring to your music making. This was hinted at in the previous chapter when describing the kind of mental chatter that can distract us with judgmental thoughts. But as we begin to let go of this critical mindset, there can be fascinating and fruitful levels of self-consciousness to explore.

The great jazz pianist and teacher Kenny Werner refers to playing from his best source as playing from "the zone." He says he would rather play from the zone than play well! That is a comment that reflects true respect for the music inside, and instantly quells a multitude of critics with a simple and profound truth: This music is my story. This is my life. This is who I am.

"Life is like music; it must be composed by ear, feeling, and instinct, not by rule."
—Samuel Butler

As you go deeper into the source of your music, the connection is not always completely unfettered. There are obstructions, distractions, and irrelevancies that crop up at the strangest and most inconvenient times. Those who have practiced certain breathing techniques can tell you that simply counting your breaths—one to ten—without losing your focus can be extremely difficult. In fact, the same advice gleaned from breathing lessons can apply to your musical mindset as well: Simply take note of the distraction, and re-immerse into the music. Again. And again. And again.

This is what practice is all about. It's about learning to focus: to sink deeply into your music.

When you lose that focus, return to listening. Listening ensures that you're in the moment.

Listening is what is real right now.

You might discover a sense of curiosity in your listening. It's not an assumption that something you hear fits into a recognizable pattern or meaning. Rather, you're hearing it as a story you're experiencing for the first time. Instead of

attaching a wealth of associations to something you hear, listen for the newness of it, with the realization that it could branch into mystery at any moment. There could be an important clue in each musical scene you encounter, no matter how familiar.

This also can be practiced away from instruments and music. When you find yourself alone—walking, jogging, waiting in line—practice listening. It is practicing being in the moment, and the moment is where miracles happen.

> *"Value judgments are destructive to our proper business, which is curiosity and awareness."*
> —John Cage, quoted in Richard Kostelanetz's *Conversing with Cage* (1988)

The exercises for this chapter include responding to environmental sound triggers. Some of these triggers might be reflexive. You'll find yourself responding as if a circuit was suddenly completed. That's what we're going for.

Again, record everything. Ideally, you can create loops of your favorite sound triggers and record your musical responses.

You could also just sit and wait, like the master calligrapher, for the impulse to play.

Or you could respond to the sounds of your immediate environment: the breeze, the hum of your refrigerator, the drips from a leaky faucet, a car going by, mice, ants.... Every sound means something to you. Listen, respond, and listen to your response.

Environmental sound triggers in recorded form can be found from a number of sources, or created yourself. To start you off, on the CD, you'll hear a cello/piano piece that was a free improvisation with pianist Paul Halley, transcribed and re-recorded with pianist Tim Ray (track 1), plus we've provided three "environments" you can play and sing along with (tracks 2 to 4).

You can copy these and import them into your recording device and record your responses. With some sounds you find, the title alone may be enough to activate your imagination or to access a special memory. What is the sound of that? How can you use dynamics, articulation, note lengths, and register to give a sonic "body" to your feelings about each trigger?

Sometimes listening back to your improvisations requires a real commitment, and we suggest you make that commitment. As you do so, you can ask yourself the following:

- What are the commonalities in my improvisations?
- Do I make effective use of dynamics?
- Do my phrases have a dynamic shape?
- Is the internal motion of my melodic play compelling? Does it change?
- Are my phrases all the same length?
- Is there enough space?
- Do I use the full range of my instrument?
- Do I use a variety of notes and keys?
- Is everything I play in 4/4 time? 3/4?

RECORD EVERYTHING

If possible, record everything. You never know when you'll improvise something you'll want to capture. When you do, notate it and file it in a journal that you keep just for this purpose. This journal will be a record of your discoveries. It also will send a message to your inner musician that you value what it has to say, and that you are there to nourish it and pay attention to it.

The personal recorder is an invaluable tool for creative musicians. Imagine a dance class without a mirror! Even though we can hear ourselves as we play, listening to our recordings yields a completely different perspective, and brings a host of details to awareness. Even more effective is waiting a day or longer to listen; "getting some distance" will gain you a certain remove from the improv, helping you to hear it more clearly for what it is.

Take careful note of your successes. Whether a certain note, an interval, phrase, passage, or entire piece, each moment of beauty or effective musical storytelling should be considered and appreciated. Notate a memorable melodic turn and enter it into your journal. Label a sound file with a date and a star, signifying this is something worth listening to. *Use your recorder to get to know your playing and to monitor your progress, and use it regularly.*

CHAPTER 3

Rhythmic Accompanying

Thus far, we've been emphasizing the intuitive side of playing: finding "the zone." We will be returning to that consistently, but now it's time to begin looking at some elements of musical craft and applying them creatively.

Children love art supplies. When they are first introduced to wonderful things like watercolors, clay, brushes, glitter, markers, and finger paints, they explore them with all their senses. Of course, they are stimulated by the colors, but just as much by the touch, smell, and even taste of them! It is nothing less than a full-body experience—a total immersion into the multi-sensory realm of art. Children's art is not necessarily confined to the paper in front of them. It becomes part of their clothing and their environment (on the walls!), and, if you dare to come close, their artistic creation will be all over you, too!

As you play with the elements of music as presented in this book, you will always be invited and expected to discover the sensation of each element in your own way. I will suggest some starting points, but there is no single correct way to integrate this learning. Your way will be the best.

Any suggestion regarding the linear sequence of things is just that: a suggestion. In the important work of cultivating creativity, the natural affection and allure you feel toward something—or the smallest aspect of something—is far more significant than following a step-by-step manual. Your sincere curiosity will ultimately be your passport to becoming a creative and one-of-a-kind musician.

I've been talking primarily about your solo "voice," but playing solos is only one part of the universe of music-making. Most of the time, you will be accompanying, and there is great pleasure to be found in that.

For the purposes of developing personal creative practice time, it will be great fun and great learning to make your own play-along recordings. Let's consider a few options and tips regarding accompanying, or "comping."

In the world of accompanying, there are enormous variations, but the characteristic that is of interest in this context, generally, is the single-line comping approach. The idea is to look for ways to play several musical roles simultaneously and simply.

Let's look at a few generic examples:

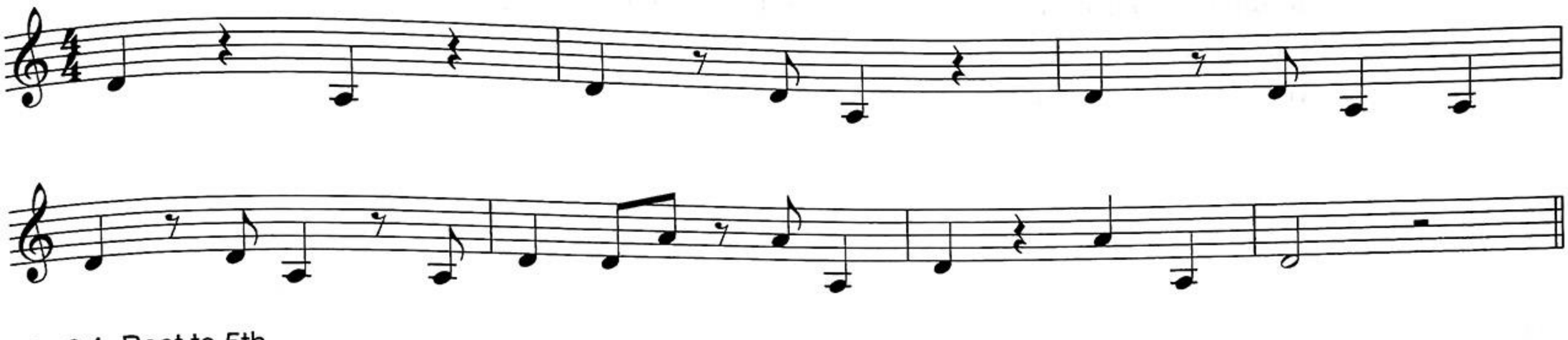


Fig. 3.1. Root to 5th

Here we have the classic bass move, the root of the chord to the 5th of the chord. The chord is a D chord; you can't tell if it's major or minor from this part since there's no 3rd. This move has lasted centuries because of its simplicity and effectiveness. It does two things perfectly: establishes the tonal center and defines the meter and tempo. Bass parts like this are the very heart of much music of the classical period, as well as polka, bluegrass, pop, and a wide range of other genres of great music. (For an introduction to chords, see chapter 8.)

SUGGESTION: PRACTICING ROOT-TO-5TH MOTION

Select a meter at random (2/4, 3/4, 4/4, 6/8, 9/8, 5/8, 11/8) and define it with a root-to-5th motion. The body tends to feel the root on the downbeat of the bar, so use the 5th to vary the tonal center and act as an upbeat. You can play the same root-to-5th over and over—call it minimalism! Or, you can move it up by a half step or any other interval, keeping the root-to-5th motion.

Remember, you can go down a 4th from the root, and that is the 5th of the chord, too (a 4th plus a 5th = one octave), so use different octaves for contrast.

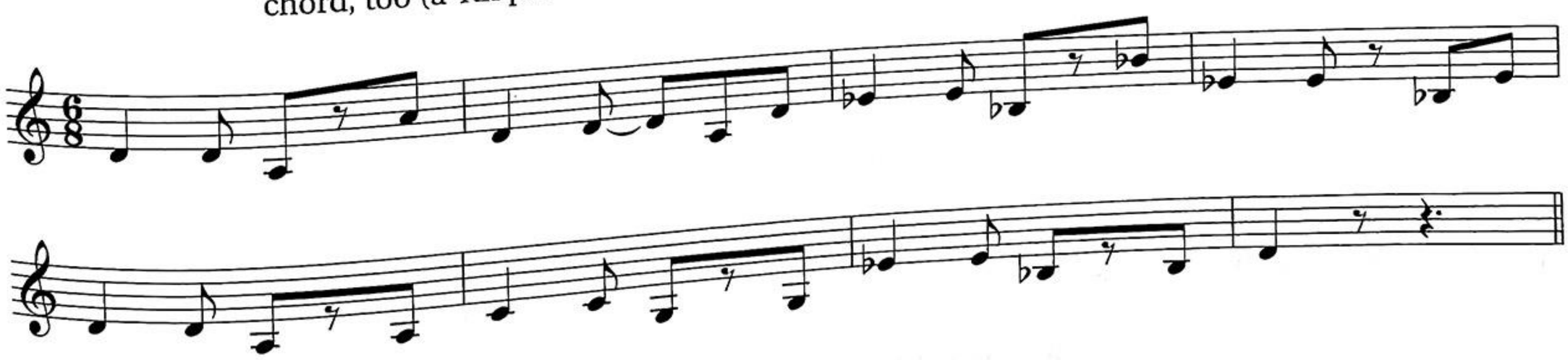


Fig. 3.2. Root-to-5th in Different Octaves

Once you have a rhythmic pattern and meter you like, find a tune in a songbook or fake book, and follow the chord symbols using just the root and 5th of each chord. Don't worry about keeping the notated chord durations

(harmonic rhythm) accurate at first; just get used to thinking like a good, honest, utility bass player. If you like the chord progression or the tune as a whole, you can then work on reflecting the form of the tune including proper harmonic rhythm. Here's a tune in E minor, for instance:

Falling Leaves

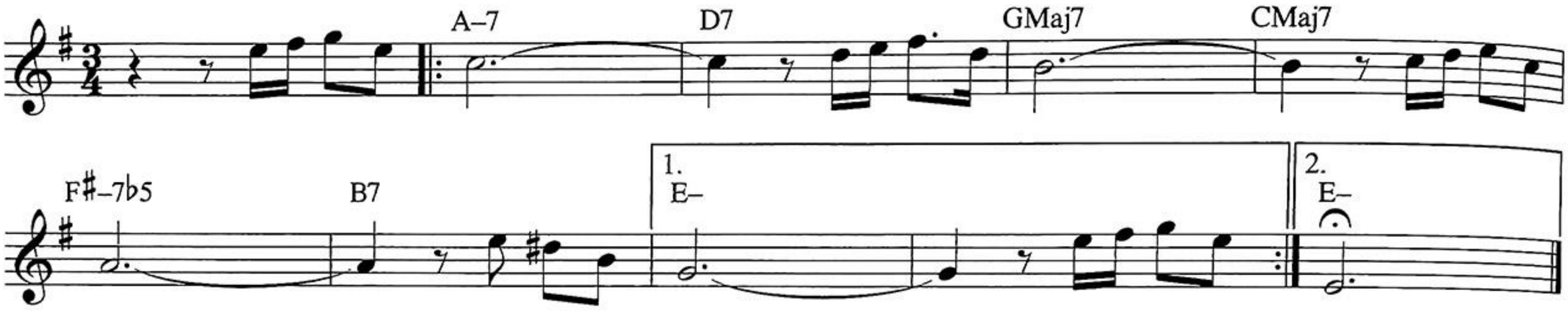


Fig. 3.3. "Falling Leaves"

When making your root-to-5th bass line for the F♯–7♭5, remember that its 5th is flatted to remain in the key.

If, in the process of studying the tune, you find one chord change that speaks to you, play with that. Isolate the passage that you like, try transposing it to a key that feels great to you, alternate the two keys, and try it with four bars on each chord so you can really get inside each chord.

Here are some root-to-5th examples in a few different meters. You'll notice some variation in rhythm. By altering the rhythm in the second bar of a pattern, a 2-bar phrase is created. You tend to hear a longer pattern, a great way to add listenability and a sense of expansiveness. You can also place an alteration after four bars to further help the listener keep track of the 4-, 8-, and 16-bar divisions.

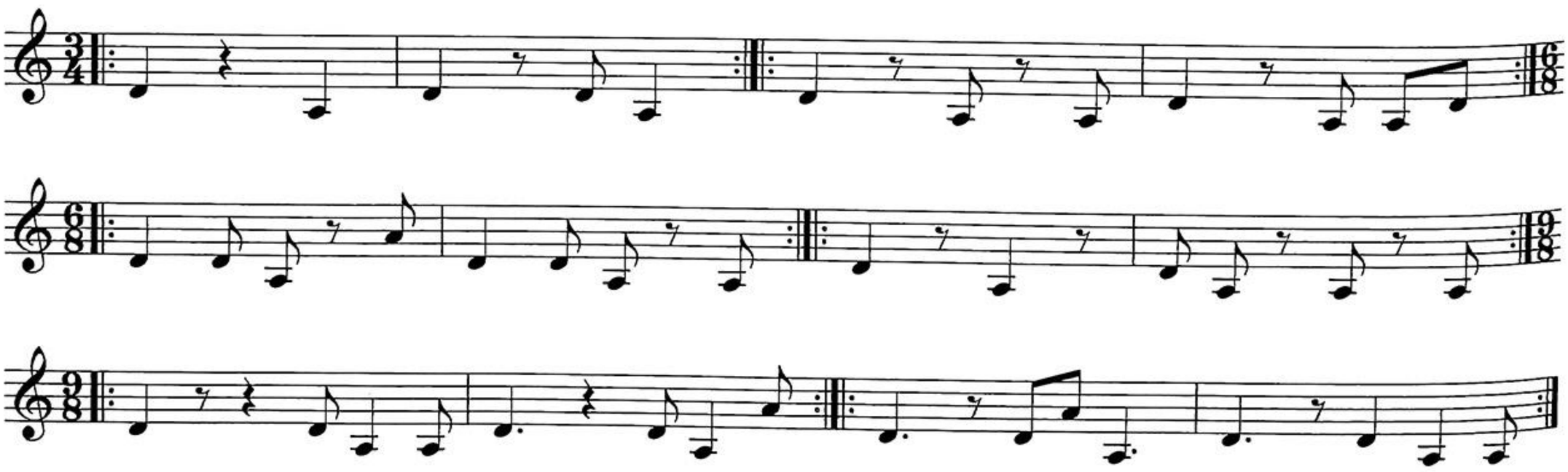


Fig. 3.4. Root to 5th in Different Meters

By all means, discard these as soon as possible in favor of your own designs, or use them as templates to personalize to your own tastes and inclinations.

Let's look at some other single-line accompanying ideas.

ALBERTI BASS

This is a left-hand keyboard pattern widely used in music from the classical period. Mozart relied heavily on it in his keyboard music and in other accompaniment parts. Here's a typical example from a piano sonata by Clementi:

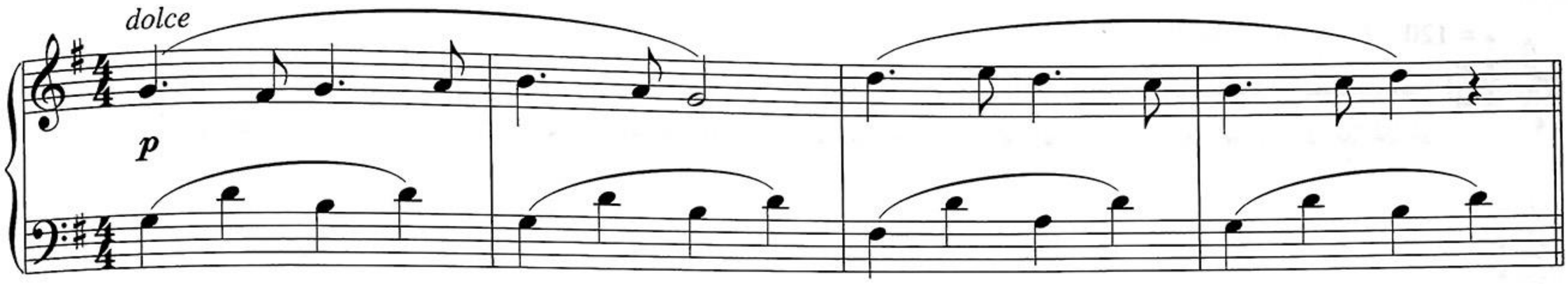


Fig. 3.5. Alberti Bass, Muzio Clementi *Sonatina Op. 36, No. 3, Movement 2*, "Un poco Adagio"

As you can see, this pattern also plays several roles: It defines the tempo/rhythmic feel *and* the harmony. In this example, the first and second bars outline a G major triad, bar 3 moves to a D chord using some nice voice leading, and goes back to G major in bar 4. While the Alberti bass is defined by a specific contour—low, high, middle, high—there are countless ways to alter it harmonically and rhythmically. Here are a few examples:

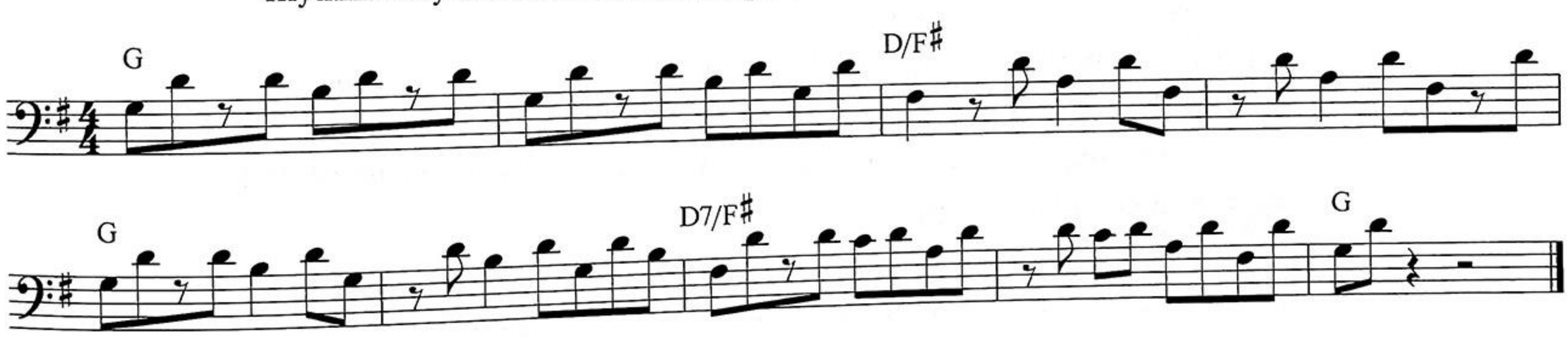


Fig. 3.6. Variations of Alberti Bass

REPEATED NOTES

This is another comping device I associate with music of the classical era—simply repeating the bass note as eighth notes throughout the measure. While a very simple device, this very effectively adds a sense of momentum, even urgency. If you combine this technique with some syncopated rhythmic accents and rests, you can propel your music, add excitement, participate harmonically, and apply it to a limitless variety of styles, tempos, and feels.

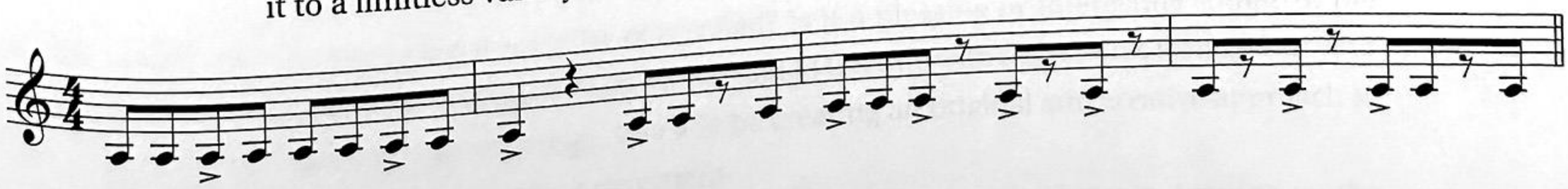


Fig. 3.7. Repeated-Note Comping

A steady stream of repeated notes can also be very effective, playing the eighth or sixteenth notes of each pulse, but radically inflecting the dynamic to accent or de-accentuate ("ghost") certain notes. This technique emulates a quality of guitar strumming and is a very effective way to really integrate your instrument's involvement in the rhythm, while adding color, groove, and variation to the pulse.

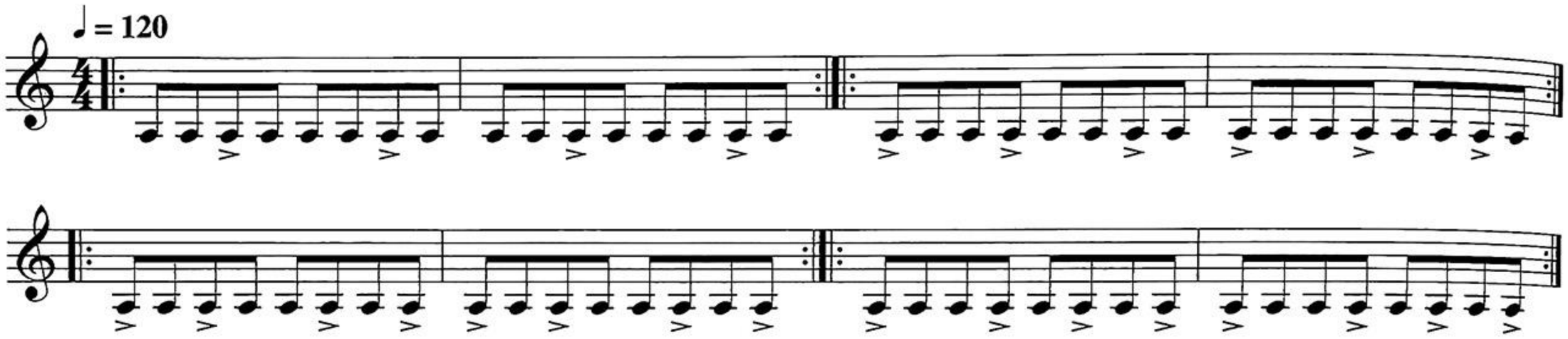


Fig. 3.8. "Strumming"

ARPEGGIATING

We're all taught to value the arpeggio as a technical exercise. Applying arpeggios to music creatively is a lot of fun and a very useful way to gain intimacy with chords and chord progressions.

For the purposes of accompanying, it is effective to break up the arpeggios, changing the order of the chord tones, using inversions, and adding rests. But please do not forget: A good accompaniment always serves the melody and the soloist. Simplify whenever possible.

Effective arpeggiated accompaniments can be created for non-tonal settings, too, and these can set the stage for colorful, interesting, surprising, and liberating improvised melodies. Select pitches at random, placing them with a free-flowing sense of rhythm, and add some rests for phrasing.

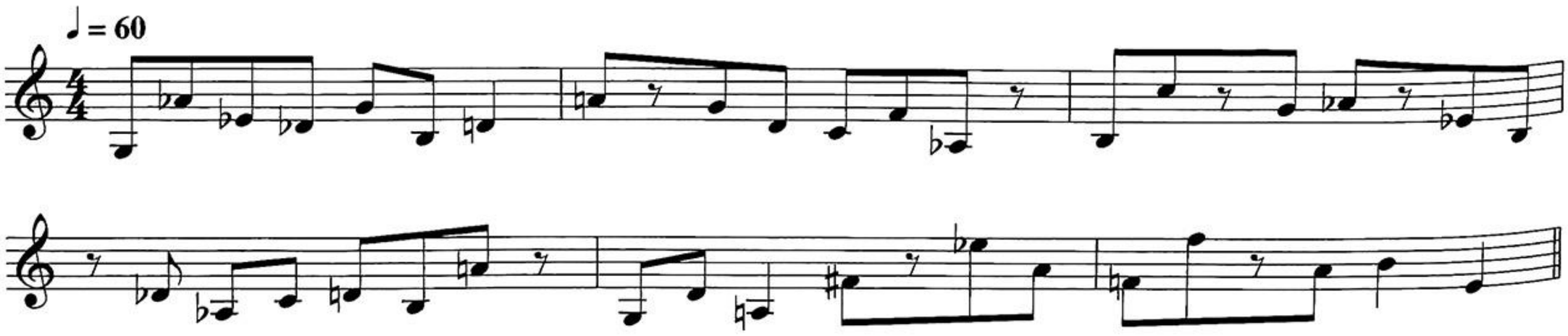


Fig. 3.9. Random Arpeggiating Ideas

You may notice the use of rests in the preceding examples. *Adding space to your accompaniments is often the best way to support a melody or soloist.* As we begin to improvise accompaniments with other players, the rests become even more important as a way of sharing the space (and we'll study this in detail when we explore hocketing later in this book). While this issue could easily spark a lively discussion on the subject of taste and style, it can safely be said that subtlety, simplicity, and invention are generally the ideals of an effective accompaniment.

Perhaps it's helpful to imagine your accompaniments as stage sets, outdoor environments, or even clothing. A visual image may spark your creativity: bees in a hive, stacking firewood, dolphins arcing through the air, New York City at rush hour.

Imagine your favorite place in the woods. Think of the different leaves, rocks, plants. Do you hear water flowing? You can take one tiny detail—a texture, shape, or color—and explore it, or you can make your accompaniment like a walk through the woods, a continually evolving sensory experience.

"Music and rhythm find their way into the secret places of the soul."

—Plato

When thinking about applying rhythm to accompaniments, one can't help but consider the drum set as a model. Drums and percussion instruments are pitched in various registers to fill in the sonic spectrum as needed with whatever instrumentation they're supporting. The bass drum can reinforce, or even substitute for, a bass line; the toms can be tuned to a variety of mid-register pitches; the snare is usually pitched in the mid-treble clef; and the cymbals activate very high harmonics.

When we simulate the drum set on our instruments, the first order of business is to articulate. A clear attack to the note removes any ambiguity as to its place in the rhythm.

Second, keep in mind that drums don't sustain. In fact, drum notes decay immediately, though not uniformly. You will want to mimic this effect to some degree.

A third consideration: To avoid pitching your notes in the same range as the melody, seek a distinct register. This is a guiding principle of orchestration and counterpoint, and an important consideration for composers, arrangers, and improvisers alike. Keep the motion of the parts out of each others' way.

Keeping these three considerations in mind, explore your instrument to find the percussive sounds that can be utilized to keep a groove. Use your imagination. Any sound that doesn't harm your instrument—or the person next to you!—is fair game. Can it be controlled? Is it a pleasing or interesting sound? If the sounds you discover can be combined fluently with short notes throughout your normal playing range, you will be creating an original and creative approach to drumming on your instrument.

On string instruments, *col legno battuto*, Bartok *pizzicato*, tapping on the instrument, and a wide range of rhythmic bow techniques including "the chop"

are colorful ways to emulate percussion. But thanks to contemporary classical music, a wealth of new instrumental techniques, textures, and colors have been explored and introduced in the past hundred or so years for most all symphonic instruments. And, of course, much can be learned from the pioneering efforts of the great bluegrass, Celtic, and jazz players, various renegade cellists, online tutorials, instructional DVDs… the list is seemingly endless.

As you begin to conceive of your instrument as a rhythmic tool, you can regard all the rhythmic music you've ever enjoyed as possible starting points for your further exploration. Over the years, you've most likely been exposed to huge doses of popular music over the radio, in restaurants and clubs, and in public places. Much of that music has been made by producers, writers, and players who have been influenced by music that is propelled by an enormous variety of rhythmic influences from around the planet—jazz, blues, Afro-Cuban, Brazilian, folk….

Perhaps the music you've *studied* the most has rhythmic influences drawn primarily from European folk traditions. Nevertheless, growing up on Earth, you've heard a lot of rock and pop no matter where you live. Whether or not you've loved all the music you've been exposed to, it's still a part of you. And perhaps you've been drawn to a great groove but didn't totally resonate with the piece or the musical message of the piece. Now it's time to take what you love from the world of rhythm and make it into something that works for *you.*

The next time you encounter a piece of recorded music that makes you want to move (dance/wiggle/tap your foot), see if you can distill the groove to a rhythm you can emulate with your voice. You don't have to be a beatboxer to use a variety of consonants and guttural noises to good rhythmic effect. Once you've got it, see if you can analyze where the accents happen, notate if necessary, then see how close you can get with your instrument.

Remember, you don't necessarily need to be playing the song that inspired the rhythm, you're just finding the groove on your instrument. There is no limit to the possibilities of creating new adaptations of great rhythmic drive from the big world of music.

The notion of distilling the rhythmic personality of a piece to a kind of single-line entity is similar to the idea of *clave* from African-influenced music. *Clave,* translated as "key," has been compared to an architectural keystone, since it holds the rhythmic aspect of a piece together. There are different claves for different rhythmic feels, and they're all well-worth studying on our instruments. Below are two that may serve as templates to get your rhythmic imagination kick-started.

Here's the *son clave,* the key rhythm of the Cuban musical style *son.*

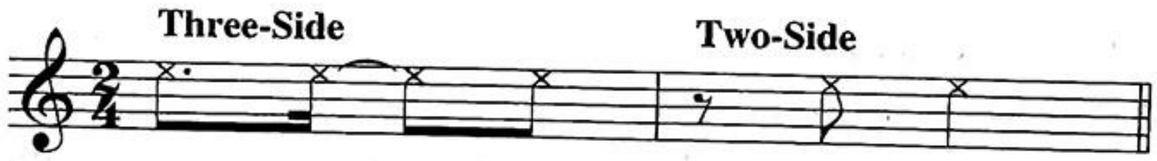


Fig. 3.10. Son Clave

In this famous clave, the first bar contains a syncopation based on the dotted eighth note, and the second bar creates a simpler subdivision to ground the rhythmic tension of the first. The first bar hints at a polyrhythm—the propulsion of the dotted eighth in relation to the drive of the quarter note.

The use of polyrhythms in accompaniments can be effective if the basic beat of the music is already clear. Part of the power of the son clave is that the dotted part of the rhythm is balanced by the strong beats at the end, a great balance of syncopation and clear pulse. But if you find yourself having to tap your foot to make your intention clear to yourself or your musical partners, it may not be the perfect opening rhythmic invitation to an improvisation.

Here's another wonderful rhythm that is sometimes referred to as clave. It's probably more accurately described as a "bell pattern," since it's often played by a two-toned bell-like Brazilian percussion instrument called the *agogo*.

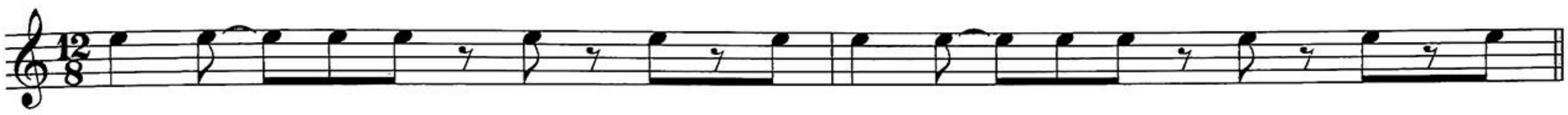


Fig. 3.11. Standard Bell Pattern

If you can internalize the above rhythms, you will find a world of internal swing and accents evolving in your body, instrument, and imagination. They are mentioned only briefly here. However, each could be the subject of a book unto themselves.

KEEPING A STEADY BEAT

It goes without saying that being able to keep a steady beat is essential. If your sense of rhythm is weak, however, take note: Good rhythm is a trait that can be developed and strengthened, no matter what your level of proficiency. You decide what kind of musician you want to be. Your passion and commitment will take you where you want to go.

It's obvious that one mark of a good musician is solid rhythm. To improve your rhythmic skill and awareness in a general way, it's helpful to synchronize your sense of the pulse with an outside source: a metronome, drum loop, ticking clock.... Practice playing eighth and sixteenth notes with it in short phrases separated by a bar of rest.

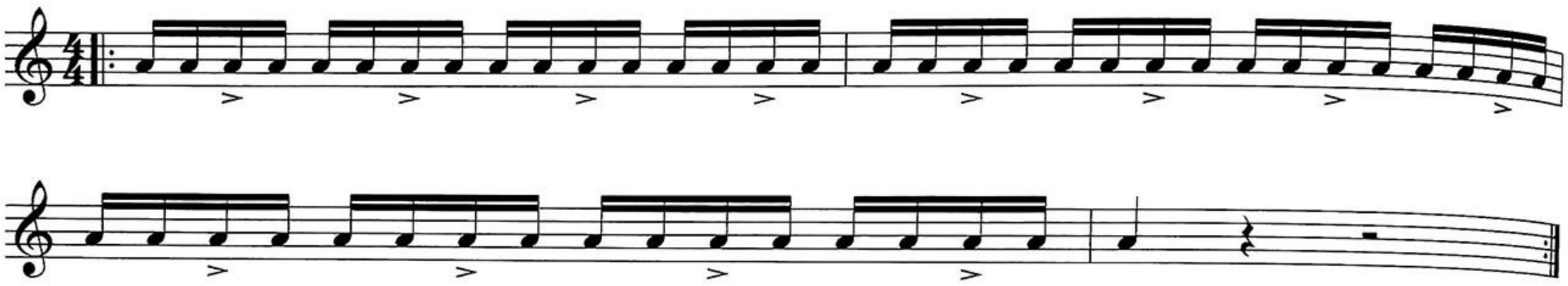


Fig. 3.12. Metronome Practice I

In figure 3.12, the accent is on the offbeats. If that's too difficult, you might try accenting the first of each sixteenth group. If the offbeat is too *easy*, try accenting the second or fourth sixteenth of each beat. The bar of rest is there to help you practice starting a steady stream of sixteenths from a stop.

A goal could be to play fifteen to twenty revolutions of this exercise without fatigue corrupting the flow of sixteenths. To keep challenging yourself, increase the number of bars of rhythm before the bar of rest, and continue to raise the metronome marking.

This exercise is a great way to practice the "strumming" idea presented earlier. De-emphasize the non-accented notes to simply keep the internal "clock" of the music.

Here are some further ideas for practicing with a metronome.

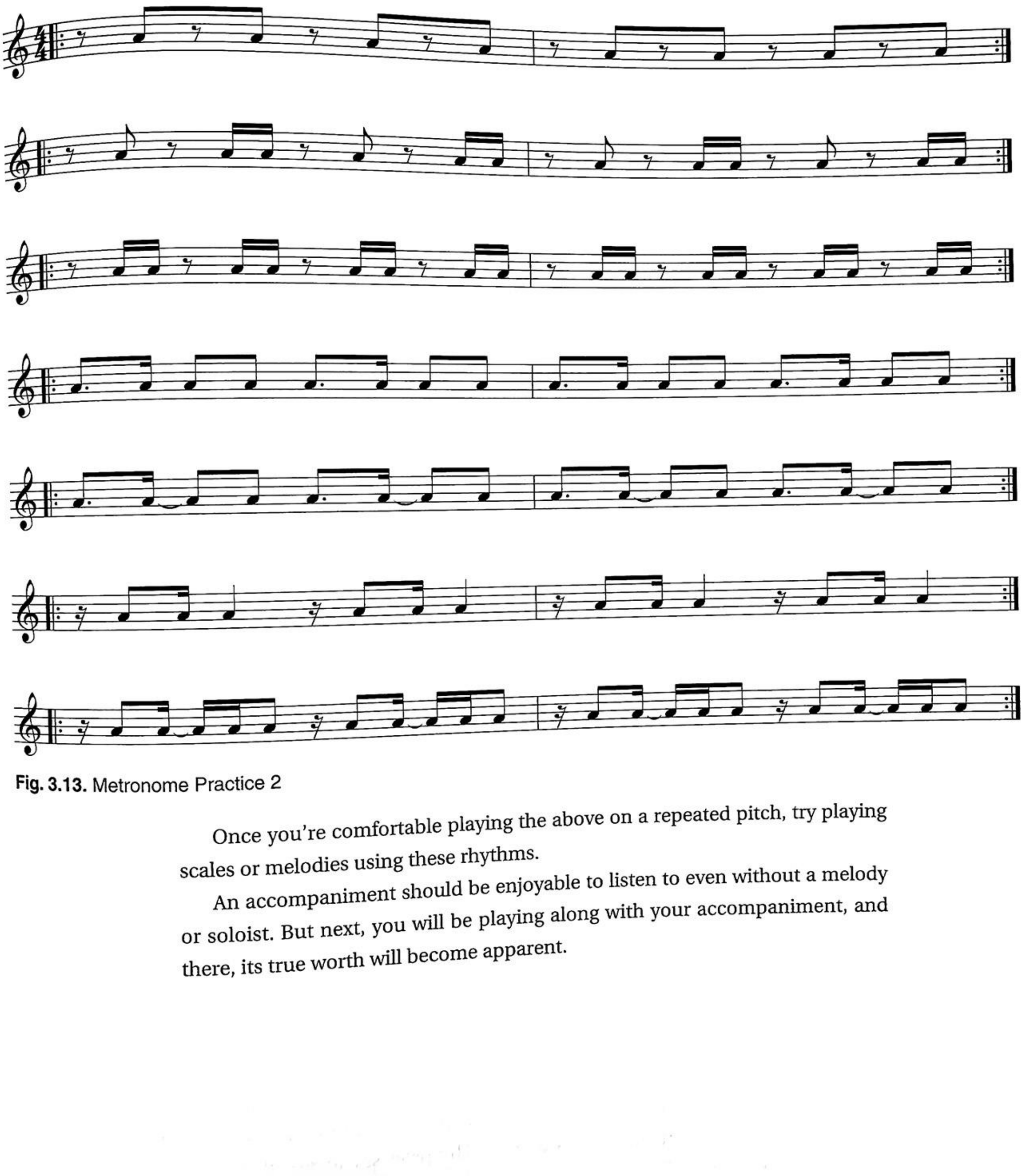


Fig. 3.13. Metronome Practice 2

Once you're comfortable playing the above on a repeated pitch, try playing scales or melodies using these rhythms.

An accompaniment should be enjoyable to listen to even without a melody or soloist. But next, you will be playing along with your accompaniment, and there, its true worth will become apparent.

CHAPTER 4

Melodic Play: Pacing and Polyrhythm

By now, you've improvised a few different solos, created some accompaniments, and recorded yourself improvising along with them.

When listening back to your solos, have you experienced the feeling of wanting to make an adjustment to your performance, wanting to change a note, or had an entirely different idea? These are your creative urges, and they deserve your attention and respect. Give them full rein whenever possible!

One of the tell-tale marks of a new improviser is the tendency to overplay, to play constantly. A solo or melody needs to acknowledge its surroundings, needs to breathe. Coming on too strong can be alienating for the listener and for your bandmates, particularly if you have limited tools with which to develop your musical statement. Holding the spotlight with nowhere to go? This is not where you want to be.

Pacing is key, and effective pacing involves two essential components. Mindfulness about the accompaniment is essential so that you can phrase your improvised commentary in a way that can integrate what is being played around you. Second, innovation will help you develop new ways to relate to 4-, 8-, 16-bar—or longer—phrases and/or sections of the piece you're playing.

The first element is obvious, and you may have already noticed it in your improvised responses to your self-created accompaniments. Playing the roles of accompanist and soloist is a great way to value both. There are elements to the accompaniment that are well worth taking note of: tempo, rhythm, and harmony, obviously, but within those, there will be changing elements—accents, chord extensions or alterations, melodic snippets—that you can respond to spontaneously and integrate into your solo. This process can be called "organic" because the solo will feel connected to the organism of the music, and the ensemble as a whole.

Let's return to the analogy of the storyteller. You begin your story, your solo, by introducing your character. Your character is at home in its environment, or maybe it's visiting an interesting destination, or it's in a dangerous situation.

Allow your character to look around, take stock of the situation, and gradually decide what course of action to take. What is this character's emotional reaction to the situation? What tools does he or she possess to deal with it? How is the character changed by the experience?

On a practical level, get accustomed to placing large rests in your solos. Begin a solo with a single note … wait … two notes … wait. Experiment with waiting for that inner prompt to release your arrow. Remember, it's not about *you*, it's the music, and it might take a minute to get fully aligned with it.

Breathe.

I'll say that again: Breathe.

Performance can feel like a joyous sharing, and sometimes it can feel like a high-stress situation. It's counter-intuitive yet true that, in dealing with stress, we tend to hold our breath. Just when we need complete, unfettered access to our finest abilities, our system shuts down its intake of oxygen. When this happens, the flow of blood to our brain is slowed, and a million (or so) flashing red lights go crazy in the central nervous system, up and down the spine. This anxiety, this internal hyper-alert, jeopardizes our connection to anything but the fight-or-flight adrenaline rush left over from our tribal forebears. This feeling has its place in music, but is not necessarily where you want *all* your music to emanate from.

Breathing is the antidote to anxiety. One yoga teacher said, "Anxiety is excitement, but without the breathing." Whether you want to exude calm or excitement, breathing is essential.

So, go ahead and experiment with taking full breaths, adding substantial pauses in your solos. You'll probably be amazed, listening back, at how natural this sounds to the listener.

The space around your melodic play is essential to defining the shape and content of your statement. The space is just as important as the play itself. As your solo progresses, you may find that the spaces become compressed. They may even disappear as you build toward a climax. Even by its absence, space is a powerful contributor to music and should be mastered like all other musical elements.

The second dimension of pacing is varying the placement of your improvising in the context of the phrase.

We tend to hear music in blocks of 2-, 4-, 8-, 12-, or 16-bar sections, depending on the harmonic structure of the piece. To keep the listener's attention, it's useful to be comfortable in placing your melodic contributions in various parts of the phrase. For example, you might notice that your solos always begin on the downbeat, or that you tend to play in a kind of "sing-song" phrasing cadence. That's not wrong, of course, but it's useful to expand your awareness of phrasing to encompass a wide range of options.

Here are some pacing templates. As with everything else in this book, use these templates as suggestions or starting points for creating your own. You can practice these with a metronome, but you may find it more fun to play along with

one of your own accompaniments: a drum loop, a CD, your washing machine—whatever you find enjoyable.

In these examples, the slashes indicate where to play and how long to play. The rests are, well, rests. These are 4-bar phrases. Get comfortable with them one at a time, then combine them to make longer phrases. This will allow you to vary your melodic pacing over the course of a long section.

Eventually, you will create spontaneous versions of your own as you explore how to adorn a phrase melodically and rhythmically.

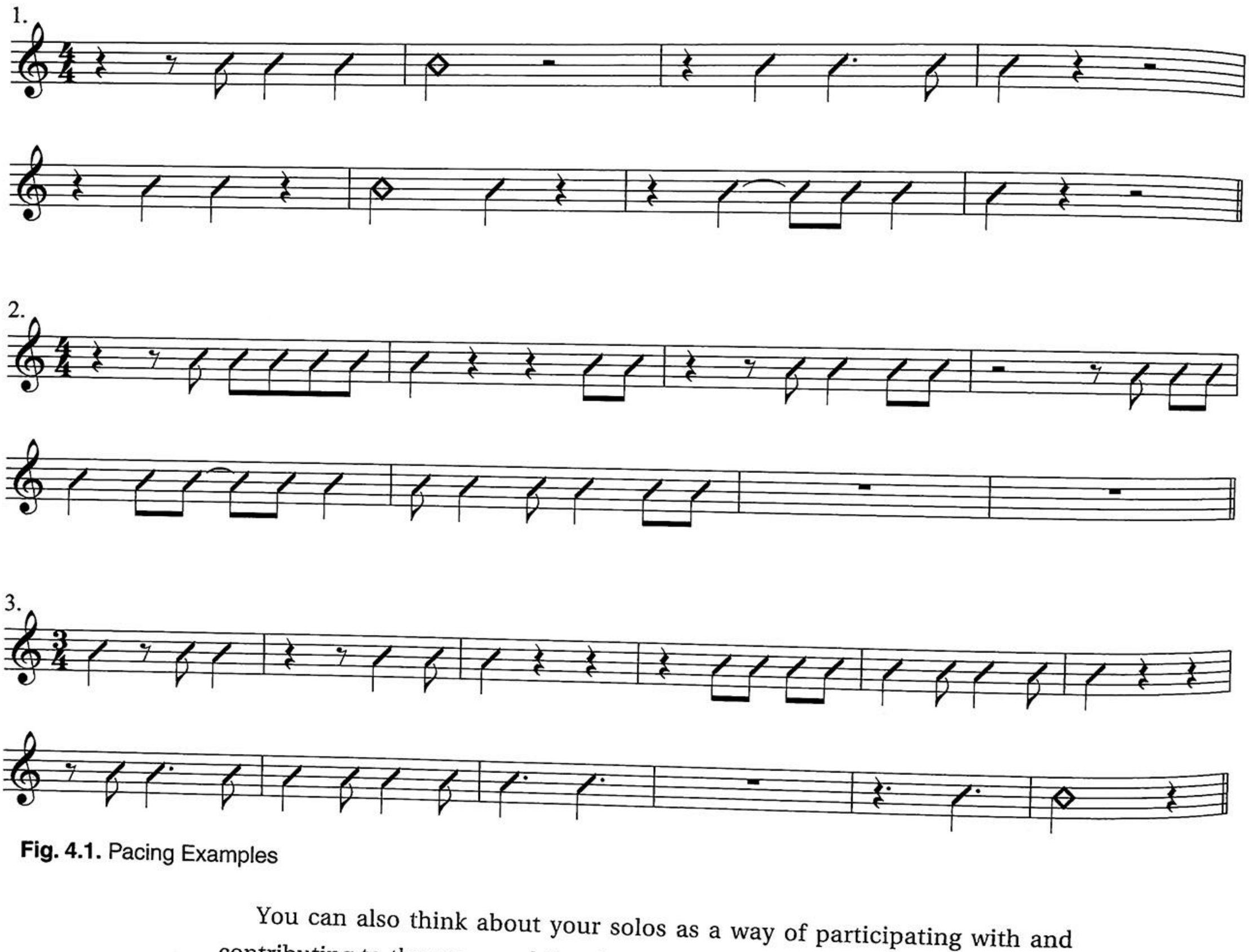


Fig. 4.1. Pacing Examples

You can also think about your solos as a way of participating with and contributing to the groove of the piece. For this, focusing on the "feel" of the groove will help you determine whether to play long notes or note lengths that you hear around you using elements of pacing that have already been mentioned.

Try playing eighth-note, quarter-note, and half-note triplets using the pacing templates above. These are *polyrhythms*, and now you're ready to look more at the treasures that the world of polyrhythm holds.

POLYRHYTHMS

Using polyrhythms and the great fund of internal accents they provide can be pleasurable for the accompanist, soloist, and listener alike. Polyrhythm can be defined as a simultaneous occurrence of multiple rhythms. Triplets are one example, but subdividing the pulse in multiple ways will bring a host of other possibilities. The study of polyrhythm will offer a new menu of accenting options into your improvising, bringing fresh, unpredictable accents, rhythmic tension and release, and enhanced comfort in relating to a pulse.

A great example of polyrhythm can be found in dividing the eighth notes in a bar of 3/4. Everyone knows that 3x2 = 2x3 right?

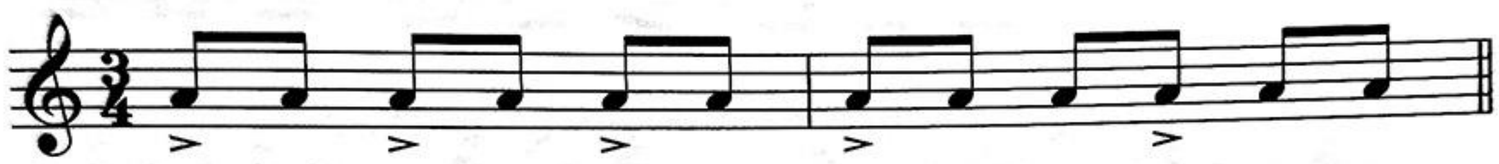


Fig. 4.2. Bars of 3: 3x2 = 2x3

Here, we've taken the same six notes and, with our accent, divided them two ways: bar 1 is three groups of two notes; bar 2 is two groups of three notes. If other musical voices—bass, drums, etc.—are stressing the quarter-note motion of 3/4, then playing the grouping in bar 2 stresses the dotted-quarter motion.

Another way to think of this is as playing 6/8 against 3/4—the same eighth note, just divided differently. The result of this simultaneous juxtaposition of meters is polyrhythm, and there is tremendous energy to be found in exploring the kind of rhythmic tension and propulsion it creates.

To gain comfort with the example above, essentially playing two against three, practice the following exercise with a metronome until it feels natural.

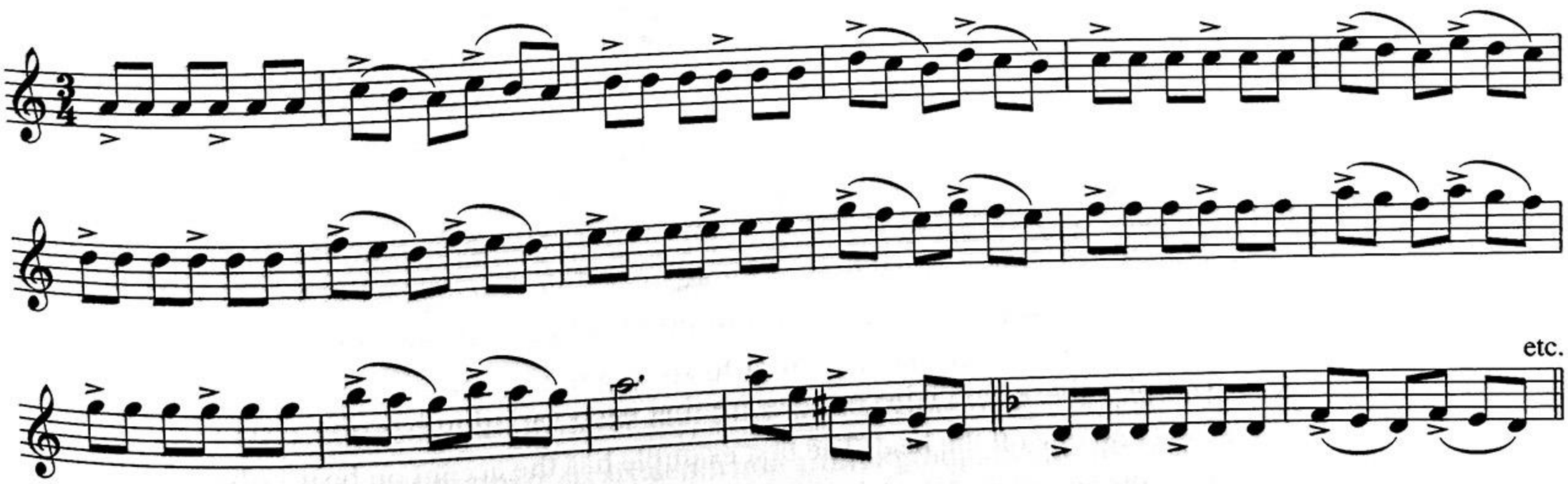


Fig. 4.3. Two-against-Three Exercise

Figure 4.3 is in Aeolian mode, natural minor, but the last measure arpeggiates a dominant chord to modulate. Using this template, you can continue this exercise through twelve keys.

To further explore the concept of polyrhythm using two against three, it's important to note that there are two other options for placing the accents against the quarter-note motion of the 3/4. We can also begin the pattern of 3-note grouping on the second eighth of the bar, or on beat 2.

Let's alter the previous example slightly to shift the accents over one eighth note.

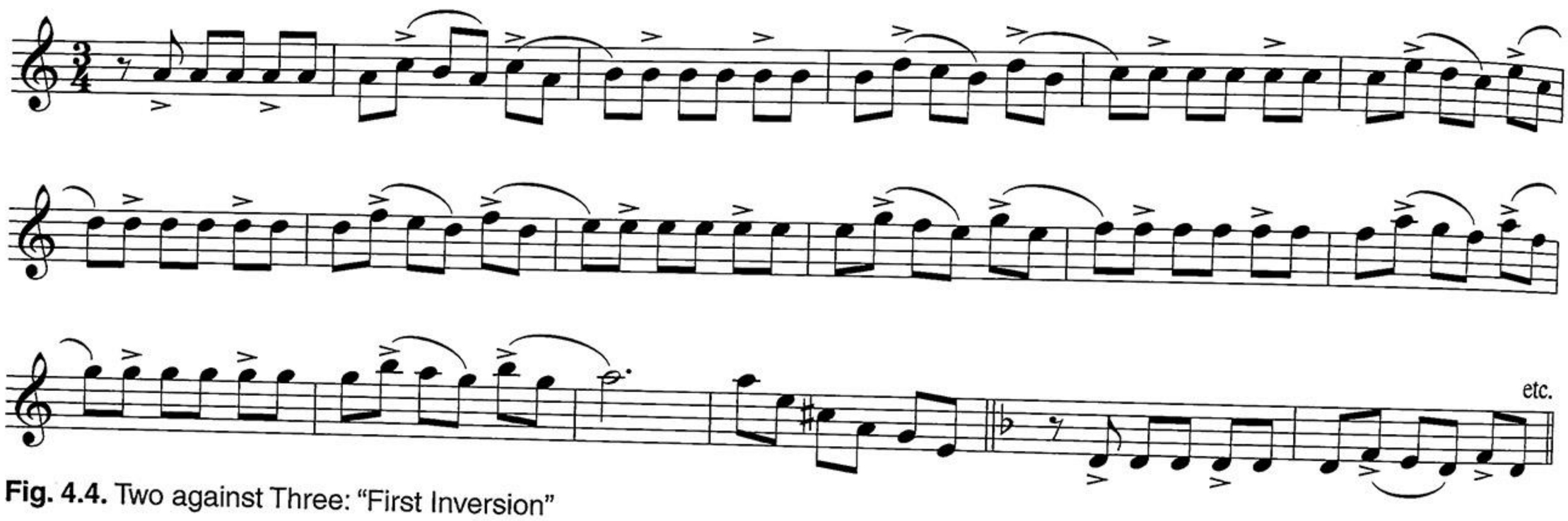


Fig. 4.4. Two against Three: "First Inversion"

And then shift it over one more eighth for the third variation.

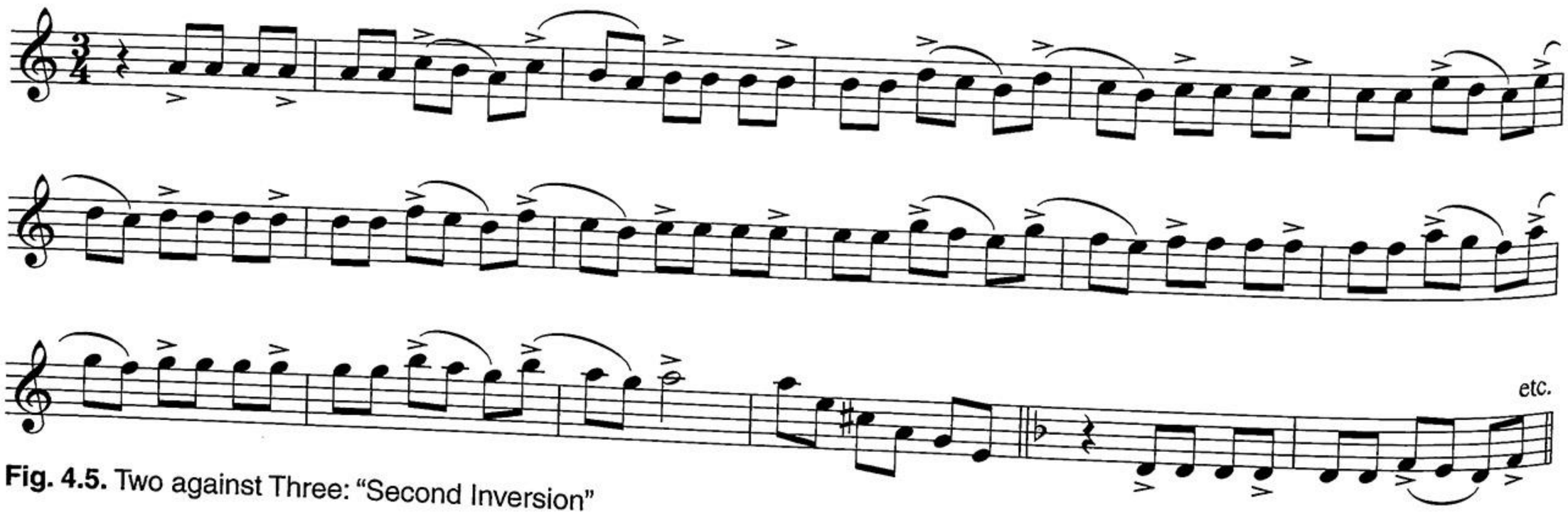


Fig. 4.5. Two against Three: "Second Inversion"

As you play these, you'll become aware that each variation has one accent on the beat and one off the beat. The first example has the accent on beat 1, the second has the accent on 3, and the third has the accent on 2. Being aware of this may assist you with keeping in sync with the quarter beat.

Here's a little exercise to further integrate these concepts:

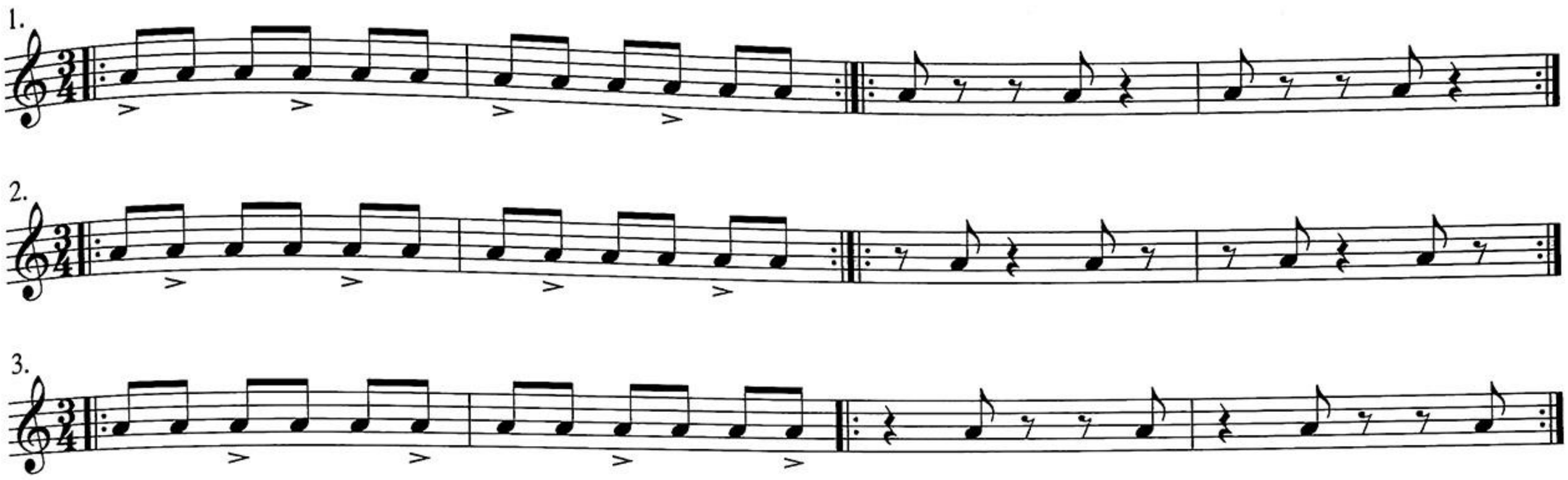


Fig. 4.6. Two-against-Three Exercise

We like beginning with 3/4 time since we're talking about six notes, but of course you can use two against three in any meter, either within the bar or over the bar line. Here's an exercise to practice changing meters while playing two against three:

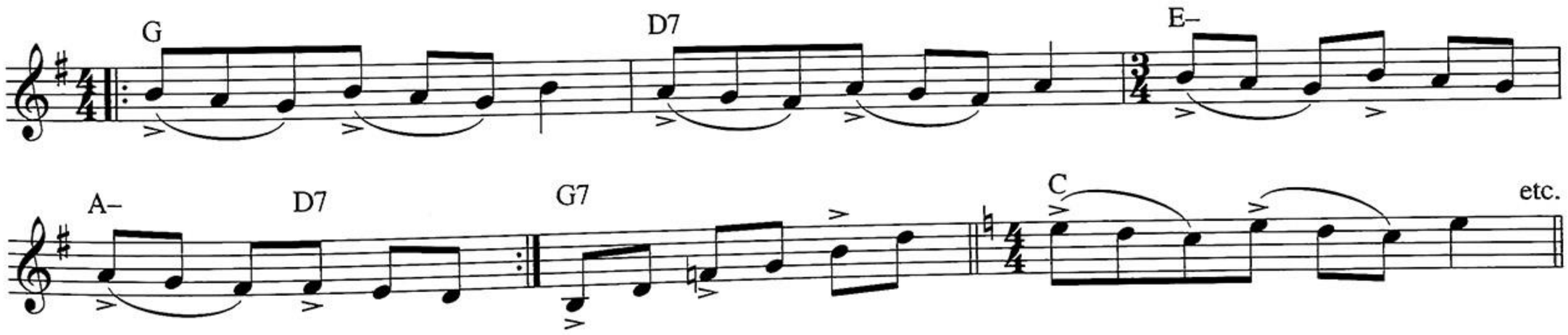


Fig. 4.7. Two against Three in 4/4 and 3/4

Again, the fifth bar modulates up a fourth, so you can continue this pattern through all keys, changing octaves when you like.

FOUR AGAINST THREE

Going a bit deeper, let's also examine *four against three.*

We'll again examine a bar of 3/4 time, a bar containing three quarter notes. Each quarter note is made up of four sixteenths, so the bar contains twelve sixteenth notes—three groups of four sixteenth notes. The number twelve is incredibly fertile rhythmically, since it's divisible by 2, 3, 4, and 6. You could feature two groups of six sixteenth notes, three groups of four sixteenths (quarter-note value), four groups of three, or six groups of two. Each group can start in different parts of the measure.

To demonstrate, let's look at my favorite of these: four groups of three sixteenth notes. I call these "threes." They're not triplets, but subdivisions of the sixteenth notes into groups of three.

Here's a bar of sixteenth notes in 3/4 time. The beams show the dominant meter—three groups of four sixteenth notes—and the accents show the threes. It's important and satisfying to feel the threes in the context of the quarter-note pulse.

Fig. 4.8. Sixteenths in 3/4

One simple way to integrate this is to play a 3-note descending scale pattern and repeat it four times in each bar starting on the downbeat. Using a metronome or loop in 3/4 time, play a measure, then rest a measure:

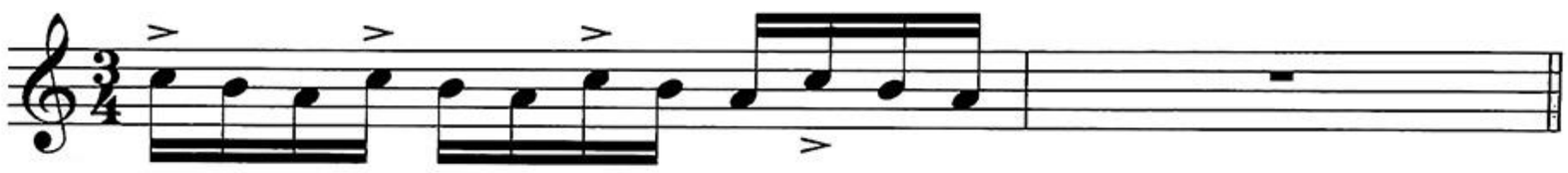


Fig. 4.9. Three-Note Patterns

The accented notes are spaced evenly throughout the bar and create a secondary pulse. (You might feel it like a kind of 12/16, a beat made up of four groups of threes.)

You'll notice that the downbeat of the bar is shared by the threes and the quarter note. It's the only quarter beat that the pattern of threes begins on.

Looking a bit closer, we notice a couple of other details. The four groups of three each begin on a different sixteenth: the first group on the first sixteenth, the second group on the fourth, the third group on the third, and the fourth group on the second. Each sixteenth note of the quarter-note pulse is featured: 1—4—3—2.

Within this, there is a secondary pattern: The first and third groups fall on strong beats; the first accented note is right on the beat, and the third is on the "and." The alternating groups are syncopated, falling on weak beats. Play it a few times with this in mind. You can imagine it in any of the many, many polarities: strong/weak, male/female, sun/moon, light/dark, down/up, whatever. Just make it your own with mindful repetition.

If you sustain the accented notes, the first note of each group, the notation looks like this:

Fig. 4.10. 4 against 3

This is called "4 against 3": four equal notes to the bar against the prevailing quarter-note beat of 3. You can see that this new pulse, the four groups of three sixteenths, are each equal to a dotted eighth note (three sixteenths equals a dotted eighth).

If you consider this to be beautiful and satisfying, take some time to integrate it. It's really effective to practice this with a clock (metronome) of some kind, or when walking, driving with windshield wipers, listening to a steady drip—any rhythmic source can be an invitation to try out your threes.

Once you've gained comfort with the basic four against three, you can appreciate the fact that the groups of three don't have to begin on the downbeat. You can begin the threes on the second or the third sixteenth of the bar and continue the pattern across bar lines:

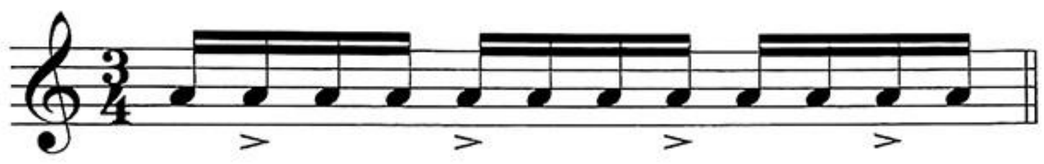


Fig. 4.11. 4 against 3, Starting on Second Sixteenth

While the first pattern we looked at began on the downbeat and shared that accent with the quarter pulse, this inversion, beginning on the second sixteenth, shares the second quarter beat. Now the secondary pattern, alternating strong and syncopated accents, begins with a syncopated or "weak" accent.

If you sustain this inversion of the 4 against 3, it looks like this:

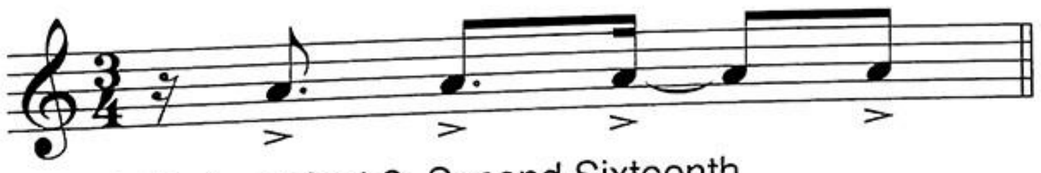


Fig. 4.12. 4 against 3, Second Sixteenth

There's one other inversion of the four against three in 3/4 time, beginning one sixteenth later on the "and" of the first beat, the third sixteenth. This inversion shares an accent with the third quarter beat:

Fig. 4.13. 4 against 3, Third Sixteenth

And if you sustain it, it looks like this:

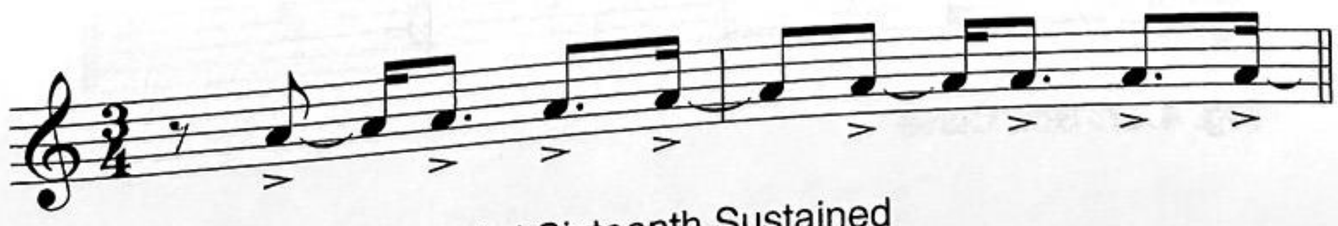


Fig. 4.14. 4 against 3, Third Sixteenth Sustained

Here's a simple way to try out your growing comfort with four against three. Take a familiar tune in a duple meter (2 or 4) that moves in eighths or quarters, and try it in 3/4:

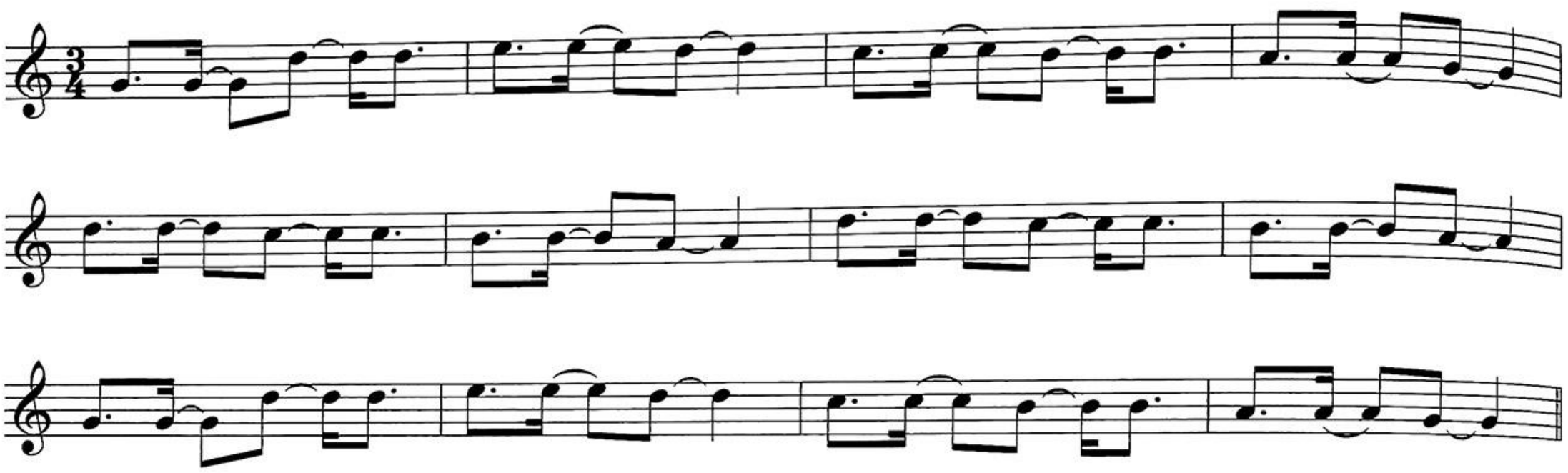


Fig. 4.15. "Twinkle, Twinkle Little Star"

Okay, that's silly. But you can hear that the rhythmic tension between the melody moving in dotted eighths and the groove moving in quarters give some new energy to the tune.

Here's "Veni, Veni Emanuel," a Gregorian chant, but in a polyrhythmic, four against three setting:

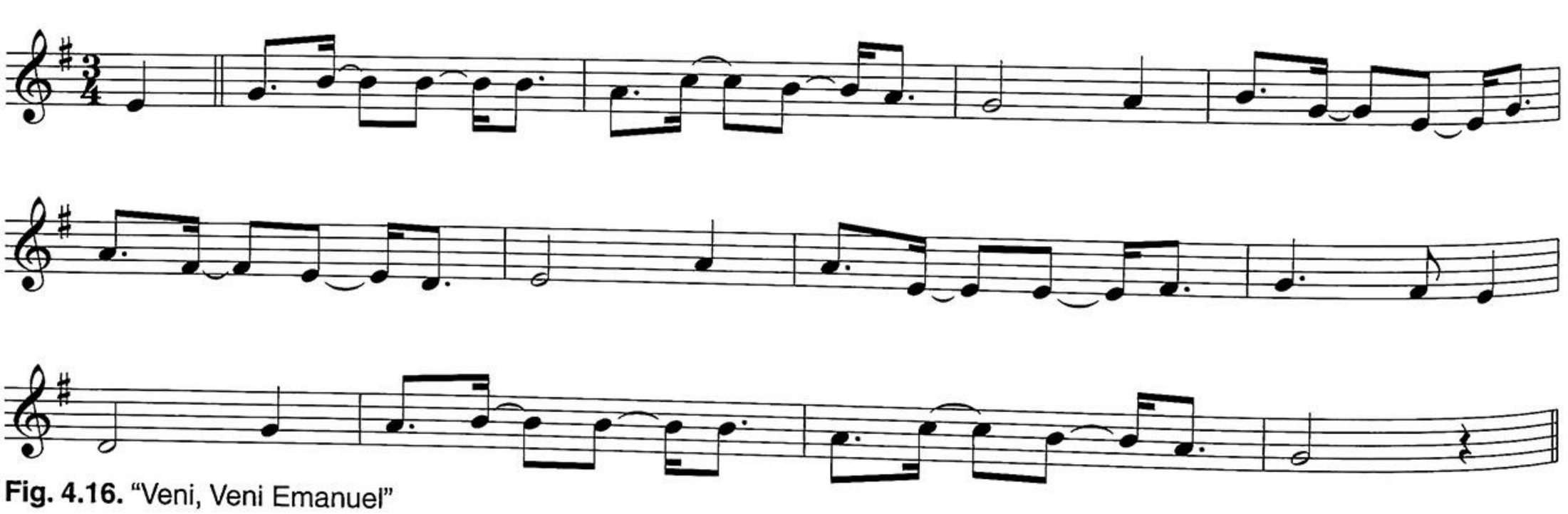


Fig. 4.16. "Veni, Veni Emanuel"

Using threes is not confined to 3/4, of course. Any meter will work and the results will differ accordingly. There are some common applications we can look at in duple meters. Here again is the son clave we looked at in chapter 3:

Fig. 4.17. Son Clave

In this famous clave, the first bar contains the threes while the second bar creates a simpler subdivision to ground the rhythmic tension of the first.

Here's a rhythm in 4/4 using threes that's so ubiquitous in rock and pop music, it's practically a pop clave:

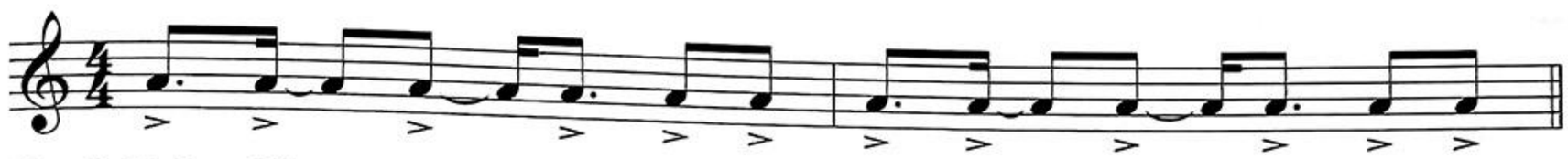


Fig. 4.18. Pop Cliché

In this example, the orbit of the dotted eighth note continues through three beats, a perfect four against three, then the fourth beat is grounded by two even eighths that serve as a pickup to the downbeat.

Using threes in 4/4 time is fun when you continue the threes across the bar line. If you do so, each bar has different accents until you reach bar 4 when the pattern will begin again, a 3-bar pattern of threes.

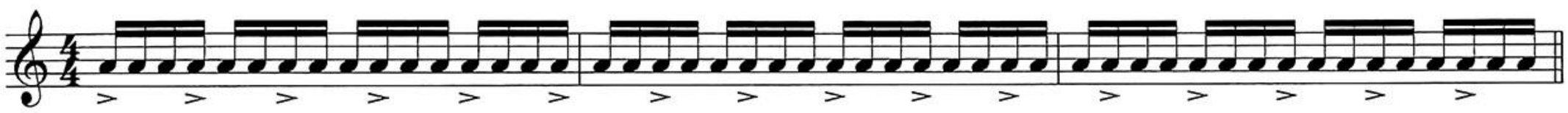


Fig. 4.19. A 3-Bar Pattern of Threes in 4/4

But it's useful to think in smaller patterns. Let's look at a pattern of threes in 1- and 2-bar phrases in 4/4.

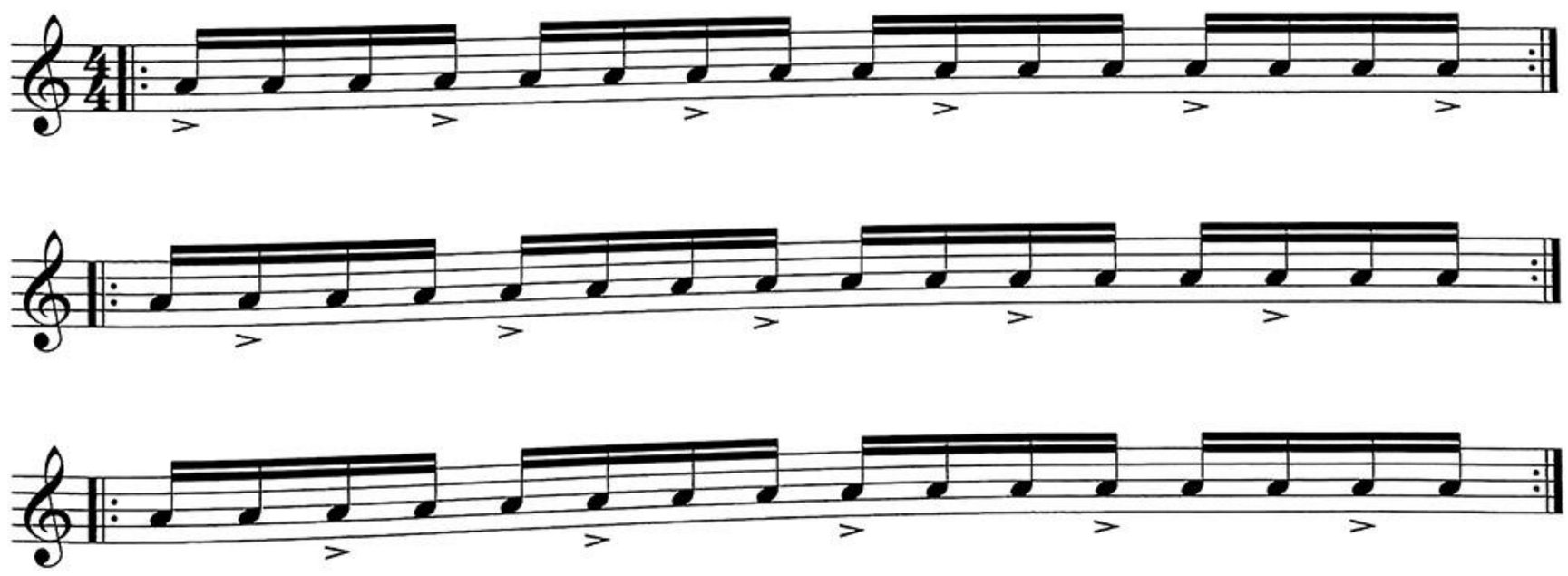


Fig. 4.20. Threes in 1-Bar Phrases in 4/4

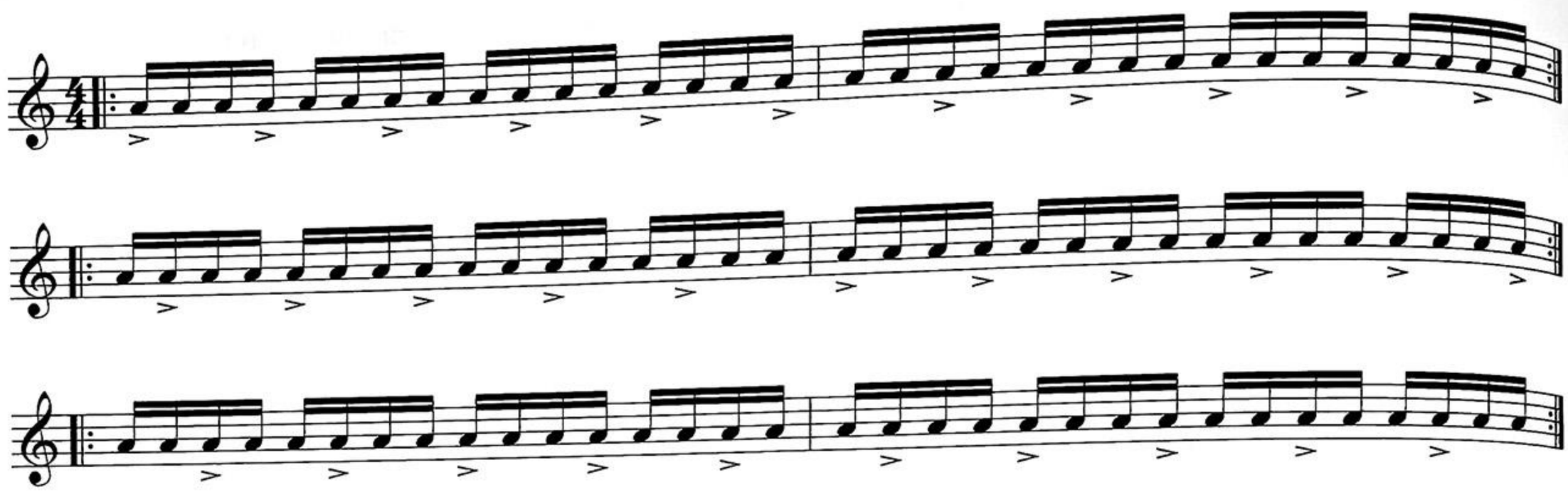


Fig. 4.21. Threes in 2-Bar Phrases in 4/4

All these examples can serve as rhythmic templates, patterns into which you can plug a variety of melodic shapes and articulations. For example, here is a melodic treatment for the three options of four against three in 3/4 time as discussed earlier.

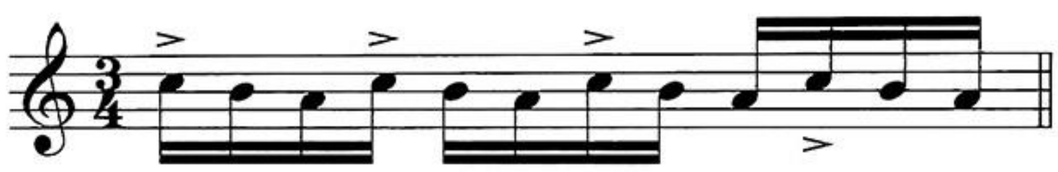


Fig. 4.22. "Three" Etude Extended

You could take this idea and practice it modally:

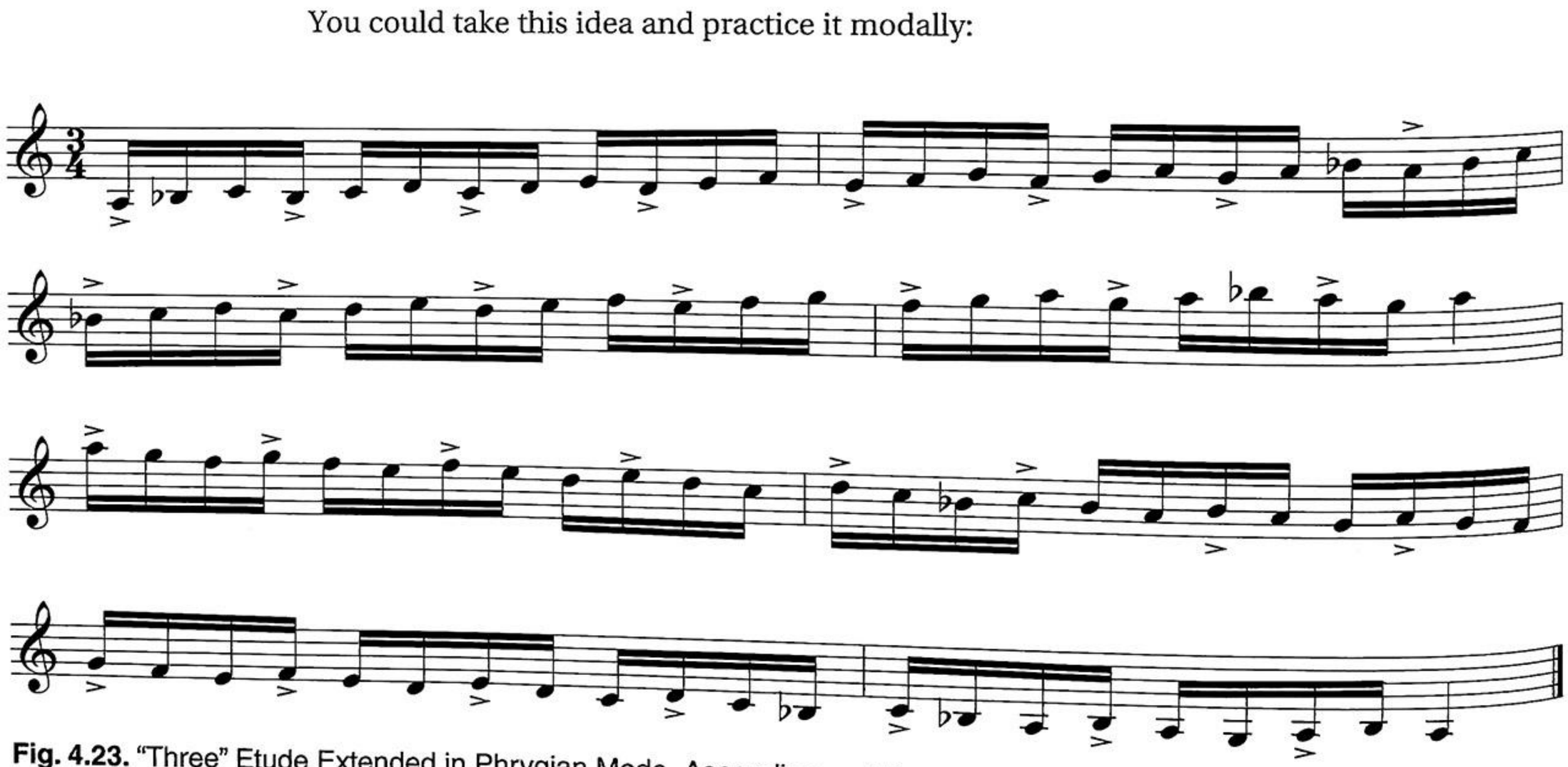


Fig. 4.23. "Three" Etude Extended in Phrygian Mode, Ascending and Descending

These ideas can help your melodies dance. Becoming really aware of multiple accenting options, and using them melodically in your practice, will open up a lot of enjoyment and enhanced rhythmic comfort.

CHAPTER 5

Diatonics: Exploring the Major Scale

Some three hundred years ago, a method of tuning keyboard instruments was adopted that allowed musicians to transpose and modulate their music freely from one key to the next.

The specific tunings of pitches can be quite controversial. Some players of orchestral instruments prefer a more organic scale related to the overtone series because their instruments sound better when tuned this way. Some even regard the piano as a collection of disastrous compromises from the standpoint of tuning, since fifths have been narrowed across the (key)board to produce reasonable-sounding thirds.

But for most working musicians today, unless you never do studio work or play with a keyboard, the piano defines what good pitch is. You have to be able to play "in tune" with a piano or MIDI instrument.

And of course, one mark of a well-trained musician is comfort in all twelve keys.

Key signatures, relative minors, and scales not only are essential tools in our kit, they are pathways to colorful and precise expression.

Let's begin with a major scale and explore it by improvising with a drone. A drone is simply a note or interval that is sustained continually for a period of time. There are many drone options: drones on CD (*Cello Drones* is very good [Navarro River Music, 2006]), or a variety of *sruti* boxes—originally, a simple reed device operated by bellows, but in its electronic incarnation, it can play any note or interval. Or, of course, you can record your own drone by holding down a note on a keyboard, or sustaining a note on your instrument. Five or six minutes should be about long enough.

Another option is to use a "looper" of some kind—an electronic pedal-activated phrase recorder that creates a repeating ostinato from what you record into it. There's a cello/drone improv on the CD included with this book plus twelve short practice drones you can import and loop for playing along with (CD tracks 5 and 6–17).


TRACKS 5–17

Improvising with a drone is a great way to explore intervals and to create melodies that relate to a tonal center. By all means, play any notes you want. You may really enjoy sustaining a dissonant note against the drone; in fact, this can feel very therapeutic! But try to limit your note choices as a way to begin to organize sounds internally. This will help you to learn what sounds you favor, and generally begin to associate emotional meaning to the sounds you're creating.

The obvious starting point is to consider the drone note to be the tonic, or root, of the key in which you're playing. You might begin by matching that note and varying your dynamic and vibrato. See how your sound grows out of the drone—how it emerges into an interval, a phrase, a melody. Explore the unique relationship of each note you play with the drone. Explore the feeling of it. Explore moving from dissonant notes into more harmonious notes, and name those intervals. You are discovering the major scale creatively! But please take your time. This is an essential process of internalizing the values inherent in each interval.

Using a collection of twelve drones, you could choose a different one each day. In less than two weeks, this will give you a new understanding of the keys. Or you could go through all twelve every day, spending a total of about an hour per day. This is important learning for any musician regardless of style or goals. This is not about "accomplishing." This is about internalizing. It takes time, curiosity, and of course, love for music!

"A jug fills drop by drop." —Buddha

Each scale has a recognizable series of intervals that define it. The major scale beginning on the root, or tonic, of the key has half steps between the third and fourth scale degrees, and between the seventh and eighth, or tonic. This scale is often referred to as the major scale, since it has a major third, sixth, and seventh, but to differentiate it from other scales that have major thirds (but minor sevenths, for example), let's call it by its other name, the Ionian mode.

Thinking in the key of C (though applicable to all keys), you can play and/or sing a one-octave scale beginning on any note in the key. Each has a distinctive series of half and whole steps. Play a scale beginning on the note D, but using the key signature of C major, and you play a distinctive scale that is characterized by its minor third, major sixth, and minor seventh. Begin your scale on the note E, and you have a mysteriously beautiful scale known by its minor second, minor third, minor sixth, and minor seventh. Each diatonic note, each note in the key, produces a unique scale, each having a modal name.

Continuing with the drone, let's now move from major mode to minor using the same drone. Now, the key changes as you change modes. For now, stay within the confines of your chosen mode. For example, moving from C major to C minor, you will move from no sharps/flats to three flats. You are moving from C Ionian mode to C Aeolian mode: natural minor.

TRACKS 5–6

Fig. 5.1. C Ionian/Aeolian

As you move between these two modes, it may be useful to just run C major and C natural minor scales, getting these two under your fingers, but the point of this endeavor is to paint the colors of these two contrasting modes vividly in your imagination. Take some deep breaths, and allow each mode to affect you in its own way. At first, play and sing several phrases in each mode. The change to minor or back to major will seem dramatic, and you may find yourself emphasizing the change by coloring it a bit differently with your dynamic or articulation.

If you can't think of something to play, that's fine. Go ahead and listen to the intervals within each mode, move from the tonic to the second, then to the seventh. Sometimes just hearing an interval can invite a third note, a fourth, a phrase, a melody. Just listen and enjoy. Sometimes, a note will tell you where it wants to go. When this happens, allow that note or phrase to follow its own compass.

Next, try playing single phrases in each mode—a kind of question and answer, perhaps, or a conversation between two very different points of view.

Finally, move between the two modes in a single phrase, exploring how each note relates to the others—how each relates with the drone.

Take your time, breathe, sing, and listen. These modes are imprinting themselves on you.

The slower you go, the more efficiently that will happen. One teacher called this "the theory of opposites." The faster you want to learn something, the slower you need to practice. If you want your finger to come down differently, lift it up differently, among a host of other possible applications.

Here are the names of each of the seven modes of the major scale. Each mode has unique qualities. As you get to know each one, you'll begin to associate colors, meanings, and attributes to it.

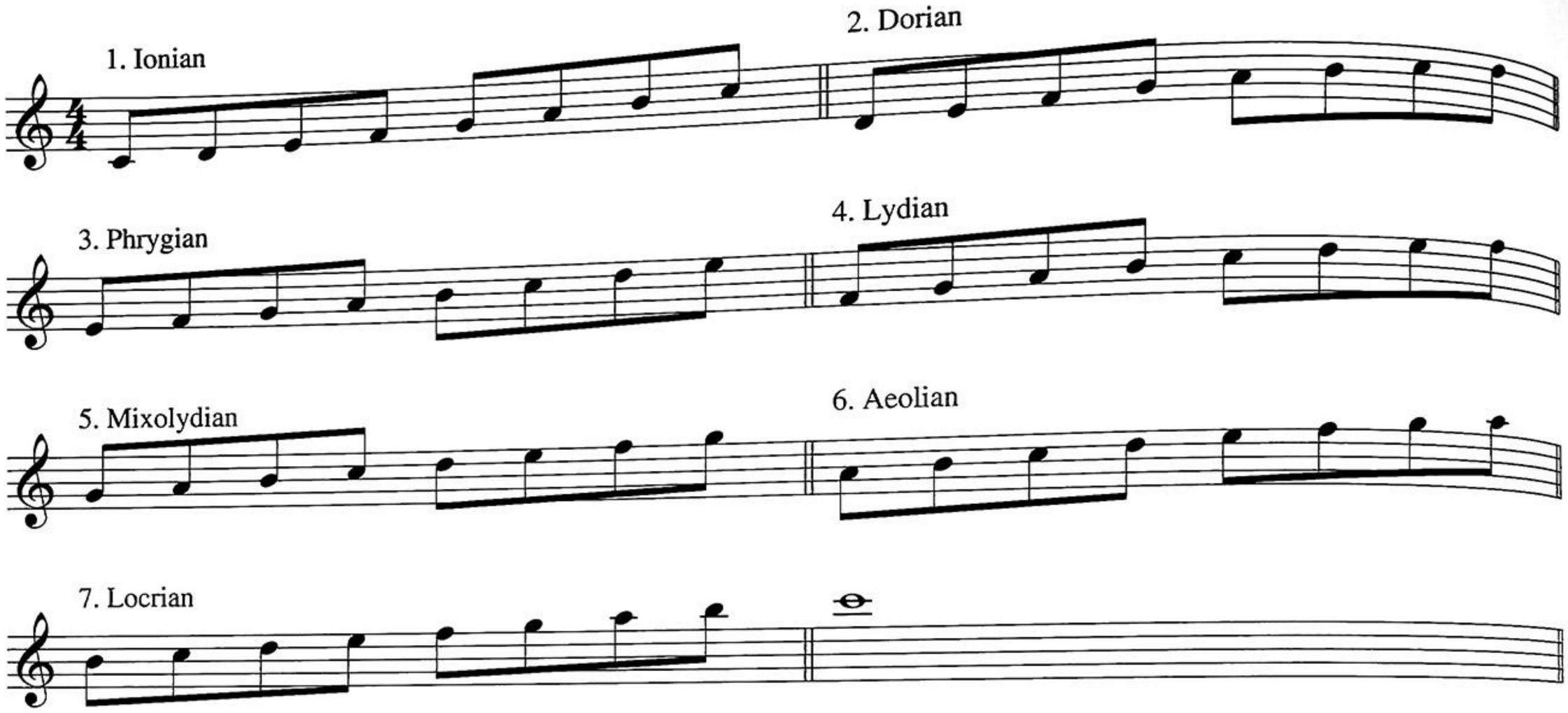


Fig. 5.2. Seven Modes of the C Major Scale

I like practicing them one by one. Sometimes, I'll let my drone CD play through all twelve keys as I focus on Dorian mode for that day. Other times, I'll use the method described above, noting the difference between two or more modes.

As you hear each mode on your instrument, allow it to instruct you regarding its unique qualities.

In the chart above, you see that each mode starts on a consecutive note of the major scale. It can be useful to associate the scale number with each mode:

1. Ionian
2. Dorian
3. Phrygian
4. Lydian
5. Mixolydian
6. Aeolian
7. Locrian

These numbers correspond to the scale step from which these diatonic modes are created. For example, to play an A Dorian scale, just remember its number (2) and know that a Dorian scale that begins on the note A would be a scale of the key one whole step down, G major. By using the key signature of G, but beginning on the note A, you will play an A Dorian scale.

Fig. 5.3. A Dorian Scale with an Accidental = A Scale in the Key of G

To construct an A Phrygian scale, think of A as the third note of the major scale. That takes you to the key of F major.

Fig. 5.4. A Phrygian with an Accidental = A Scale in the Key of F

And so on.

As in our first example, moving from C Ionian mode to C Aeolian, it can be helpful at first to be mindful of how the key signature changes when you change modes. Eventually, you will know the contours, feel, color, and quality of each mode, and key signatures—rather than first and foremost in your mind—will become simply one aspect of your understanding.

For facility in integrating these scales into your playing, here are two other ways of practicing them. The first is what I call the "Modal Scale Workout":

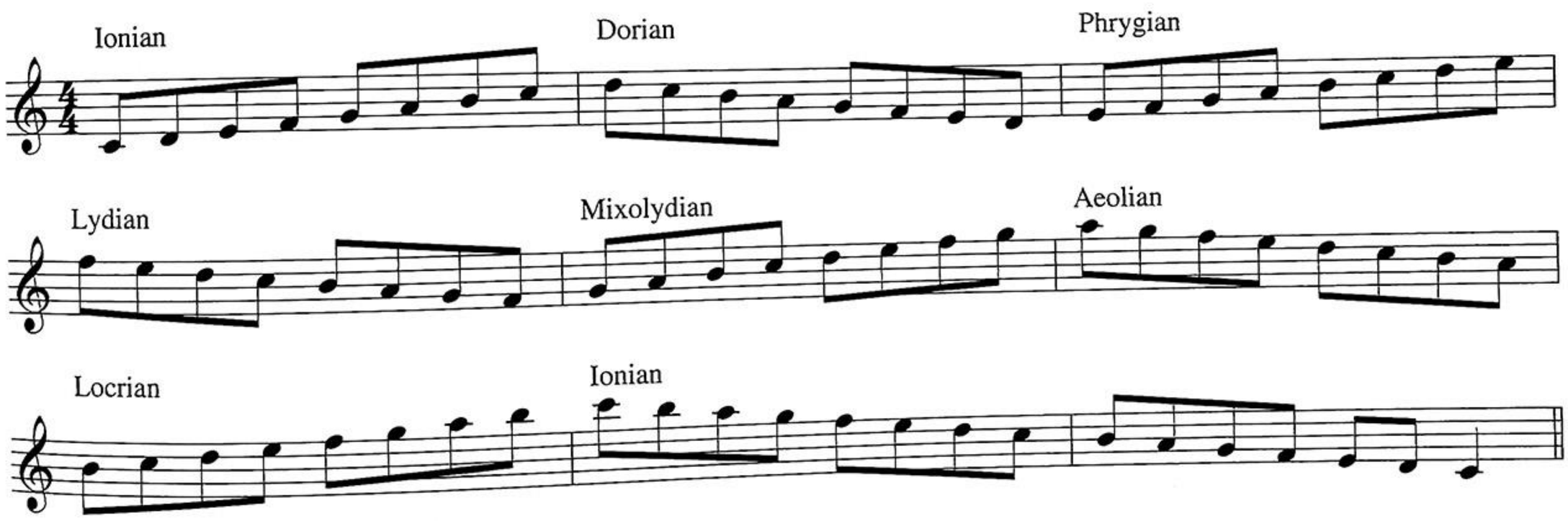


Fig. 5.5. Modal Scale Workout in C

Build up speed with the Modal Scale Workout using a variety of articulations. You can begin with staccato, legato, two slurred, and two separate, then go on from there. You will be playing the Ionian up, Dorian down, Phrygian up, Lydian down, Mixolydian up, Aeolian down, Locrian up, then Ionian down two octaves to finish. Say the names of the modes out loud before you play them until you integrate the name with the sound and pattern of intervals.

Start in C, and move on to a new key every week. You can practice the Modal Scale Workout with a drone, a metronome, or drum loop, or anything else you can think of to make it enjoyable and/or challenging.

PRACTICE MODES DAILY

Make the Modal Scale Workout a daily exercise. Your overall technique will improve quickly as you master the obstacles to playing this workout with facility in all twelve keys. If and when you encounter technical difficulties, consult with a teacher. Sometimes, small things can impede your progress—a shift, a string crossing, an awkward fingering.

When you've gotten the modal scale workout under your fingers reasonably well, try beginning with a descent from the Locrian mode. It's just inverted, so we practice all the modes ascending and descending:

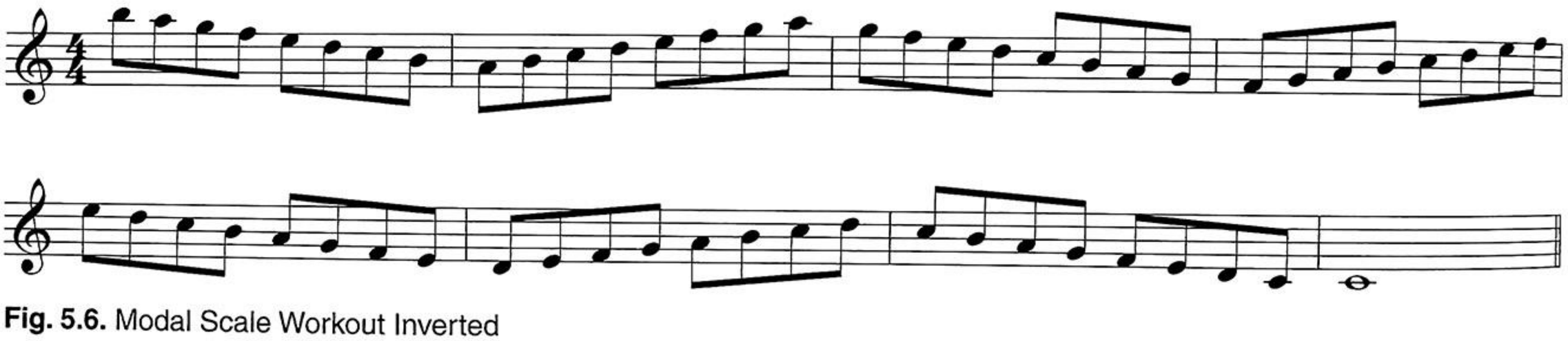


Fig. 5.6. Modal Scale Workout Inverted

Another very useful way of practicing the modes is from a common root. Try playing them in this order, ingeniously arranged so that only one note at a time is altered as you move through all seven: Lydian, Ionian, Mixolydian, Dorian, Aeolian, Phrygian, Locrian—known by its acronym, LIMDAPL ("limdapple").

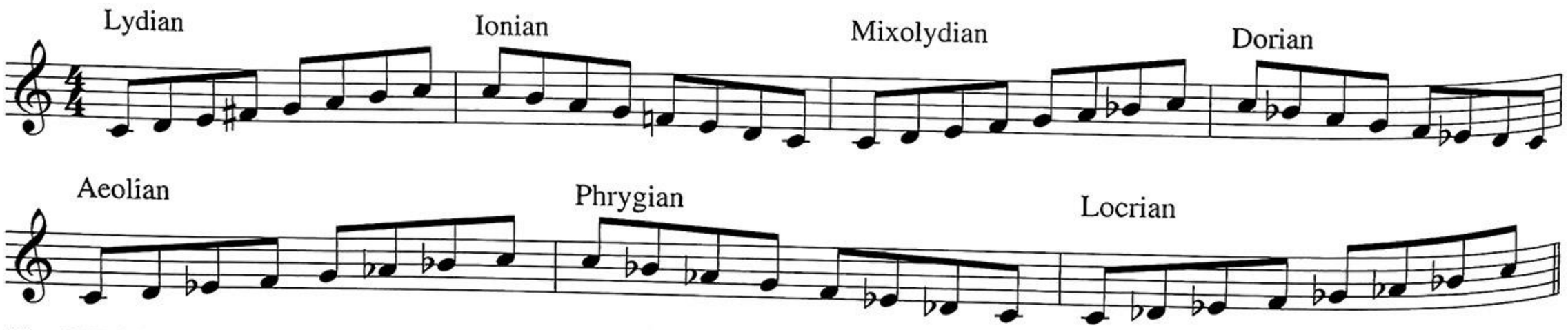


Fig. 5.7. LIMDAPL on C

LIMDAPL is very useful because it integrates the sound and relationship of each mode to the others, and it builds familiarity quickly. As you get facile with LIMDAPL from different tonal centers—starting on different notes—you also integrate scale options of that note.

For example, you'll notice that the first three scales (Lydian, Ionian, and Mixolydian) are major scales; they each contain a major third. When you are playing a scale over a major chord, you can consider each of these modal scales as options for that chord. This also works with the four minor scales, Dorian, Aeolian, Phrygian, and Locrian.

CHAPTER 6

Creative Modal Play: Playing Diatonically

Playing diatonically means that you are playing within the confines of a key, mode, and/or scale. In this book we use the word diatonic as synonymous with *heptatonic*, seven-note scales.

The world is full of beautiful and meaningful music that doesn't stray far from a single key/tonal center. And even Arnold Schonberg, the "father" of twelve-tone music, said there were still thousands of beautiful pieces in C major yet to be written.

TRACK 18

Let's do some diatonic improvising as a way of appreciating the melodic instincts and abilities you already possess. You can find some diatonic accompaniments to improvise with on the included CD (tracks 19 to 30), plus a track with a cello solo as an example (track 18). Each is labeled by key and/or mode. Import one or more into your recording device, paste it in as many times as you like, and record yourself playing along with it.

Each of these tracks moves through different chords, but always remains within the key. Just play along using the suggested scale, and enjoy making melodies, exploring intervals, interacting rhythmically, and just spending time in the key. For now, you don't need to know any more than what your ear tells you, the essence of each note.

Ready to analyze what you're doing? Let's take, for example, track 19 in C major. This track contains the following progression:

TRACK 19

CMaj7	FMaj7	G7	A–7	D–7	FMaj7	D–7	G7

When you look at each chord in relation to the scale, you see that the scale contains both chord tones and non-chord tones. And you may have noticed when playing over this progression that some notes you landed on wanted to resolve up or down to settle more comfortably into the harmony.

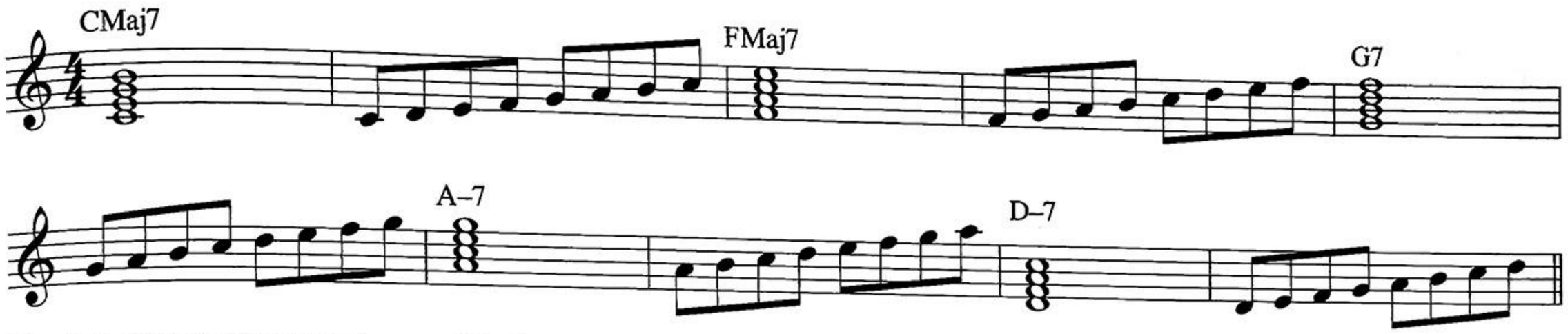


Fig. 6.1. C Major Progression and Scale

Since the scale has seven distinct pitches and each chord contains four, there are three non-chord tones in the scale for each chord. These non-chord tones can be called *tensions*, since they may yearn to resolve to a chord tone. You can also think of them as *passing tones* or *approach notes*, the notes that lead melodically from chord tone to chord tone. Some would also consider these to be *extensions* since, if you continue to add thirds to your seventh chord, you will include all the notes of the scale.

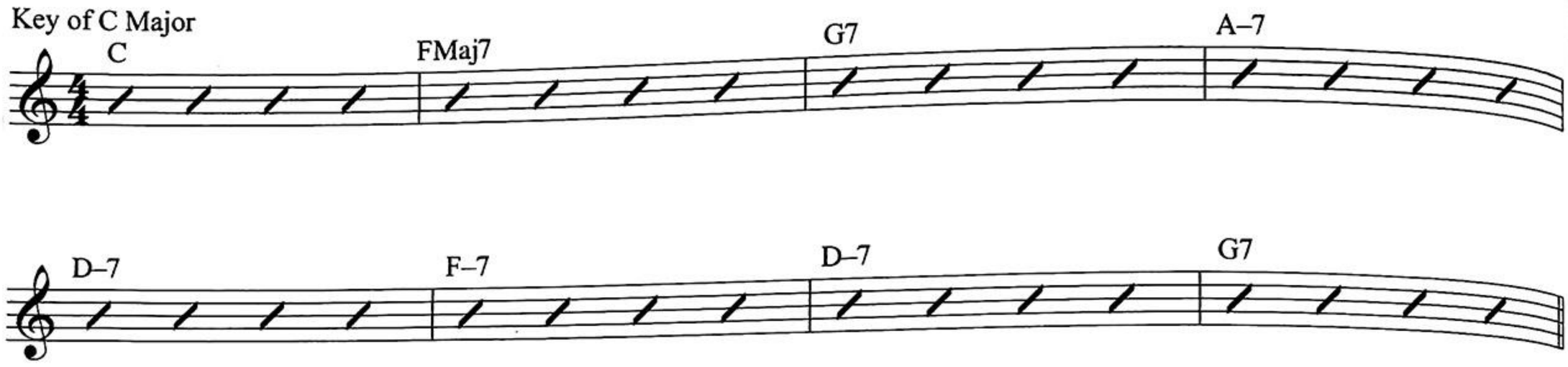
To summarize briefly: By knowing the mode or scale of the chord and/or the key you're playing in, you're confining your note choices to those that are closest to the sound of the chord. By knowing the scale, you're identifying seven notes out of the chromatic scale as the closest to the sound of the chord.

TWELVE DIATONIC PROGRESSIONS

On the CD, you'll find examples in each key, so you can practice playing diatonically in every key.

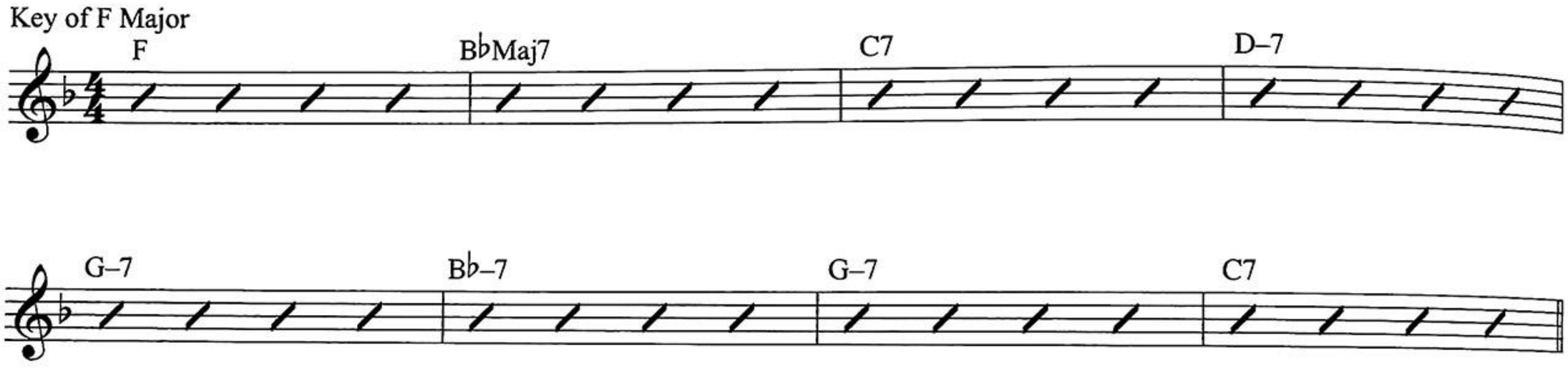
TRACK 19

Key of C Major



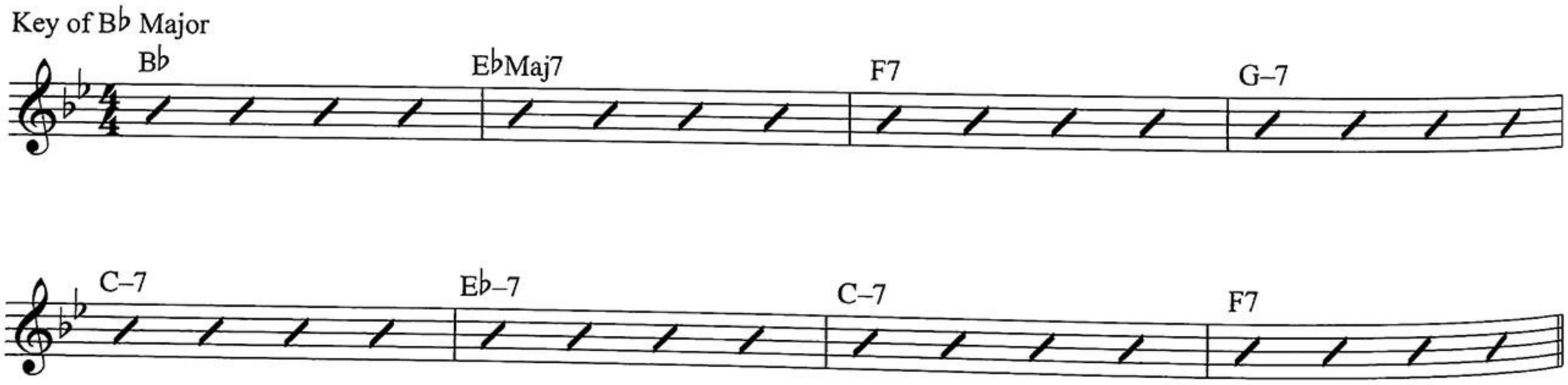
TRACK 20

Key of F Major



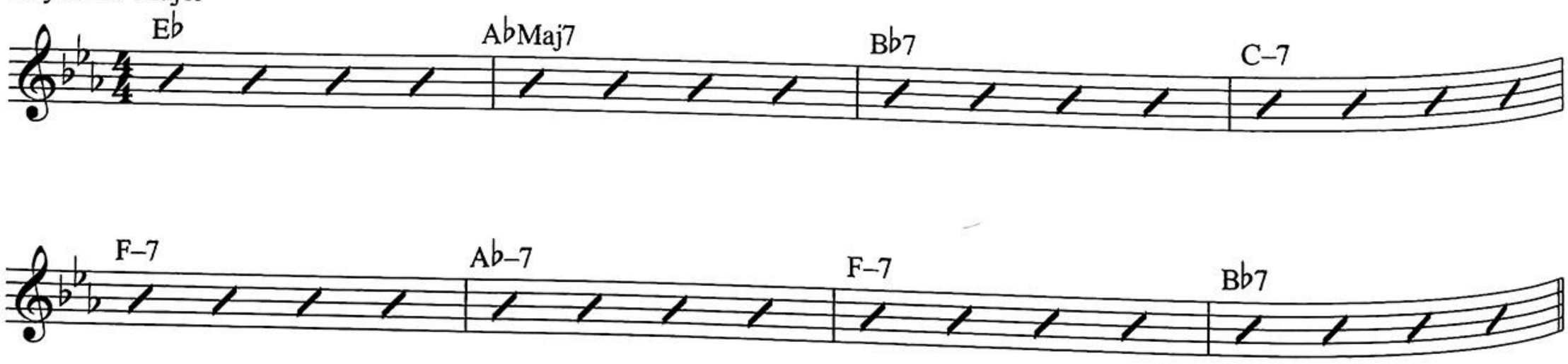
TRACK 21

Key of B♭ Major



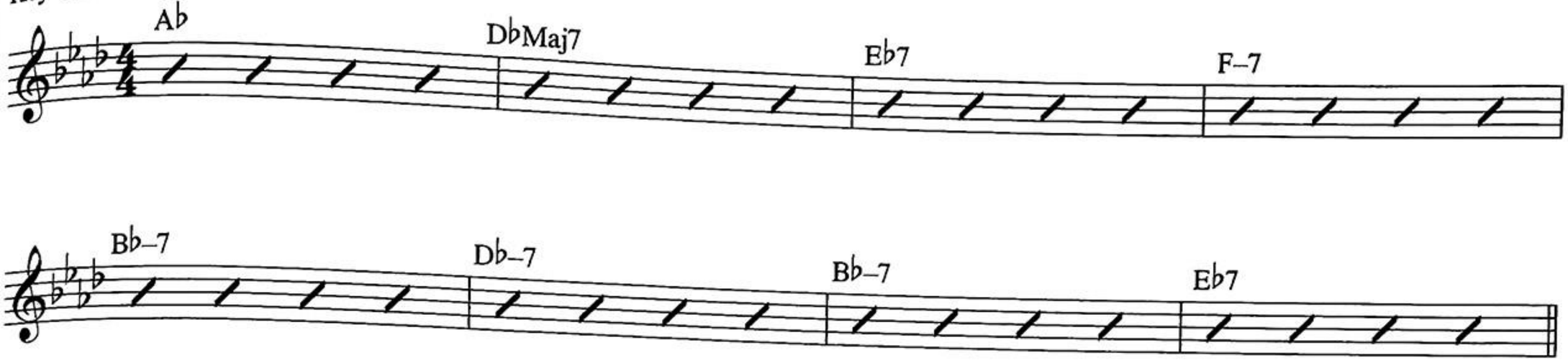
TRACK 22

Key of E♭ Major



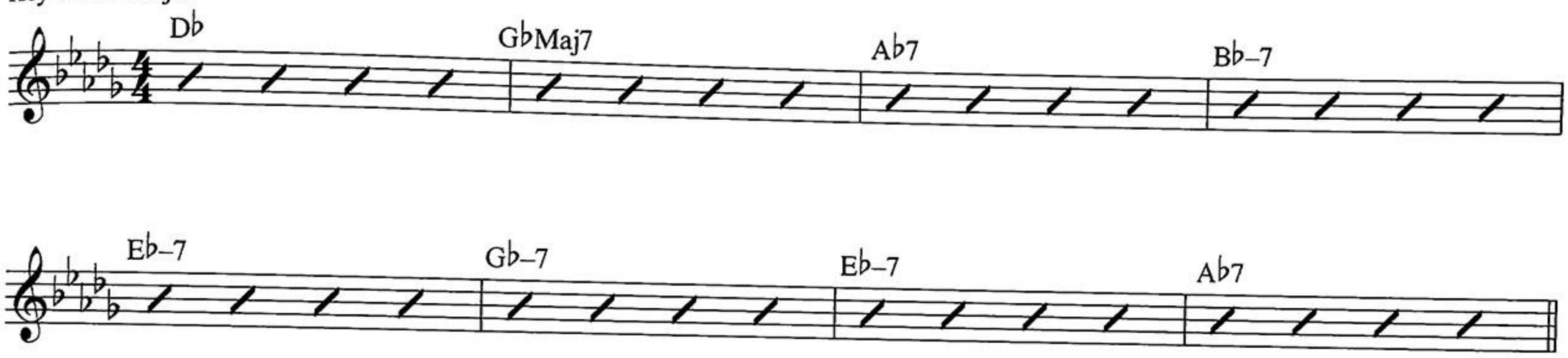
TRACK 23

Key of A♭ Major



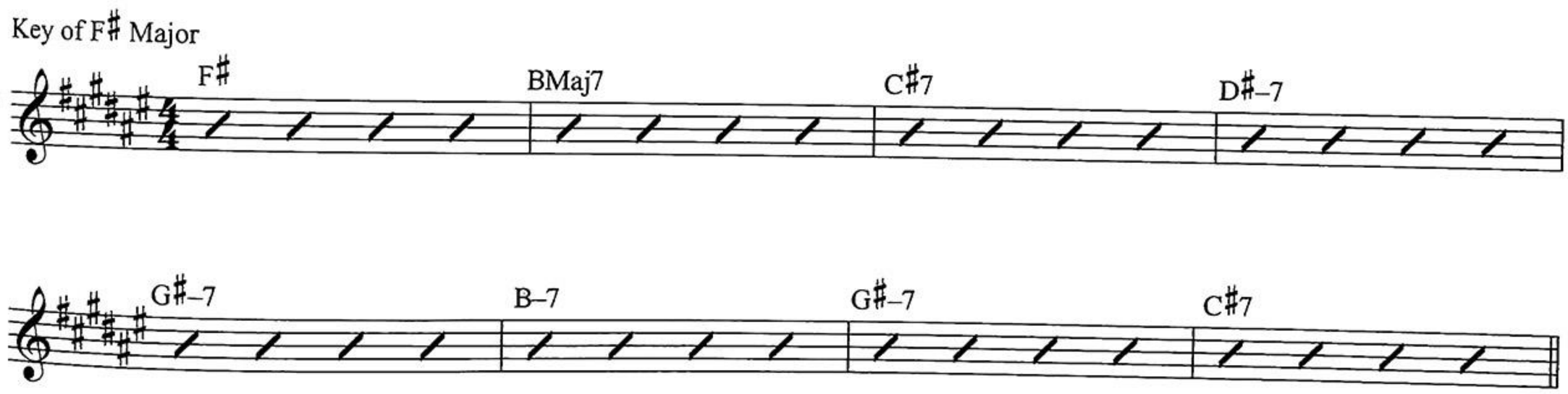
TRACK 24

Key of D♭ Major



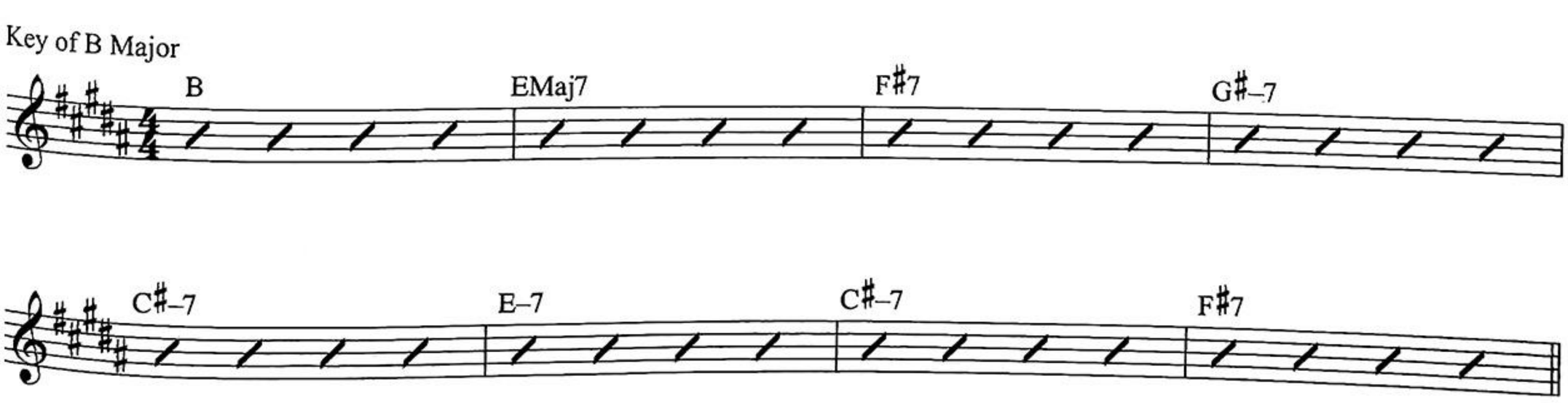
TRACK 25

Key of F♯ Major



TRACK 26

Key of B Major



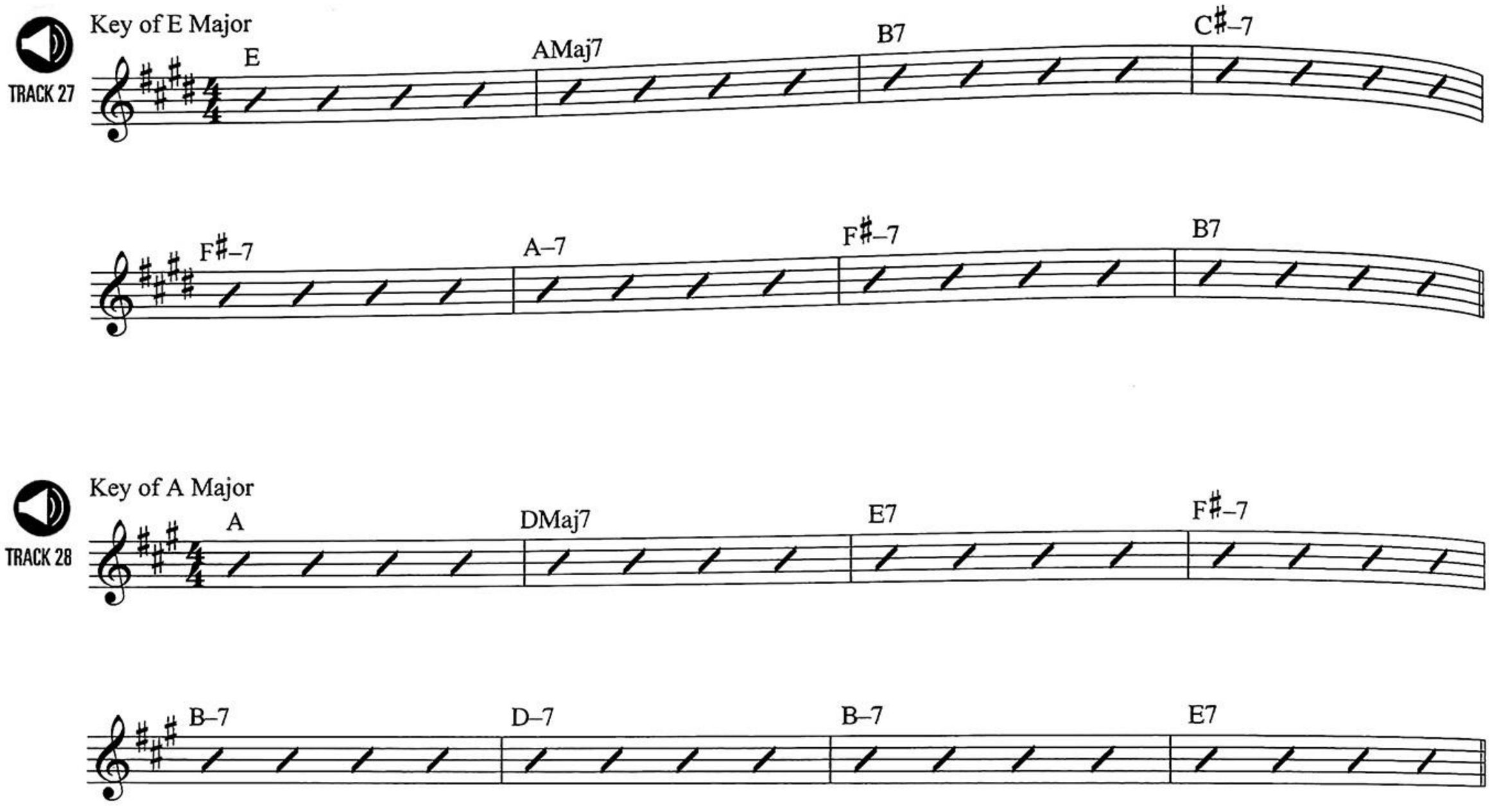


Fig. 6.2. Chord Charts for Twelve Diatonic Progressions

TRACKS 31–32

When you're ready, let's begin changing modes within a section of music. Here's a progression that moves between four chords, with two different tonal centers.

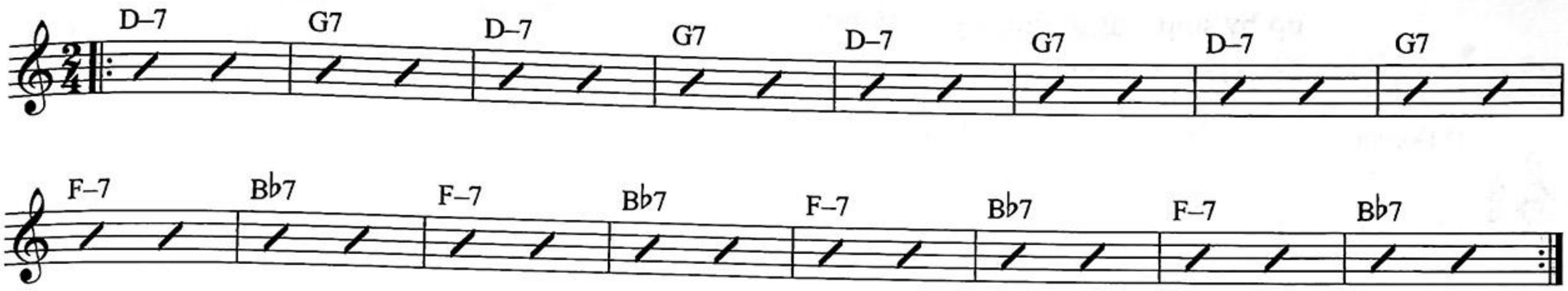


Fig. 6.3. D and F Dorian Progression

The first eight bars toggle between D–7 and G7 chords. The practiced eye recognizes those chords as being a two/five (II V) progression in C: seventh chords built on the second scale degree (D) and the fifth scale degree (G). One option is to play in the D Dorian mode (key signature of C, but tonal gravity to D).

The next eight bars toggle between an F–7 and B♭7, the same relationship as D– to G7, but up a minor third. You can still play Dorian mode over this, but F Dorian (key signature of E♭). Here are the two scales you'll use for this play-along:

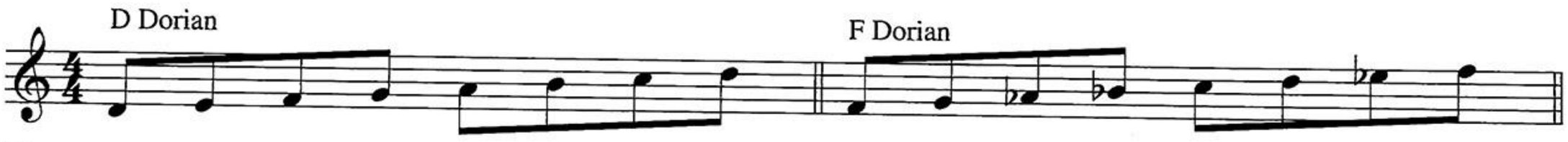


Fig. 6.4. D and F Dorian Scales

When playing this, you'll begin to feel where the modal change will happen and can prepare for it. Try sustaining a common tone over the bar line:

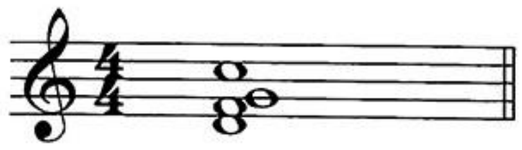


Fig. 6.5. Common Tones of D and F Dorian

Or you can approach a new modal note by step:

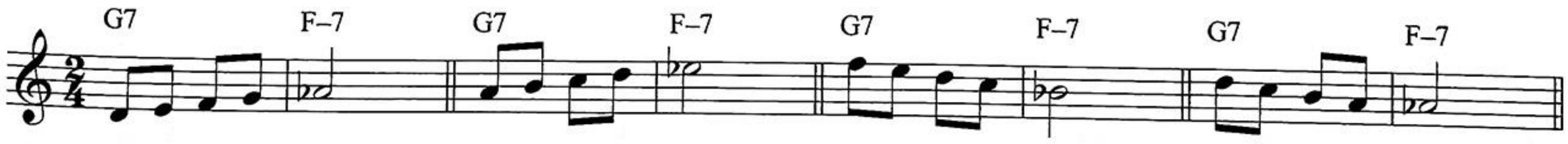


Fig. 6.6. Approaching F Dorian by Step

Practice approaching by skip:

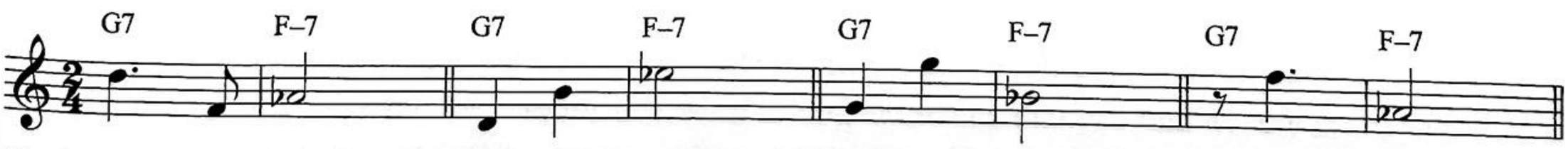


Fig. 6.7. Approaching F Dorian by Skip

Take a look at the sudden modulation from D Dorian to F Dorian from a *voice-leading* perspective, how the notes of the two scales most gracefully shift. The following example illustrates how the notes of these two Dorian scales move up by step—or in the case of common tones, remain the same—as they move from D to F and back.

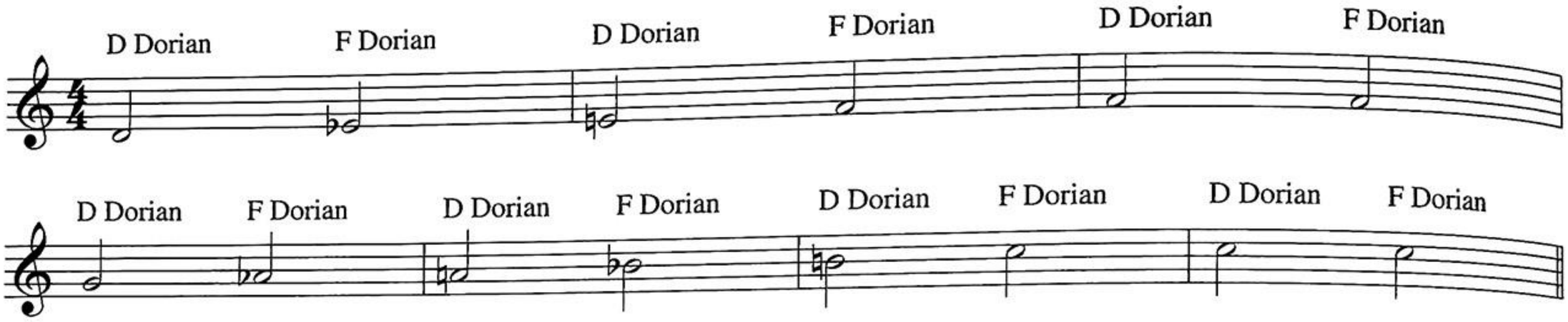


Fig. 6.8. Voice-Leading D Dorian/F Dorian

TRACKS 32–37

There are six versions of this tune on tracks 32 to 37 of the enclosed CD, so you can play it using all twelve Dorian scales.

CREATE YOUR OWN SOLUTIONS

The examples in this book are included to introduce ideas and suggestions. Create your own solutions, solutions you really like. Make a note of your favorites and enter them in your creative music journal. With each entry, you are expanding your menu of options.

Next, let's look closely at the Phrygian play-along.

With the major scale, there's a recognizable pattern of major and minor chords that occur from the tonic upward. Likewise, each mode has its own pattern of seventh chords. Here's how the Phyrgian mode looks using E as the tonal center:

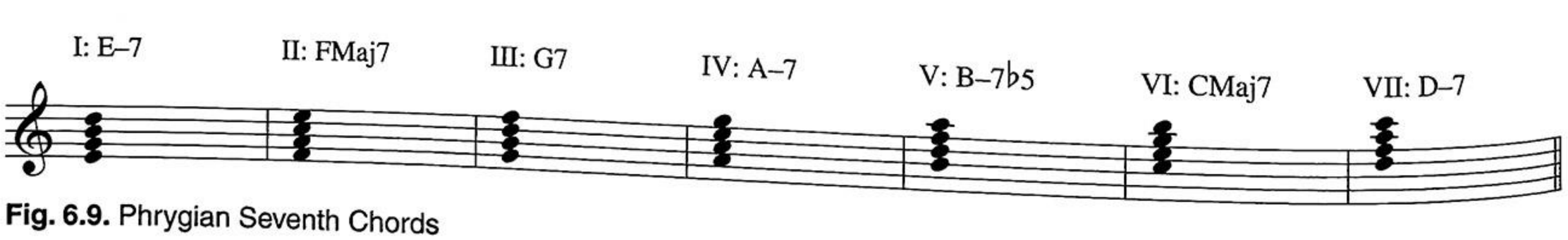


Fig. 6.9. Phrygian Seventh Chords

TRACK 38

The play-along, track 38 on the CD, uses two Phrygian scales, E and G.

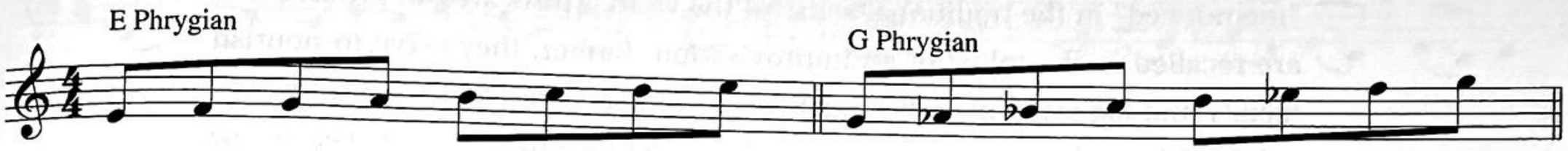


Fig. 6.10. E Phrygian and G Phrygian

Until you've internalized the sound—and intervals—of the Phrygian mode, it might be helpful to remember that Phrygian is the third mode—that is, a scale built on the major third of a major scale. So E Phrygian uses the key signature of C major, while G Phrygian uses the key signature of E♭ major.

As with the previous example, let's look at the common tones of the two scales:

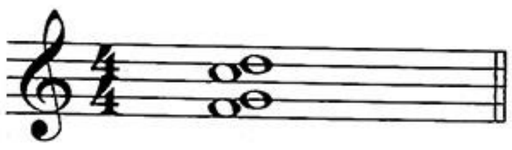


Fig. 6.11. Common Tones of E and G Phrygian

Playing the common tones through the modal shift is effective. You can sustain it through the change or hammer it out rhythmically, or keep referring to it even as you play other modal options.

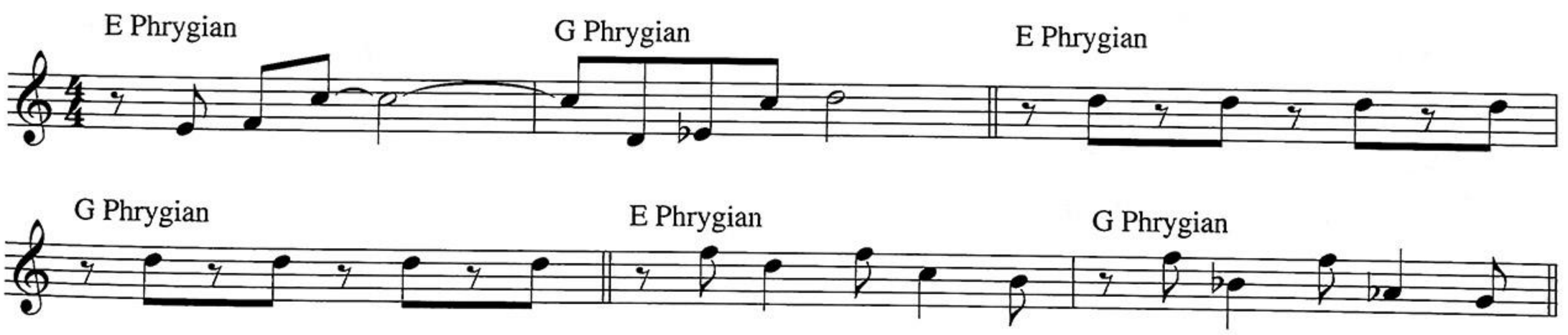


Fig. 6.12. Common Tone Usage, E Phrygian to G Phrygian

All the above are examples of how exploring these modes can lead you to greater understanding, musical sensitivity, and enjoyment. The goal is to present these possibilities as ways to ignite your creative curiosity. By working slowly, holding each sound or modulation in your attention, these sounds and relationships are working their way into your personal musical vocabulary.

These are subtle lessons, and the perceptions gained carry over to other applications as well.

As you explore the relationships between different modes, you may very well find that you are creating a musical setting or melody that you find worthy of notating and entering into your journal. These sketches could be the foundation for a new composition or starting points for improvisations with other musicians.

To further build the infrastructure of diatonic melodic play, it's helpful to create and explore some melodic formulas. These formulas are not to be "memorized" in the traditional sense of the word. These are not phrases that are recalled in the midst of an improvisation. Rather, they serve to nourish facility and log some melodic "quality time" in each key. We are beading the colors of the scale together in various orders, internalizing the effect of each new combination. In the process, we are uniting those sensations with the patterns of motions in our fingers, our *muscle memory*.

You can move through a scale by step or by skip, up or down. There exists a dizzying array of melodic contours. You can start with a few familiar patterns, then some that may seem new to you. You can create many, many more. The more unique your practice regimen, the more unique a player you will be.

All the following examples are in C Ionian. Take one, get it under your fingers slowly, play it in all keys, melodic and harmonic minor, and try it in other modes. Play these with different rhythms and meters, start the patterns on the pickup, or the second or third eighth of the measure. Try the suggested slurs, but again, mix these up. Try different approaches, ornaments, embellishments—anything you can to explore and discover the sounds, snippets, and seeds that attract you.

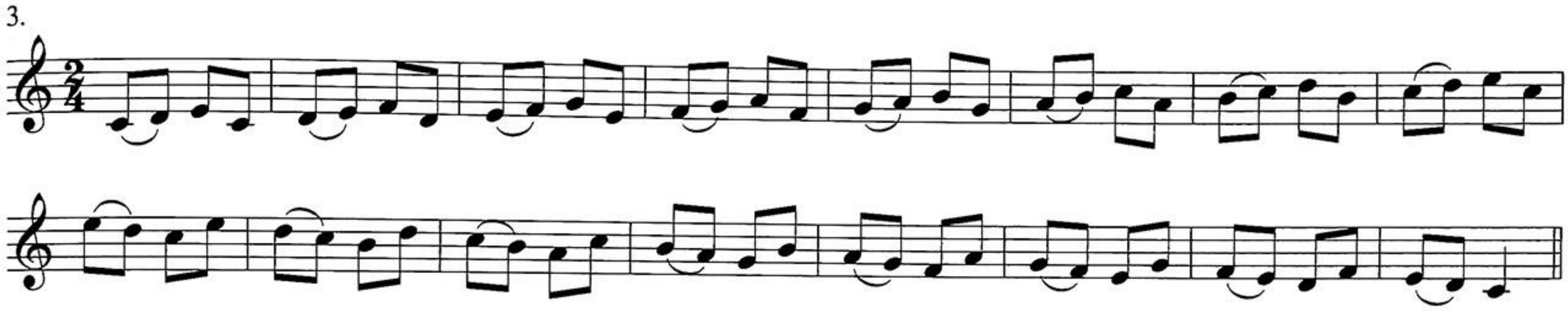
OCTAVE TRANSPOSITION PRACTICE

One of the realities of creative music-making is that if and when you encounter sheet music, it will often be in treble clef and at concert pitch. For bass clef instruments, it's great practice to transpose down an octave (or two when necessary or desired). For transposing instruments it will be a mark of your professionalism to be able to transpose at sight.

1.

2.

3.



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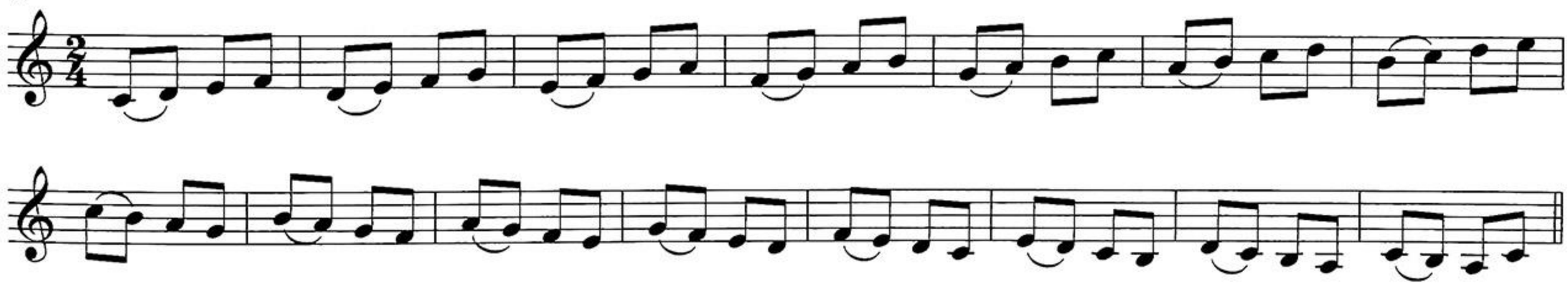

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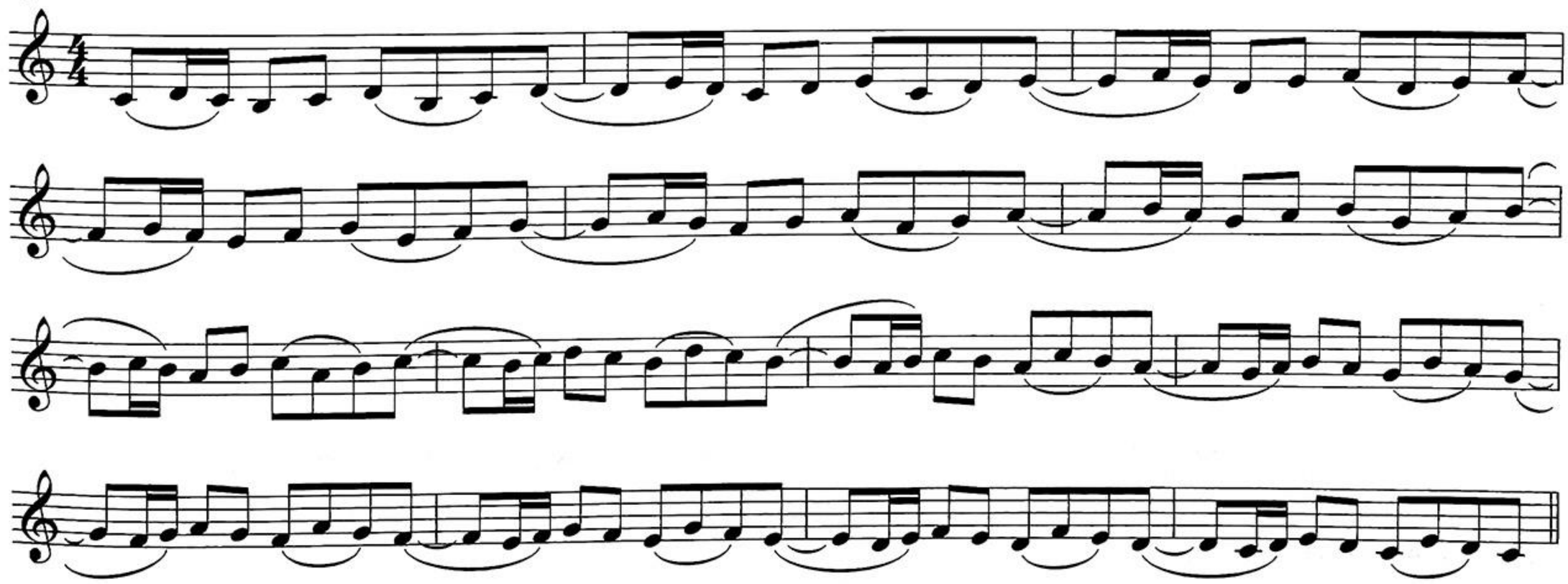

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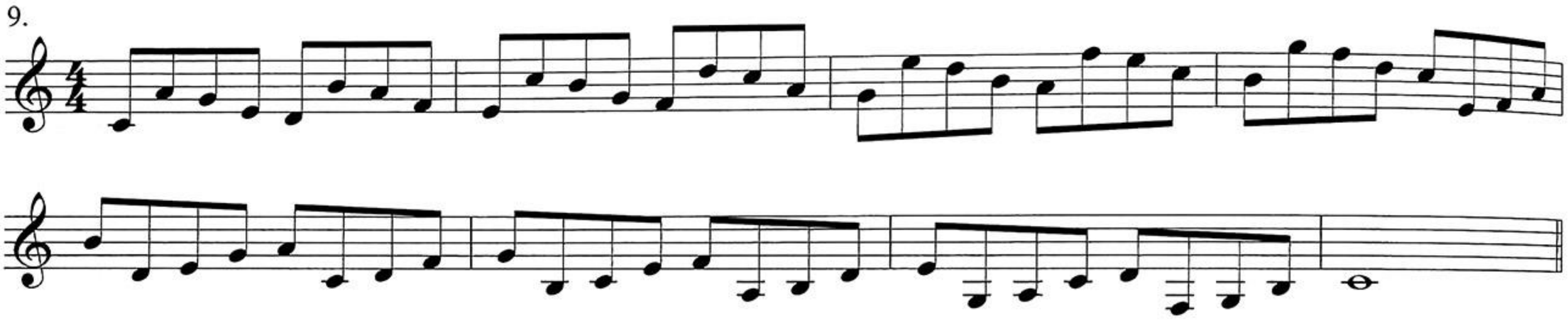

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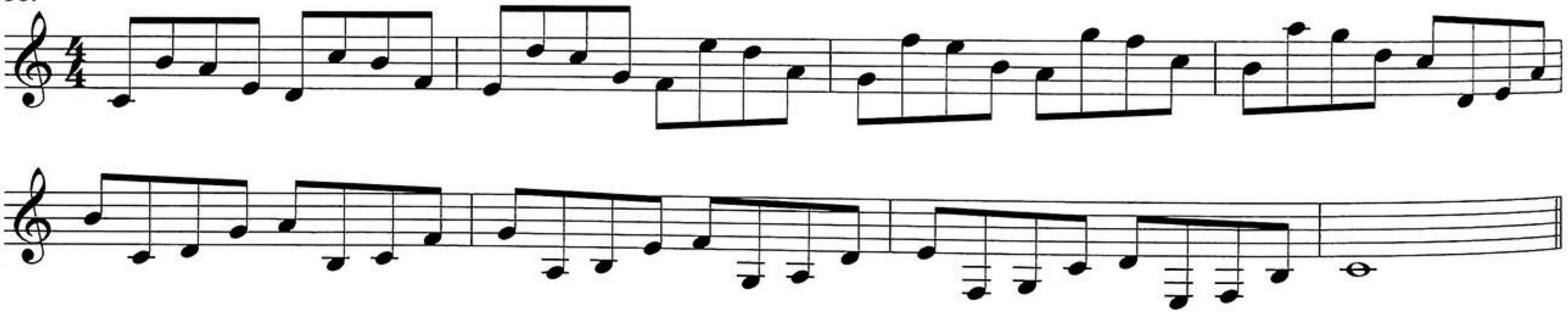

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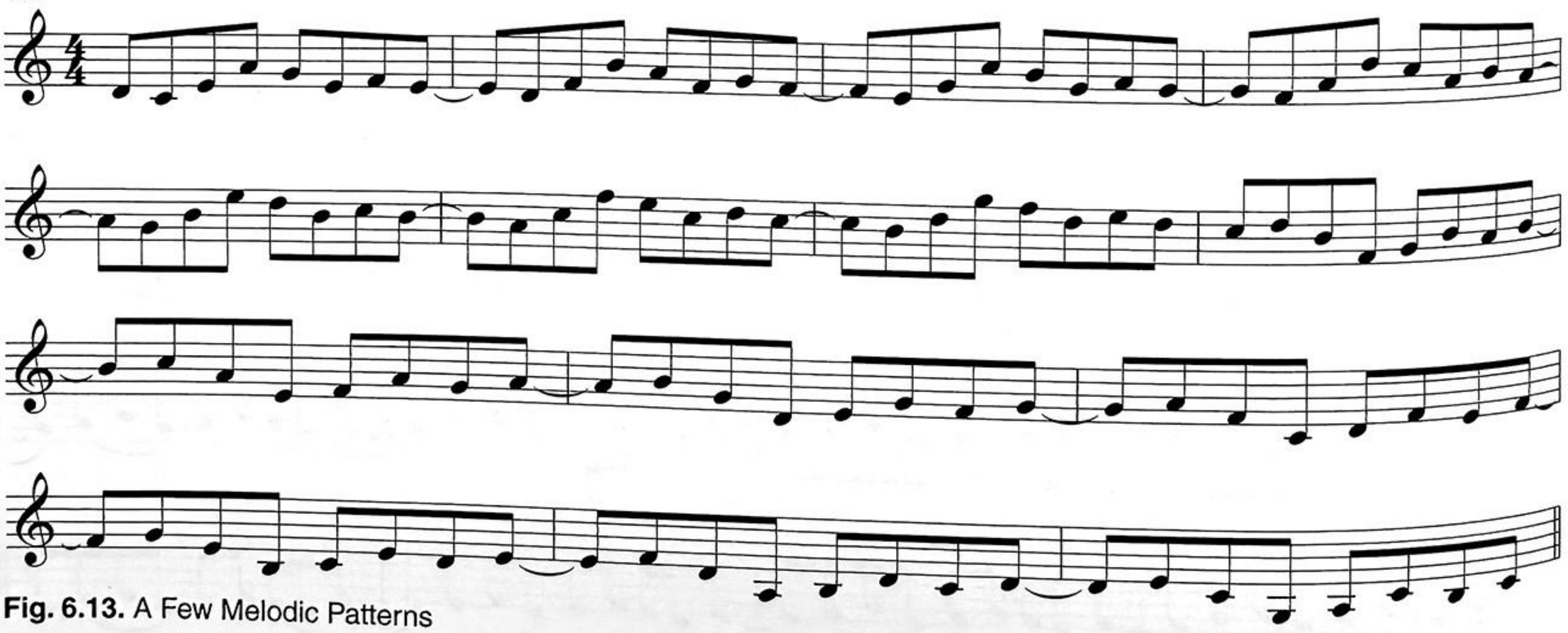


Fig. 6.13. A Few Melodic Patterns

CHAPTER 7

Hocketing: Sharing the Rhythm Role

Hocketing is a centuries-old musical concept. In early notated vocal music from Europe, hocketing was the technique of dividing a melody between two or more voices. Using rests in the parts, the prominent melodic voice would shift from part to part. (The word "hocket" comes from the French word *hoquet*, which means hiccup!)

The handbell choir is a good example of hocketing in action. Each player is responsible for two notes—one bell in each hand—played in service to a composed line.

While its origin in classical music is melodic, and the name comes from 13th century French vocal music, hocketing has been in use far longer as a rhythmic device in Africa and Indonesia. Hocketing provides an exciting model for interactive rhythmic play, and it is used widely by contemporary composers and arrangers. It can be used in improvising, too, to create energy and a conversational quality within an accompaniment.

Here's what you might call a *perfect* hocket. The two parts are rhythmically identical, except they begin at different places in the bar.

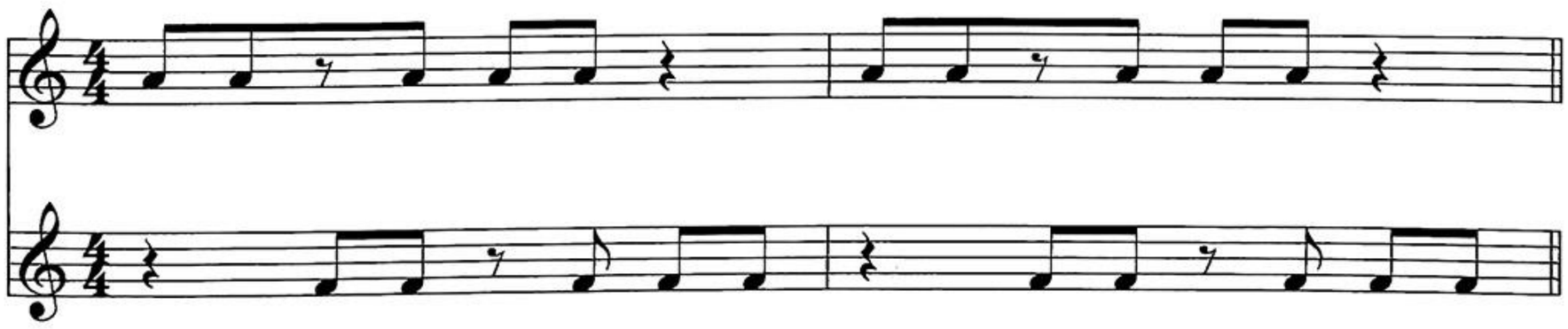


Fig. 7.1. "Perfect" Hocket

Both parts feature rests (hiccups), but put them together and a flowing stream—or *ostinato*—of eighth notes is created. This simple technique is brilliant for at least two reasons:

1. The sound color of the resulting ostinato is always shifting. Even if the players are playing the same instrument and the same note, there will be differences in color and articulation.
2. All musicians will differ or falter slightly in relation to a pulse. For players to lock in to a hocket, intense listening and engagement is required, resulting in palpable energy.

Here's another example of a perfect hocket:

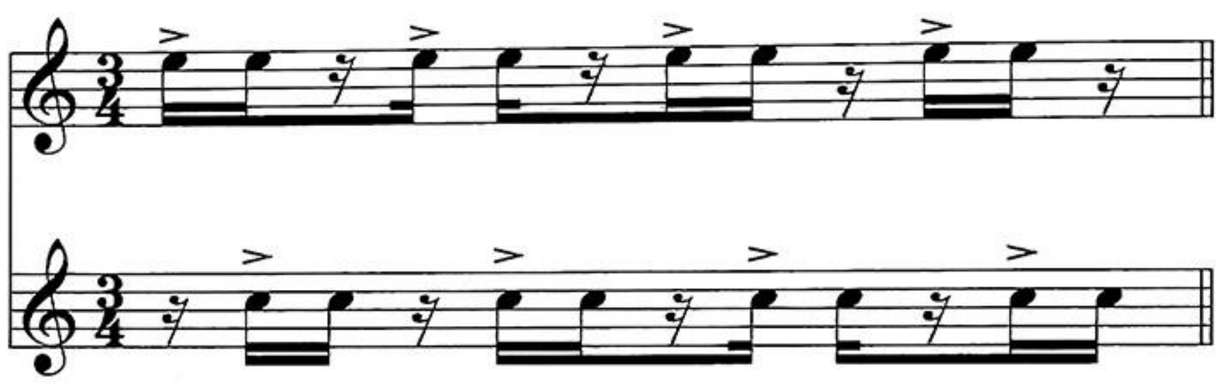


Fig. 7.2. Four-against-Three "Perfect" Hocket

This one features some additional interest and energy due to the polyrhythm. It's a three-sixteenth (dotted eighth) pattern—note, note, rest—that flows through the bar of three quarter notes. If you accent the first note of the pattern, you hear more distinctly the four against three: four dotted eighths against three quarter beats.

The pattern creates internal accents that change throughout the bar, and that's just the top part! Adding the second part removes the hiccup from the ostinato and adds yet more internal, polyrhythmic accents.

You could add a third part to the above, starting the pattern on the third sixteenth of the measure.

Much of what I know about part writing is informed by hocketing. It's fascinating to construct these propulsive entities. And it's great fun to reflect the values of hocketing when improvising in a group.

It's enjoyable and instructive to improvise duets that are only about rhythm and hocketing. When setting up an improvised interactive rhythm, the challenge is to leave space while still conveying the beat and/or meter unambiguously. Since you want to project your rhythmic intention with your instrument—not by tapping your foot or counting out loud—you might want to avoid a lot of syncopation in your initial "offer."

It can be helpful to make this initial offer a consistently repeating pattern so your partner can get a clear picture of your intention. Once you're locked in together, you can start to vary it by adding new coloristic or textural elements, or changing your initial rhythmic template while still leaving space.

HOCKETING PRACTICE

The "perfect" hocket is only a guiding principle when improvising. Once you understand the concept, use it to create energetic exchanges and interlocking rhythms with your partners without regard to their "perfection." If concepts don't yield positive results for you, abandon them in favor of what does. You can always return later to explore them further.

Since the point is hocketing, not harmony, don't concern yourself with keys or modes at first. You can use one note effectively, or random notes, or even non-pitched sounds until you get the flow going. Later, you can suggest tonal centers or modes, or simply let your ear lead you.

TRACKS 39–43

Here are some effective starting offers to an interactive rhythm game, included here only for example. You can practice responding to these with the CD (tracks 39–43).

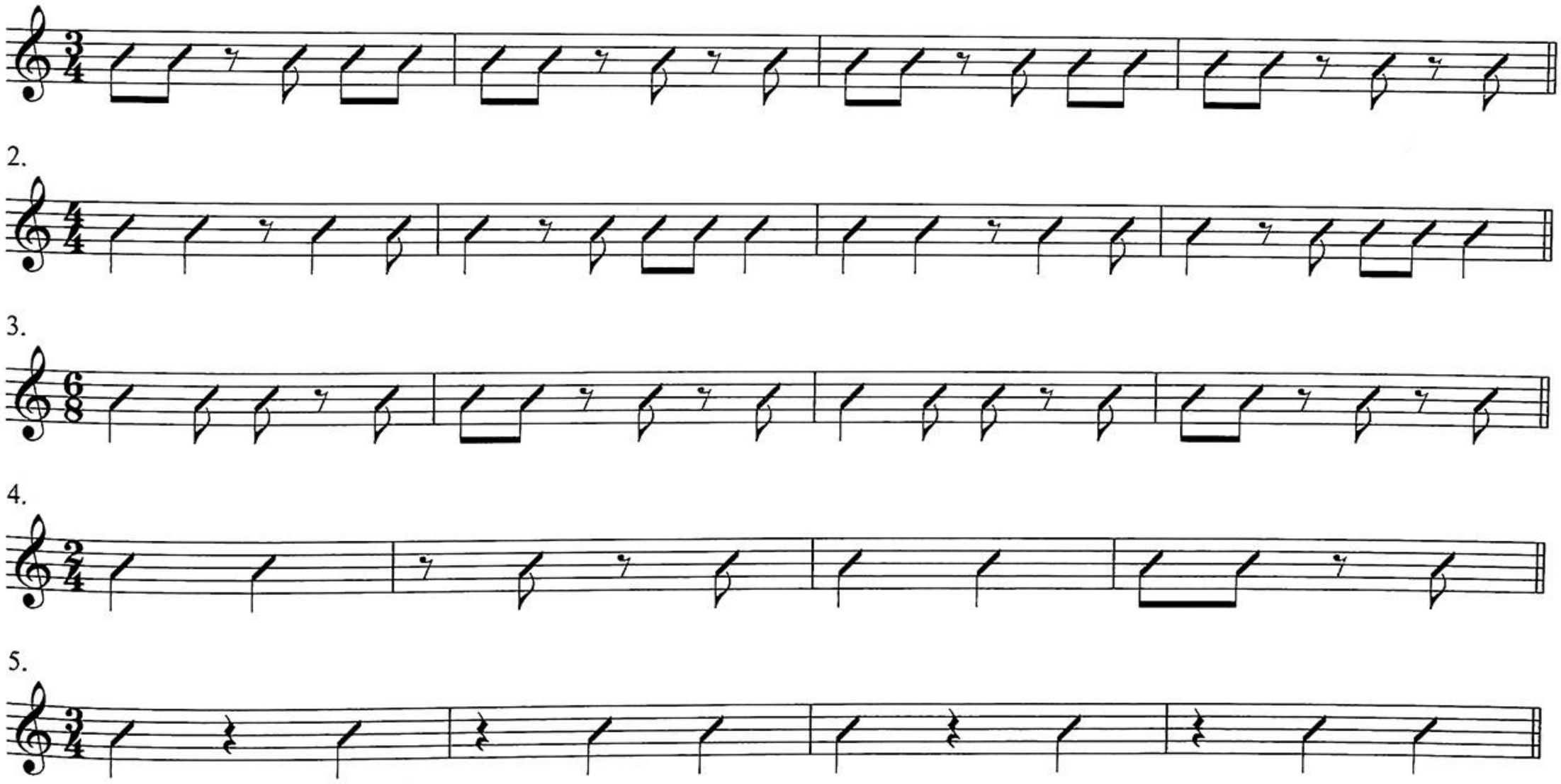
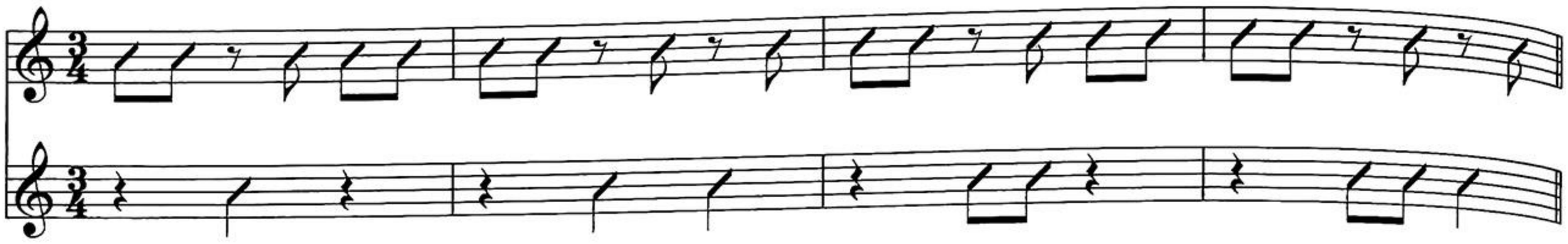


Fig. 7.3. Five Ideas for Hocketing Practice

The challenge for you as the responder is to notice where the spaces in the offer are, and to use those to design your part. When responding, match the general color and texture of the first part. You might think of the two parts as one thing, one identity—a kind of dynamic conversation between two matched voices.

Here are some possible responses to the preceding exercises:

1.



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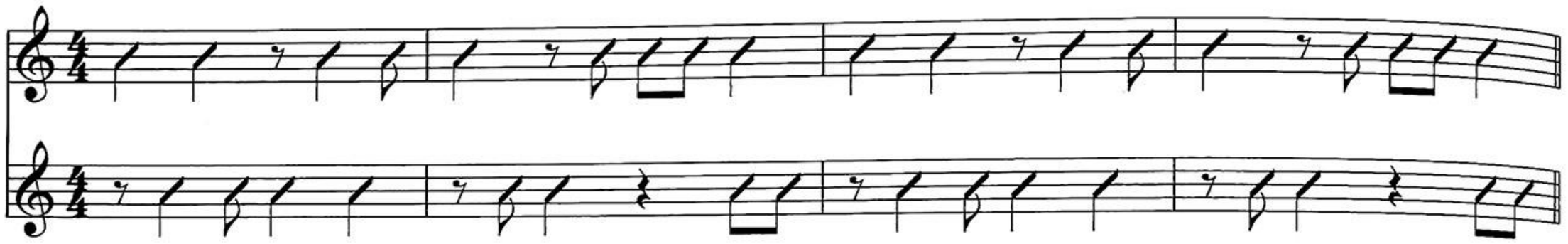

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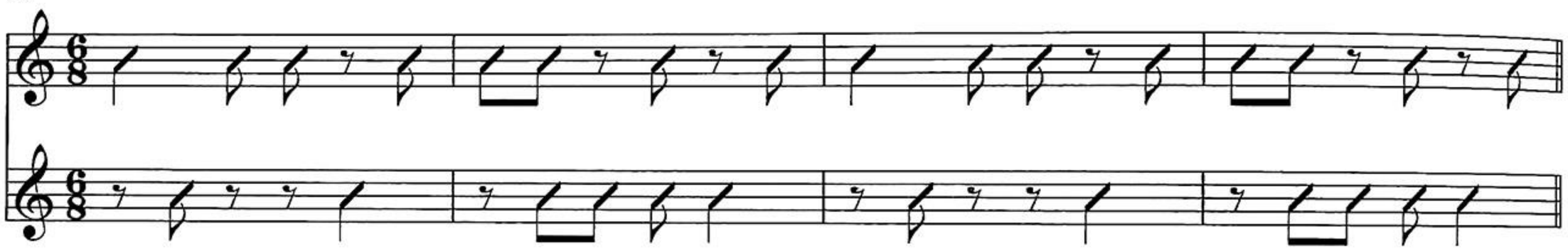

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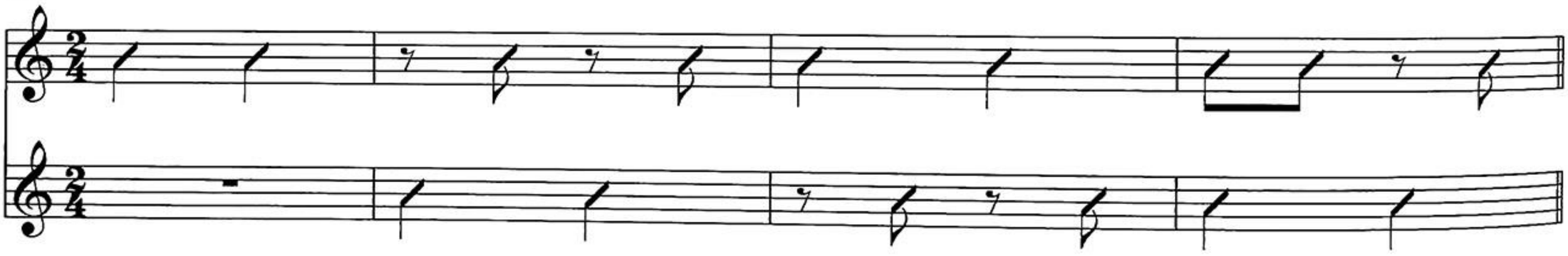

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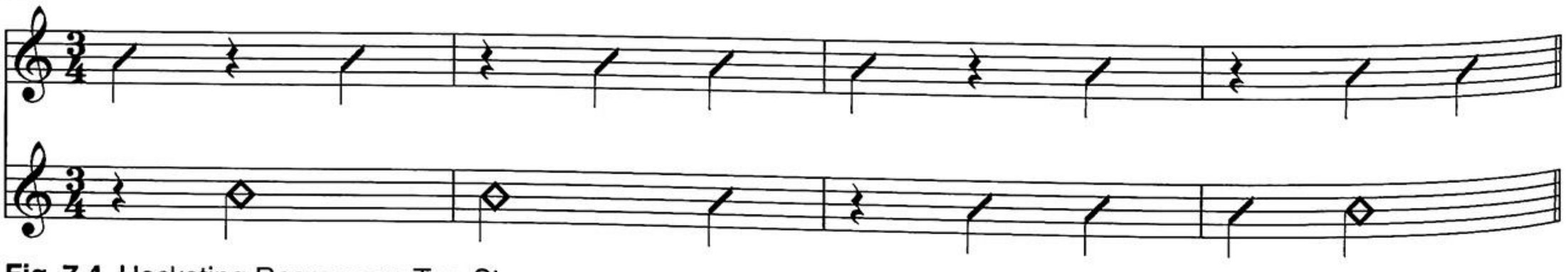


Fig. 7.4. Hocketing Responses: Two Staves

Assuming the second player ascertains the meter and feel of the offer accurately, he or she is then free to use a bit more syncopation. But keep in mind that the value to strive for is general equality in the parts.

Adding more players to the mix makes it even more colorful and exciting, though each additional player will have to leave more space and show more cunning in designing parts.

CHAPTER 8

Chords, Guide Tones, and V I's

Chord symbols are common ways of referring to various groupings of tones. A chord generally is crafted by piling thirds atop each other. C E G—a root, a third, and a fifth played simultaneously— equals a chord.

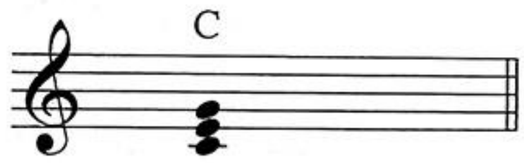


Fig. 8.1. C Major: 1, 3, 5

This chord features a major third (two whole steps) between the root and the third, making it a major chord or *triad* (three notes). Let's document the most common triads, using C as an example.

A *major* triad, as in the example above, features the root C, which identifies the chord as a "C" chord; a major third E (two whole steps above C, the third note of the C major scale), and a fifth G (fifth note of the C major scale). Chord symbol: C.

Minor triad: root, a minor third (one and a half steps above the root), and a fifth. Chord symbol: C–.

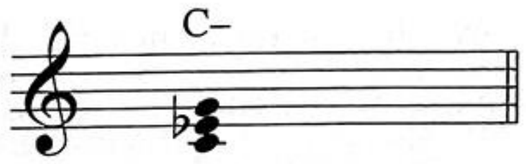


Fig. 8.2. C Minor Triad

Diminished triad: root, minor third, diminished fifth (three whole tones—*tritone*—above the root). Chord symbol: C° or Cdim.

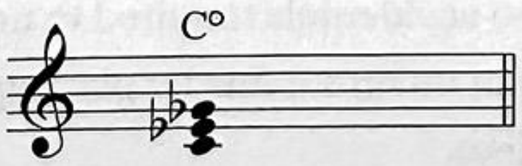


Fig. 8.3. C°

Augmented triad: root, major third, augmented fifth (four whole tones above the root). Chord symbol: C+.

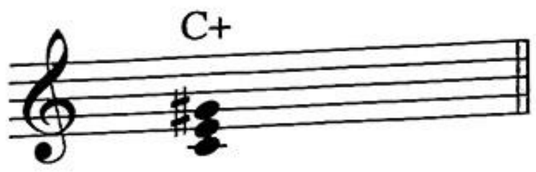


Fig. 8.4. C+

It's useful to be familiar with playing these triads as multi-octave arpeggios. Doing so will internalize the sound and feel of these chords, but also bring certain technical issues to your attention. So much of music is scales and arpeggios! The quickest way forward is to deal with them directly.

By adding additional thirds, you create seventh chords, ninth chords, elevenths, thirteenths, and on and on. Since seventh chords are so common in jazz and popular music, let's begin there.

A good way to understand the variety of seventh chords is to look at them in the context of the major scale. When you play seventh chords on each successive note of the major scale, you find the same sequence of chord qualities:

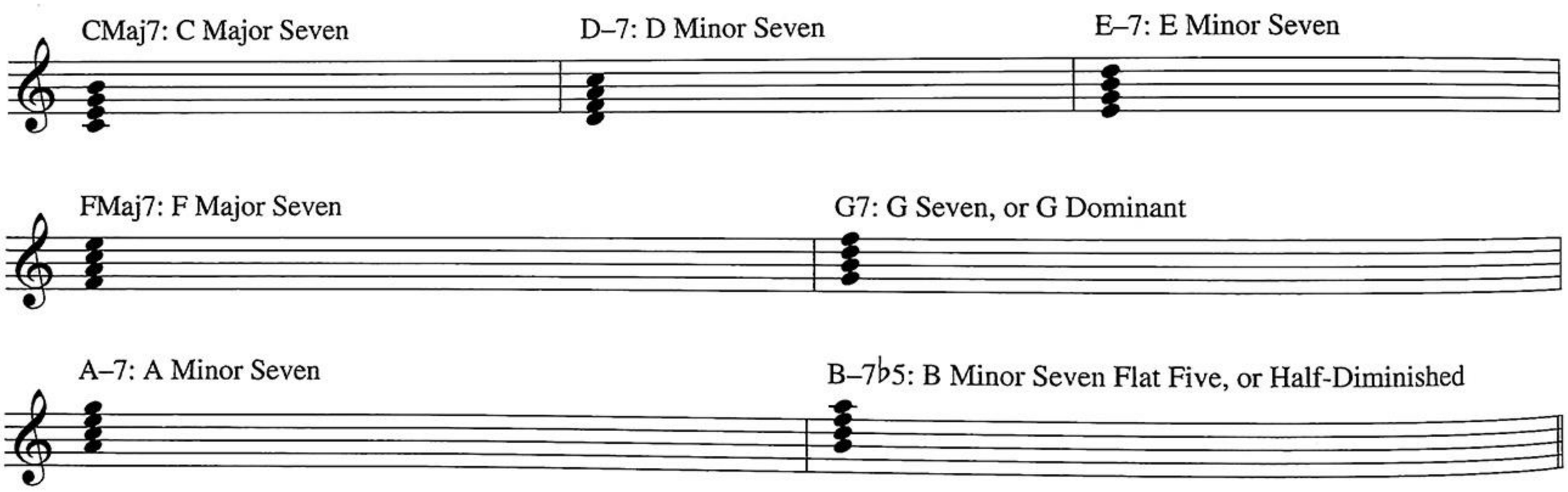


Fig. 8.5. Diatonic Seventh Chords

You'll notice that there are four distinctive seventh chord qualities in every key: two major seven chords featuring major thirds and major sevenths, three minor seven chords featuring minor thirds and minor sevenths, one dominant seven chord featuring a major third and minor seventh, and one minor seven flat-five chord (also called a half-diminished chord) featuring a minor third, a flatted (or "diminished") fifth, and a minor seventh.

All these chords share the attribute of being made up of thirds piled on diatonically. There are no accidentals required to notate them when they appear in their home key. We can integrate this by playing and singing these chords as arpeggios in all twelve keys.

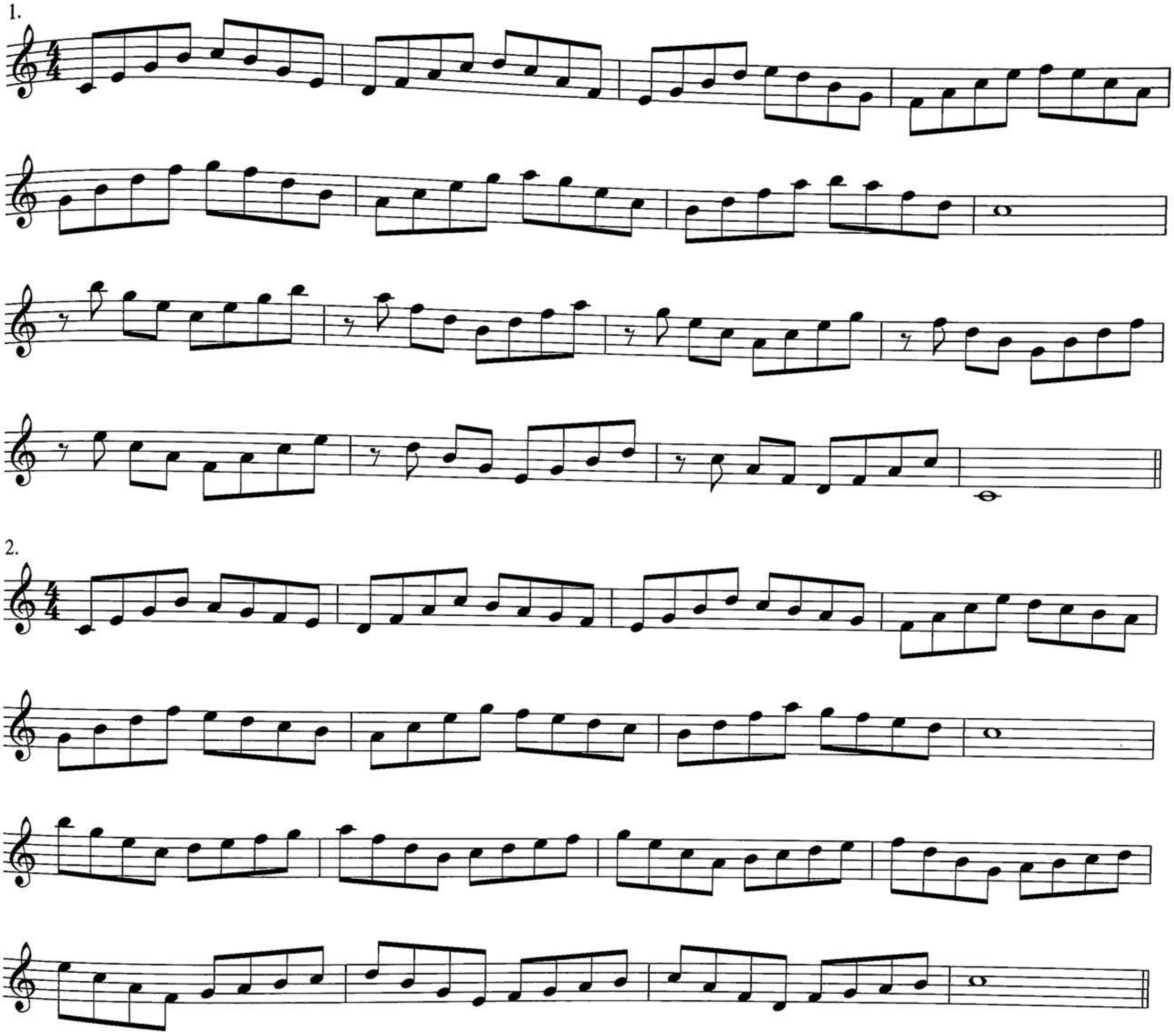


Fig. 8.6. Diatonically Occurring Seventh Chord Exercises

Now, let's change the order of the chord tones, creating some melodic play. Make up your own combinations of intervals, taking into consideration what feels comfortable on your instrument and what you like to hear.

Here are two examples:

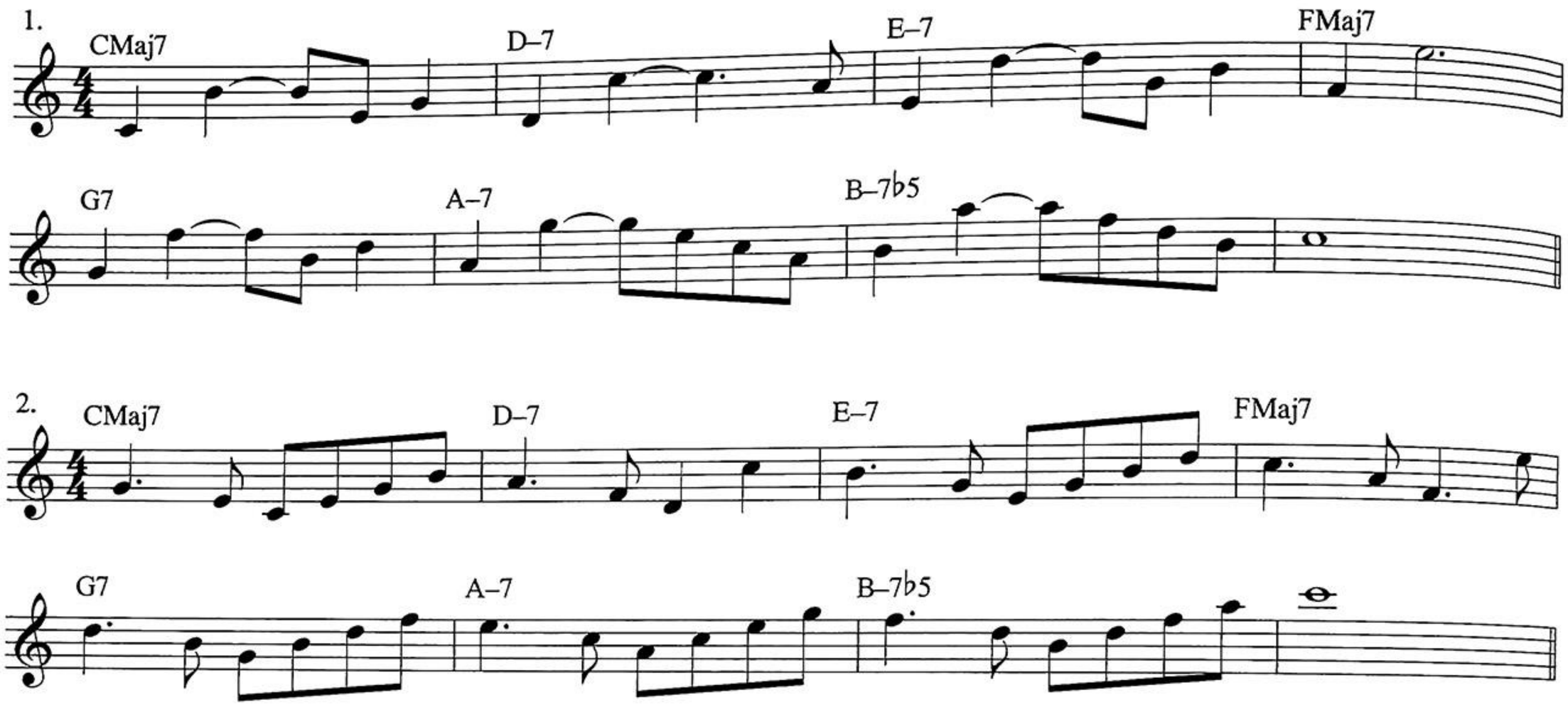


Fig. 8.7. Melodic Seventh Chord Arpeggios

The arpeggios above, and the melodic seventh arpeggios of example 8.6, can be practiced with a drone in all twelve keys. When approached consistently, a few minutes a day will yield great familiarity and freedom with these.

INVENTING YOUR OWN EXERCISES

Invent your own exercises and melodic solutions to the various ideas presented in this book and sing as much as possible. This is the path of the creative musician.

The chords you have been practicing have roots, thirds, fifths, and sevenths. You've probably noticed that the thirds and sevenths are the notes that really define the chord, and these tend to be strong melodic notes. For example, if you play the note E along with a sustained C, the E—the major third above the C—determines the tonality of the chord. For this reason, many great melodies feature the thirds of the chords that support them. The seventh has that quality as well, and there is a term—*guide tones*—that applies to the thirds and sevenths of chords.

By practicing the guide tones of a chord progression, a player can quickly integrate a sense of how the harmony moves. This is also a great way to integrate an awareness of chords.

GUIDE TONES

Guide tones = the thirds and sevenths of chords.

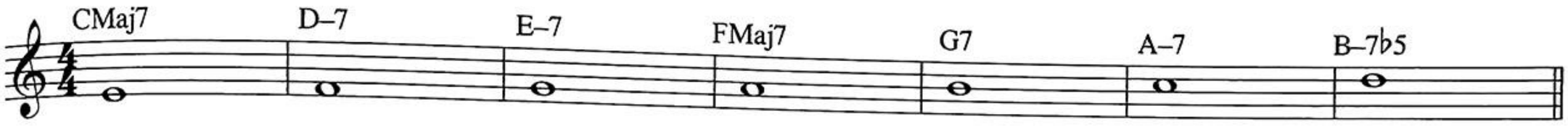


Fig. 8.8. Thirds of Diatonic Seventh Chords in C

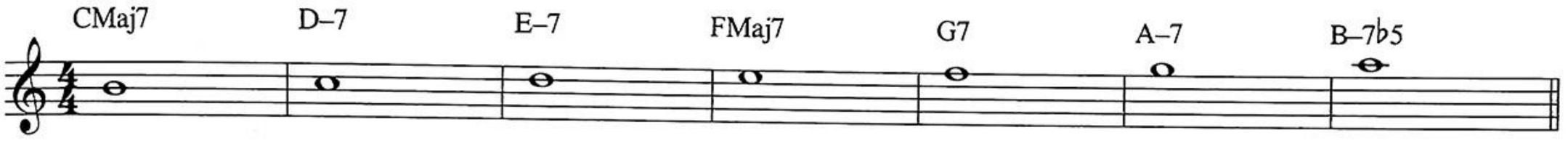


Fig. 8.9. Sevenths of Diatonic Seventh Chords in C

Now look at "Falling Leaves" again:

Falling Leaves

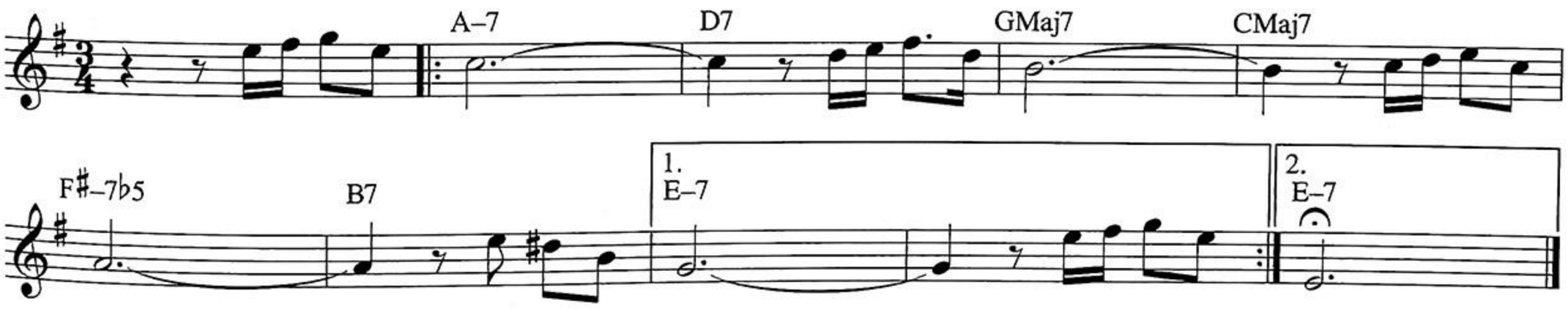


Fig. 8.10. "Falling Leaves"

You see that the melody features the thirds and sevenths considerably. The first sustained C is the third of the A minor chord; then, that C becomes the seventh of the D7, etc.

Go through any tunes you like, and play the thirds, then the sevenths, then both. When you're ready, add a metronome or backing track, always at a tempo that makes you feel comfortable.

SLOW IT DOWN

If you find your brain freezing up, that's fine—just practice it slower. You're creating important new synaptic circuits in your brain (called learning!), and you don't need to associate tension or fear with the material. Find your own pace. Stay comfortable, and breathe. Take note of the difficulty or ease with which you approach the exercise, but avoid drawing any conclusions regarding your abilities or the pace of your progress.

When you're ready, try connecting the thirds and sevenths of chords with scales. Approach each guide tone with ascending or descending scale motion. In figure 8.11, you see that the scales used remain in the Aeolian mode, natural minor in E, except for the B7 bar: *harmonic* minor to include the D♯, the raised third of the dominant chord.

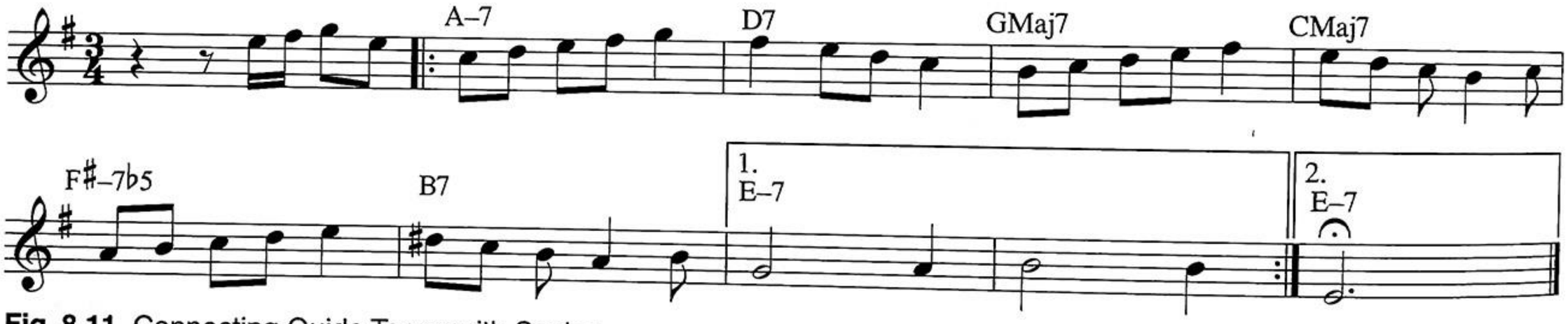


Fig. 8.11. Connecting Guide Tones with Scales

As we noticed in "Falling Leaves," the sevenths often resolve downward to the third of the next chord. The rules of good voice leading include this attractive motion; the seventh of a dominant chord resolving to the third of the tonic chord is the most common example.

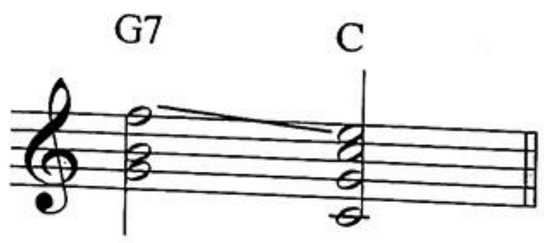


Fig. 8.12. Seventh of Dominant Chord Resolving to Third of Tonic Chord

To express this in a melodic line, here is a simple arpeggiated figure that captures this sound very well. Arpeggiate the seventh chord from the root to the seventh, then resolve downward to the third of the next chord, continuing down to the fifth of that chord.

Fig. 8.13. Seventh to Third, Melodically

Continue this pattern through all twelve keys. If you continue this dominant-to-tonic relationship, and break up the melodic pattern a bit for musical phrasing, you might end up with something like:

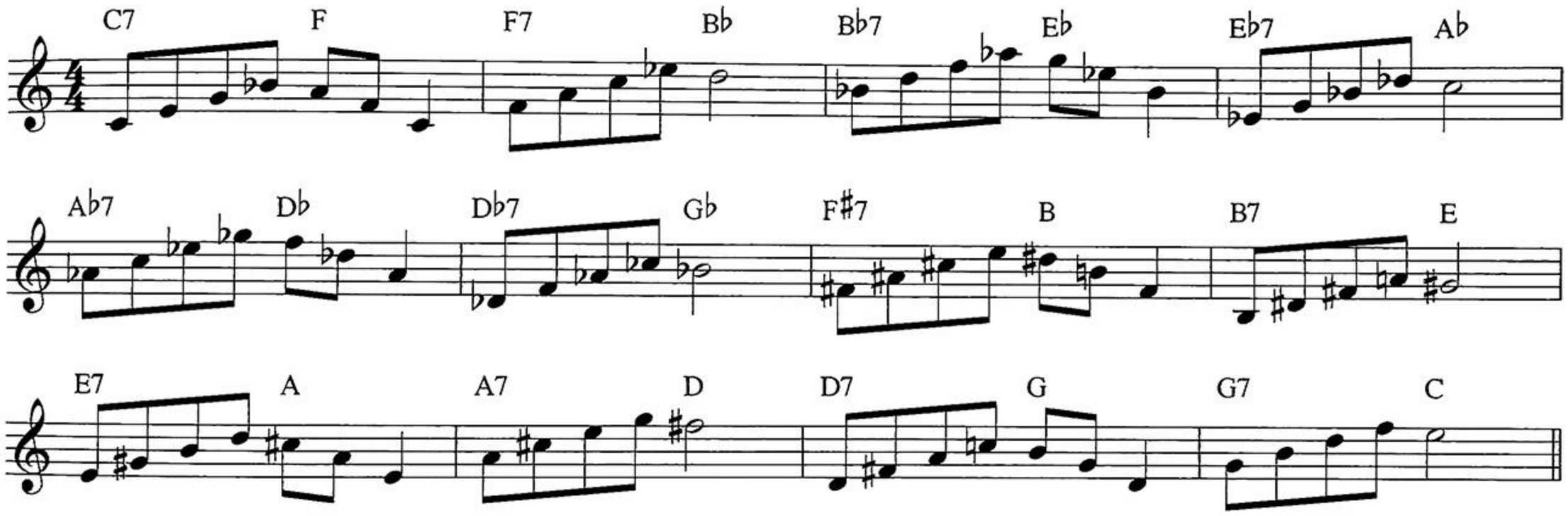


Fig. 8.14. Seventh to Third Exercise

The other strong voice leading motion in this progression is the third of the dominant chord resolving upward to the root of the tonic chord.

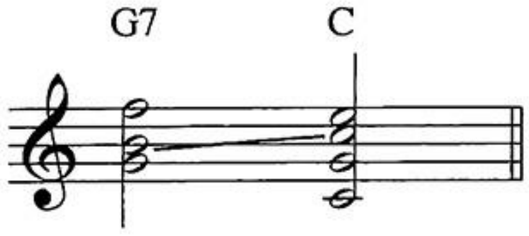


Fig. 8.15. Third to Tonic

Let's adapt the previous example to reflect this sound in a melodic way:

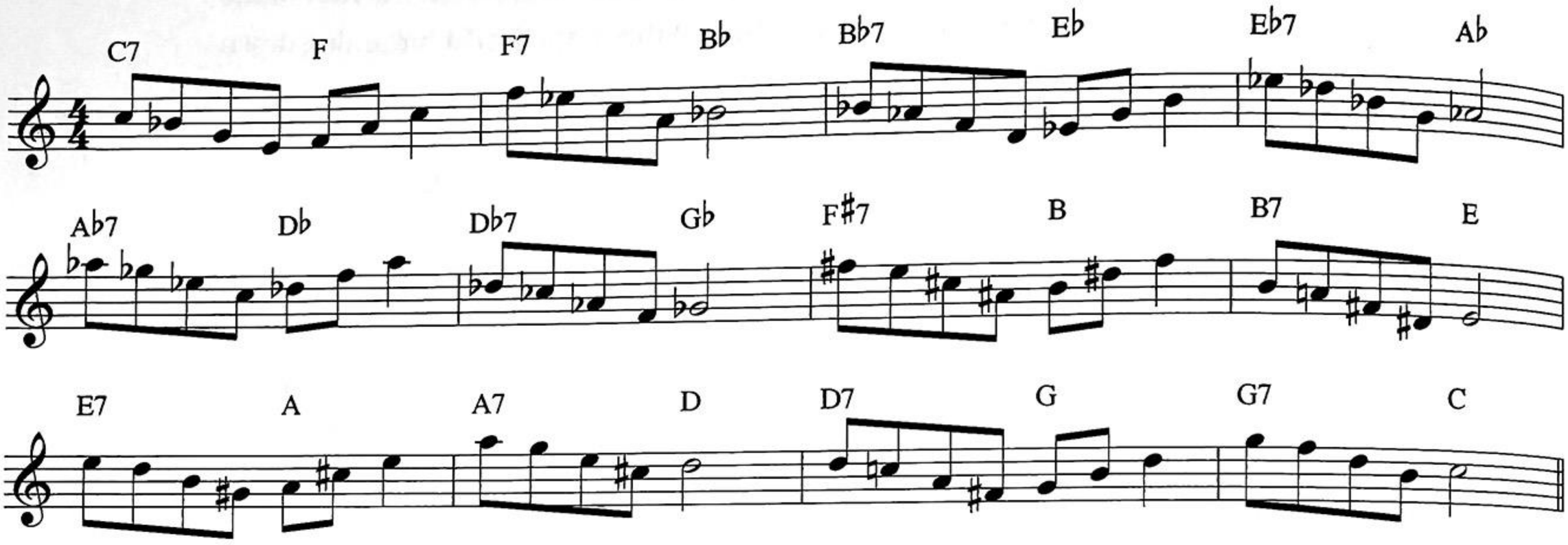


Fig. 8.16. Third to Tonic Exercise

SAY CHORD NAMES ALOUD

Say the name of the chord you're outlining out loud: "B♭7, E♭; E♭7, A♭," etc. Repeat consistently: You're ingraining the sound, the fingering, and the name of each chord.

The dominant-to-tonic chord progression, also called a *five-one cadence* (V I), is probably the most common in all of music, so it deserves our playful and respectful attention. You will notice that if you continue this motion—changing each tonic to a dominant and resolving it down a fifth—you will be modulating through all twelve keys. This circle is represented by the following diagram, called the *circle of fourths* (or fifths, if G is in the 1:00 position):

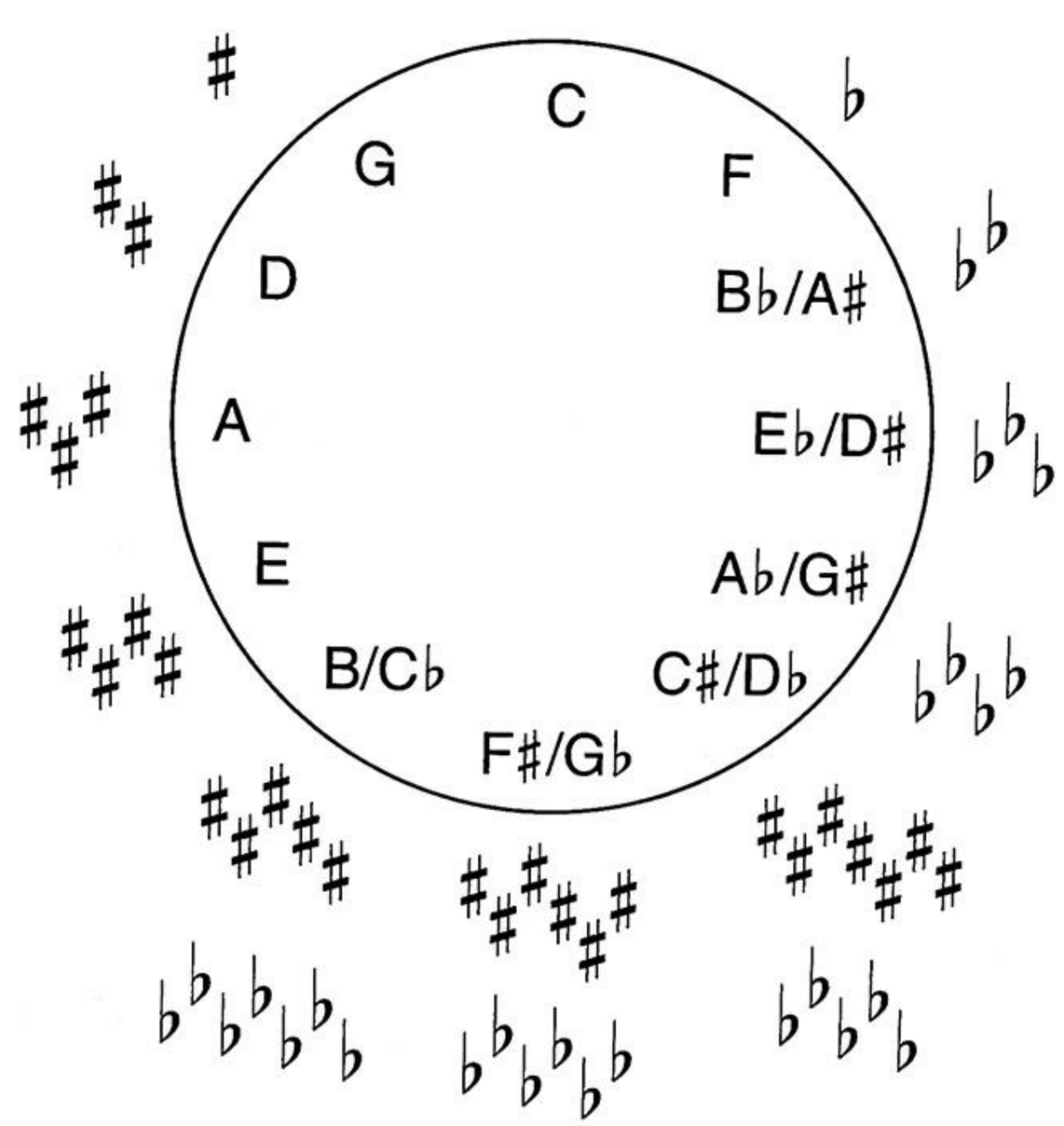


Fig. 8.17. The Circle of Fourths (Fifths)

You'll notice that as you progress from C, one flat is added to each key signature until changing to sharps, then one sharp is reduced, key by key, returning to C. Interesting! Beautifully symmetrical. The study of this circle will have the effect of demystifying what I call "the dark corners of the circle of fourths," those keys with multiple sharps and flats. The engineers of keyboard tuning made access to these keys practical, and we can each explore them, keep them polished in our tool kits, and enjoy their fascinating tonal relationships.

(Note: One often sees this graphic in mirror image, ascending by fifths instead of by fourths as above. This author favors the depicted sequence to reflect the work integrating the dominant to tonic relationship introduced here, rightly called the circle of fourths to differentiate between the two.)

It may be useful to simply arpeggiate the above to further integrate the sequence of keys and relationships. We'll also add the major seventh to the I chord.

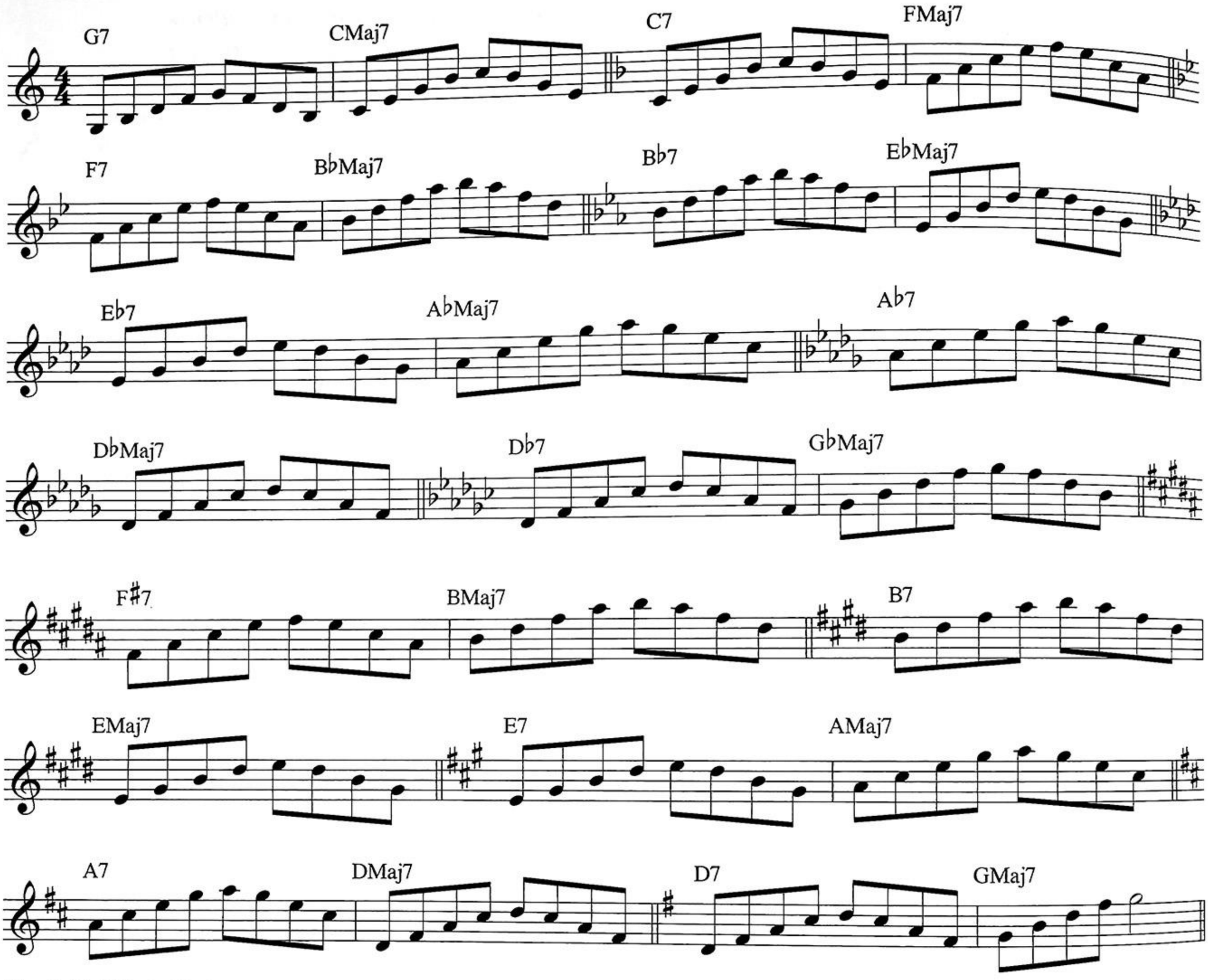
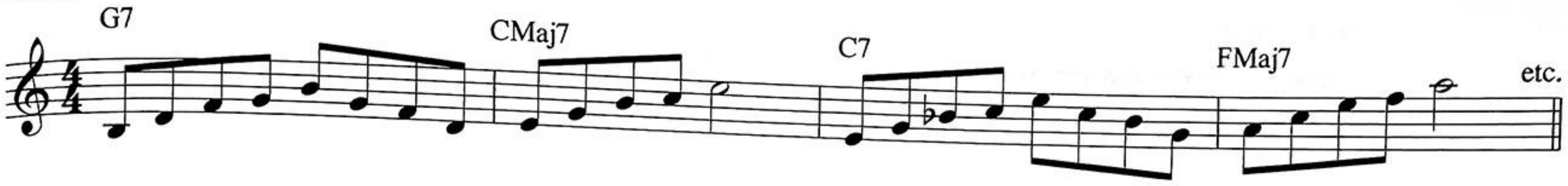


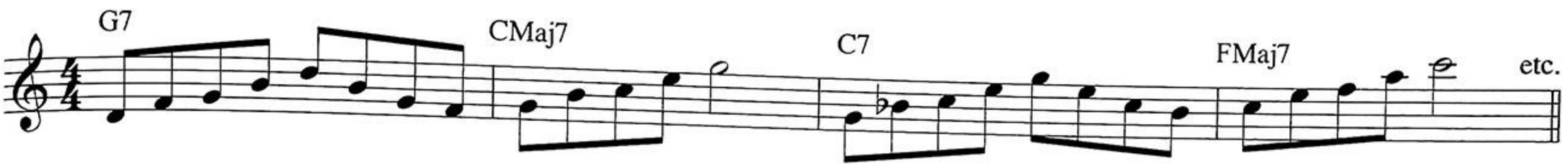
Fig. 8.18. V I's in Major

Once you are familiar with this pattern, dominant to tonic—arpeggiating from the root of each chord—then try starting on the 3rd, the 5th, and the 7th. Notice the internal motion and resolution of the guide tones as you modulate through the keys.

From the 3rd:



From the 5th:



From the 7th:

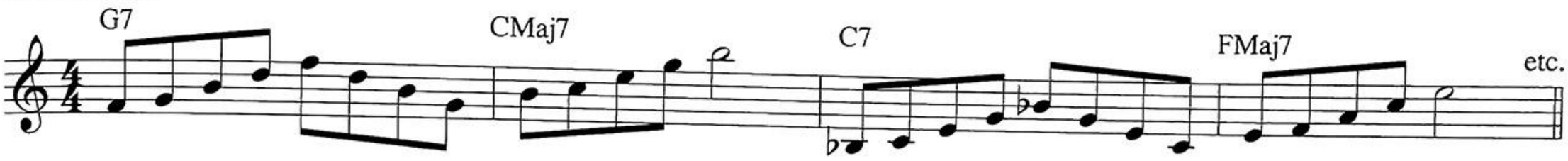


Fig. 8.19. V I from 3rd, 5th, and 7th

Try inventing some melodies that capture the dominant to tonic relationship in a single line. Here are a few examples in C and in F. You can continue each of these through the circle, then make up your own practice examples using any meters and styles you choose:

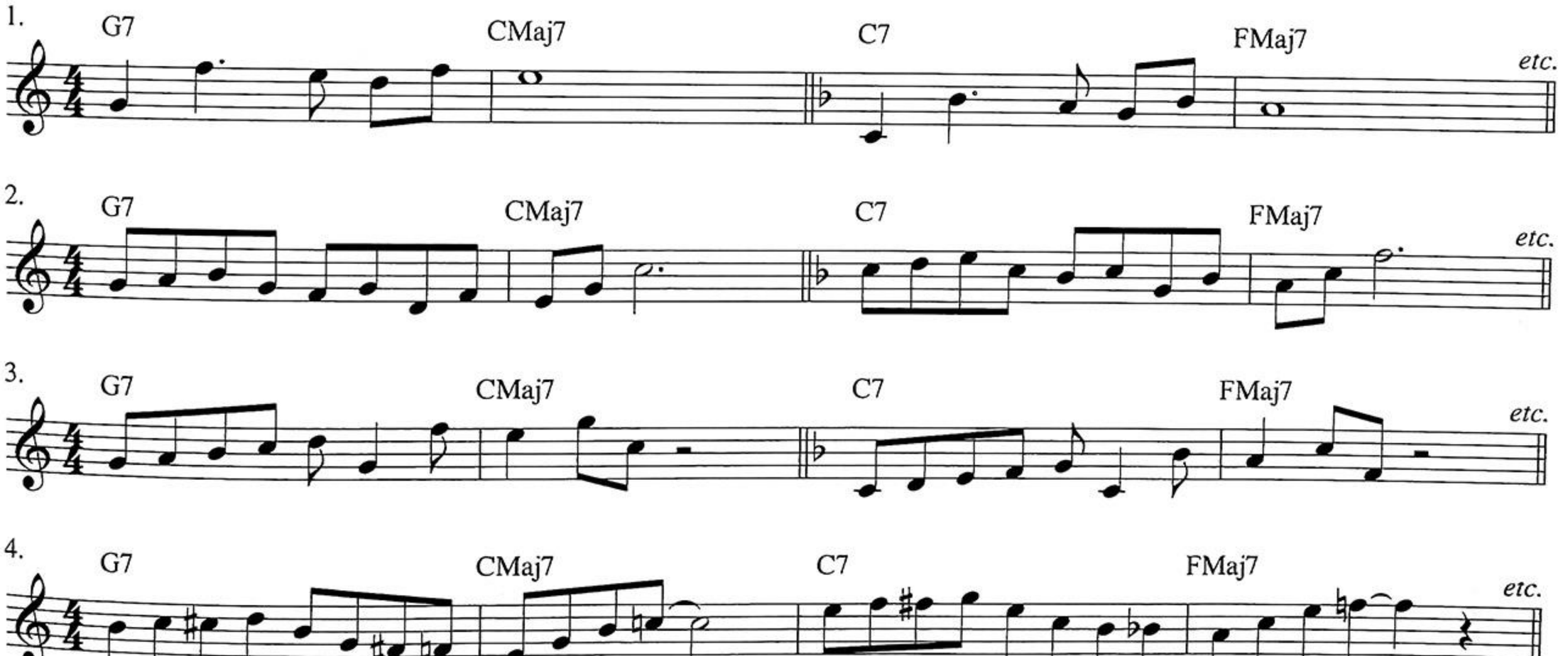


Fig. 8.20. Melodic V I's

CREATE YOUR OWN MELODIES

When you create your own melodies you will be mindful of what feels right on your instrument and under your fingers. That's fine: It's only right that you should develop an ample vocabulary of melodic alternatives that feel good to you. At some point, there may be a musical phrase or interval that you sing or can hear in your mind and just have to figure out a way to play on your instrument. Obviously, that's healthy, too. Part of the beauty and importance of practicing creatively lies in consistently extending your comfort zone.

Create your own melodic solutions based on your tastes, values, and technique. Using published materials can have the potential of stifling your creativity. Please don't allow that to happen! For the challenges presented in this book, or any other book, strive to understand the "problem" and invent solutions to suit yourself, your instrument, and your technique.

You can see how easy it is to modulate by changing the major-seven chord into a dominant chord. You will often encounter dominant chords outside the key of the piece you're playing. Known in classical parlance as "secondary dominants," these dominant chords smooth the way to a new tonal center, often without a change in key signature. Recognizing a dominant chord in relation to its key can be a good way to identify a mode (scale) change that's required to keep your melodic improvising grounded to the harmony.

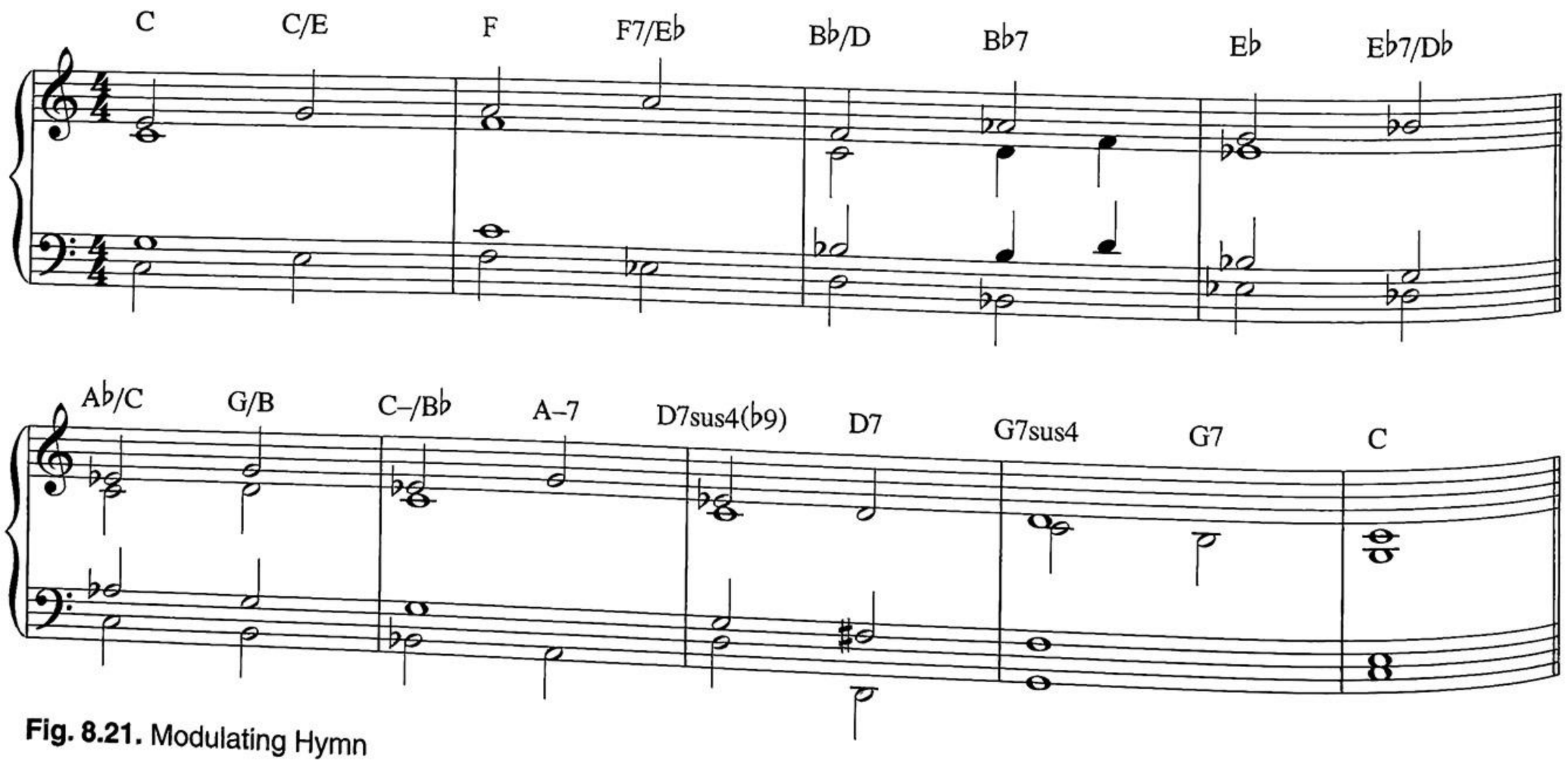


Fig. 8.21. Modulating Hymn

In the previous little tune, the appearance of each dominant chord signals the change to its tonic key. In other words, if you change the scale to the home key of each dominant chord, your melodies and scales will best reflect the passing harmonies.

Let's explore this cadence in minor now. In a minor key, the diatonically occurring seventh chord built on the fifth scale degree is minor. However, the dominant-to-tonic relationship is so strong that it tends to be utilized in minor keys as well, even though the dominant chord must be artificially altered to do so. The third must be raised to create a dominant chord, requiring the use of an accidental.

To differentiate a dominant chord in minor from a dominant chord in major, an additional chord tone is sometimes used. Adding a diatonic third above the seventh of the chord brings us to a ninth, called a flat nine (♭9) because of its relationship to the root of the chord. In the key of A minor, the dominant chord is E7(♭9):

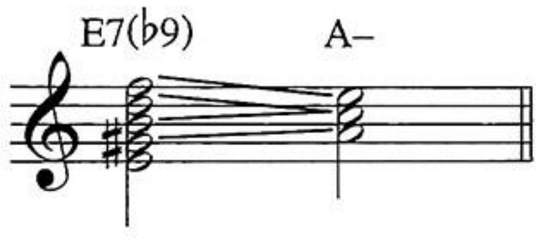


Fig. 8.22. E7(♭9) to A–7

Let's arpeggiate this cadence around the circle of fourths.

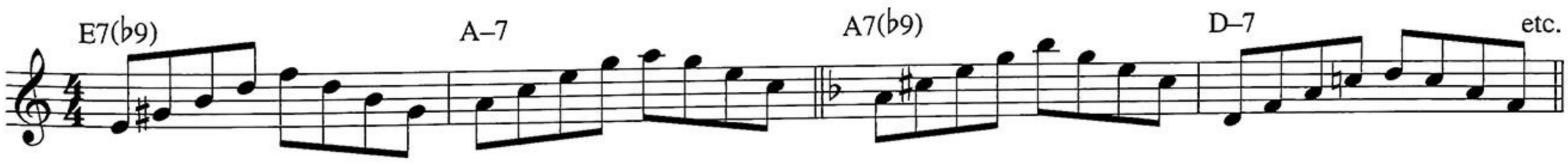


Fig. 8.23. V I's in Minor

The flat nine creates tension that resolves downward to the fifth of the tonic.

Let's make up some melodies that reflect that:

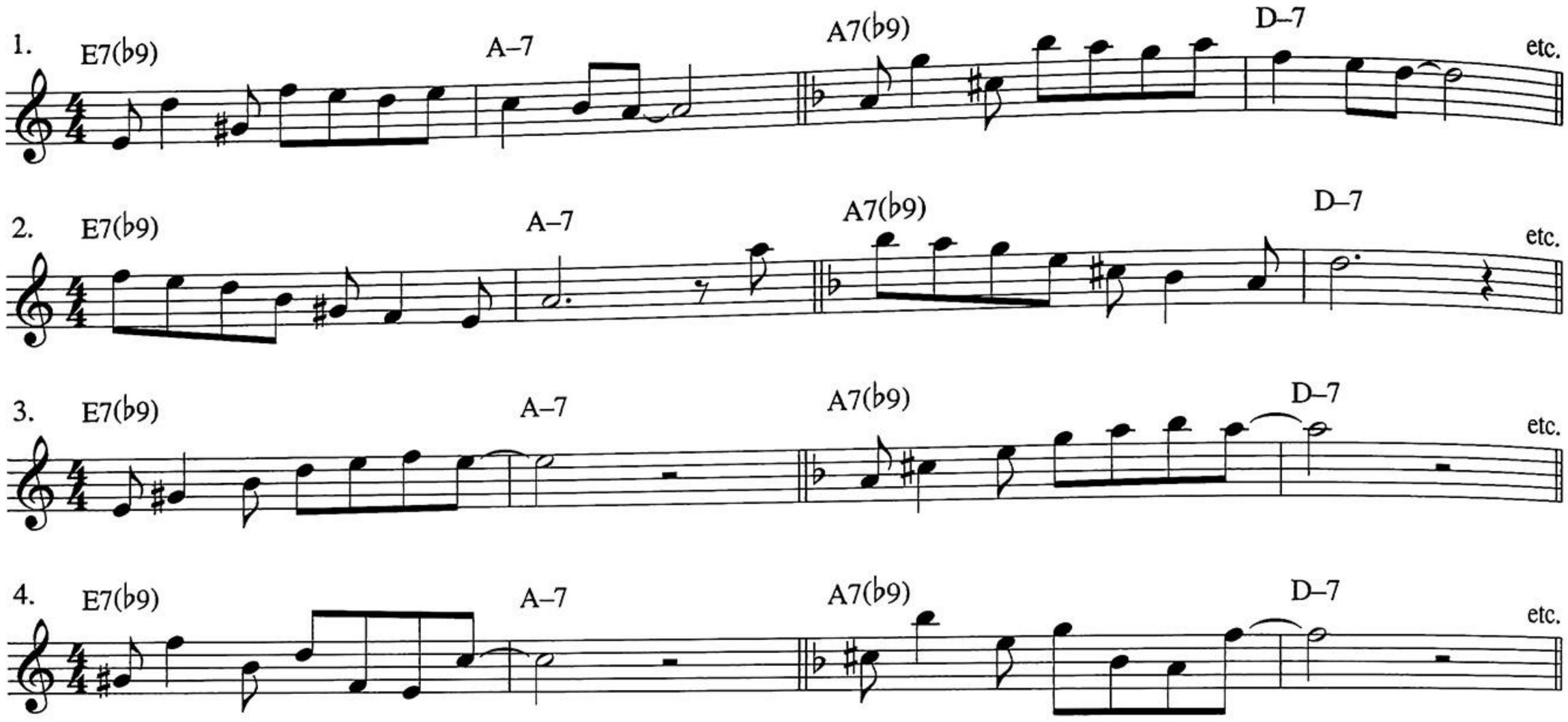


Fig. 8.24. Melodic V I's in Minor

Now create some of your own melodic solutions to a V7(♭9) I7 progression.

Write down your favorites, and move them around to some different keys.

CHAPTER 9

Modal Explorations: Melodic and Harmonic Minor

In exploring modal scales, we have discussed four minor modes: Dorian, Phrygian, Aeolian, and Locrian. The Aeolian mode is the natural-minor scale: If you play a scale from root to root using the key signature of a relative minor key, that's the Aeolian mode.

Let's look now at two other colorful minor scales and their beautiful modes.

HARMONIC MINOR

The harmonic minor scale has a raised seventh scale degree, raised to reflect the dominant chord of the key.

Fig. 9.1. A Harmonic Minor Scale with E7(♭9)

You'll notice the resulting augmented second between the sixth and seventh scale degrees. This is a very striking sound—an important and interesting sound reminiscent of Middle Eastern music. The augmented second is probably the reason that harmonic minor is not widely used as a scale. (Instead, harmonic minors serve more as a way of generating new chords and modes, as we'll see later.)

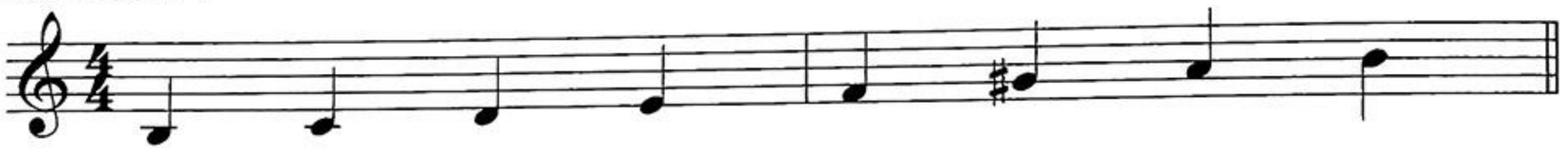
As with any scale, this scale can be explored modally. In Arabic music, scales are referred to in groups of four note tetrachords, "*maqams.*" The modes outlined here, and many more, can be found in the study of maqam, where microtonal tunings and inflections make these modes all the more expressive. Another rich source for the application of modes, including the use of augmented seconds, is in klezmer music where specific modes are tied to lessons, stories, songs, and dance.

It should be mentioned that the use of specific modes has great significance in the histories of people and places. In this book, these modes are presented in the spirit of musical inquiry and intercultural curiosity as tools for creative discovery. Please be aware, though, that in some societies their use may be tied to specific rites, celebrations, holidays, and stories.

In Western music the names of these modes have not been standardized. We refer to them here as altered versions of familiar modes.

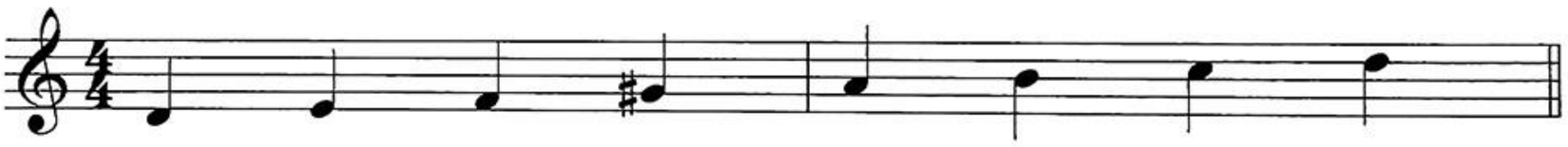
1. A Harmonic Minor

2. Locrian ♯6



3. Ionian ♯5

4. Dorian ♯4



5. Phrygian Dominant

6. Lydian ♯2

7. Mixolydian ♯1

Fig. 9.2. Modes of A Harmonic Minor

It's enjoyable to use the modal scale workout using this and any other scale.

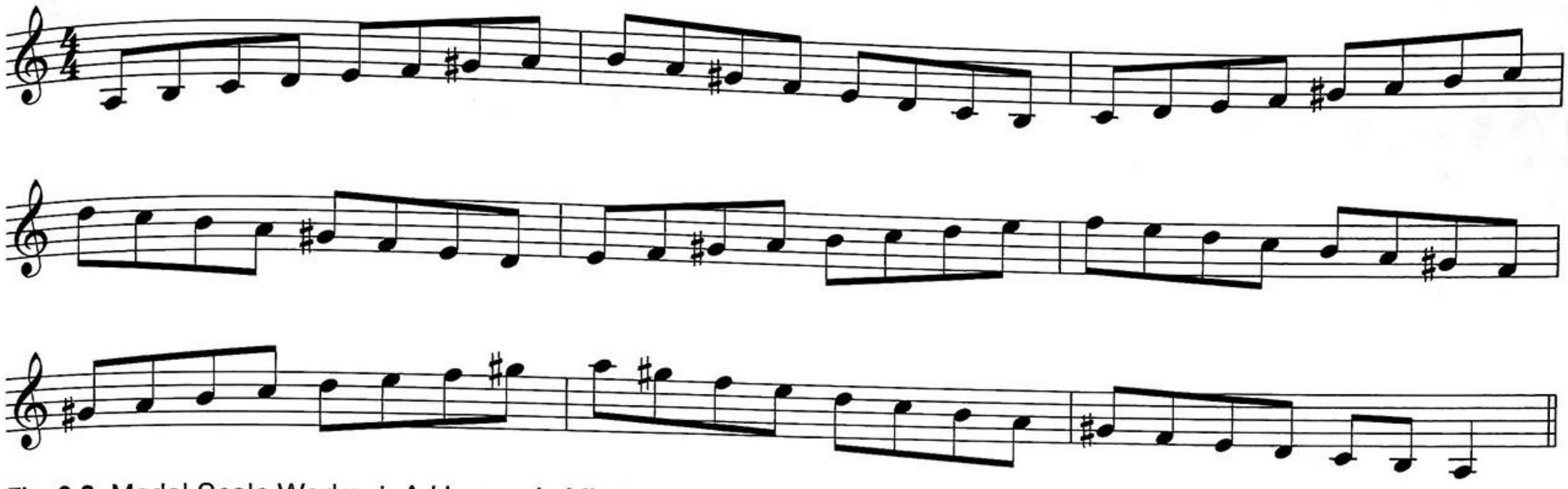


Fig. 9.3. Modal Scale Workout: A Harmonic Minor

In building diatonically occurring seventh chords of this scale (in other words, using the seven pitches of the scale), some interesting chords and chord relationships result.

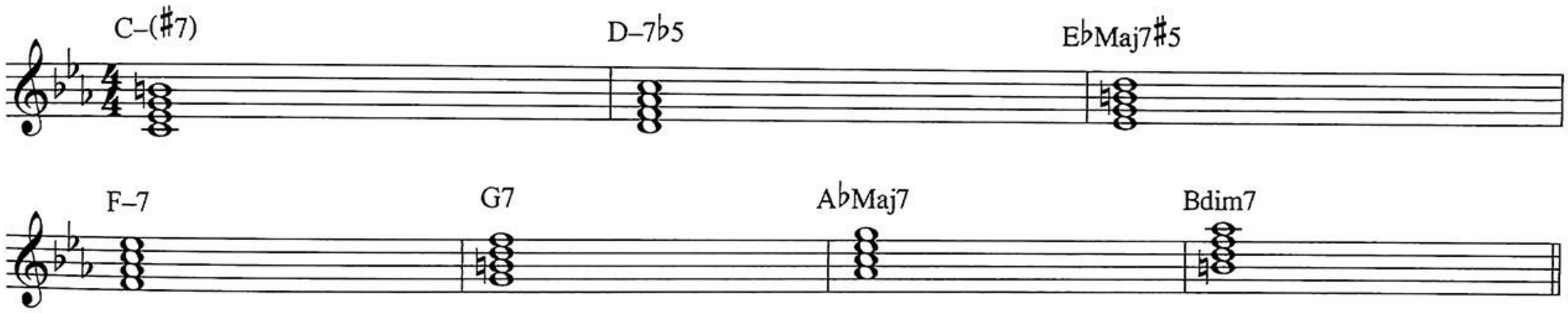


Fig. 9.4. Diatonic Seventh Chords of C Harmonic Minor

Now take these chords, and put them in an order that pleases you. Consider what meter, tempo, and rhythmic feeling seems right to you. Perhaps there will be a section in which you'll change the chords, faster or slower, altering the harmonic rhythm of the progression. Record the progression of chords and start playing some melodies over it.

USE GUIDE TONES IN PLAY-ALONG TRACKS

When making play-alongs, take time to consider the movement of guide tones from chord to chord. The awareness of voice leading will inform your melodic play as well.

Here's an example using C as the root.

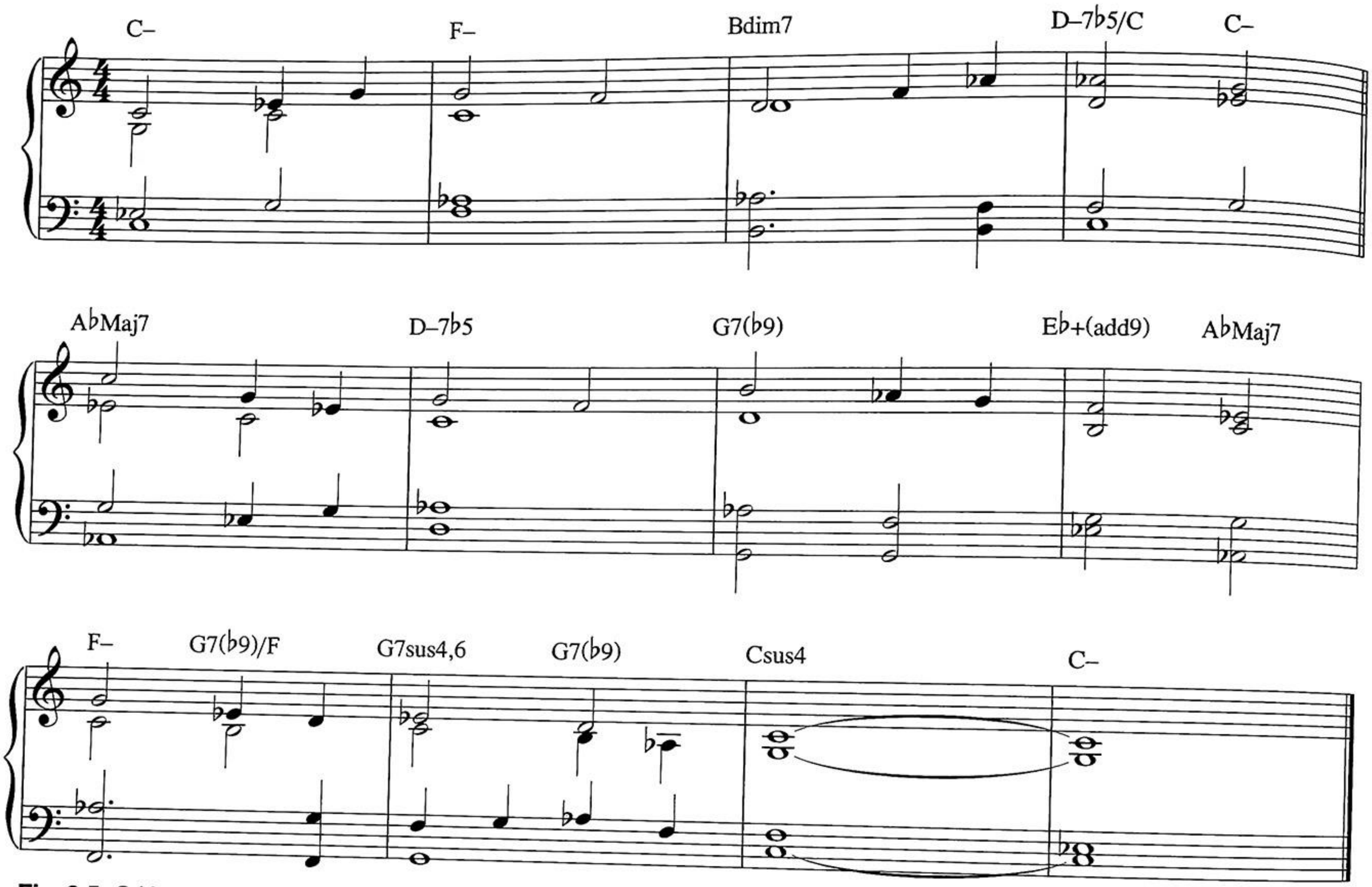


Fig. 9.5. C Harmonic Minor Tune

Of course, you can use any note of the harmonic minor scale as your tonal root, and some interesting music will result. Here's a piece using the C harmonic minor scale in its fifth mode. In other words, G is our tonal center, but our scale is C harmonic minor. You can play this melody with the play-along on track 44 of the CD and/or improvise your own melodic inventions.

Begin by trying the C harmonic minor scale to improvise on this, but you can take note of other pitches that you enjoy. Of course, you can make your own play-along at your own tempo, in your own preferred style, and in any key.

TRACK 44

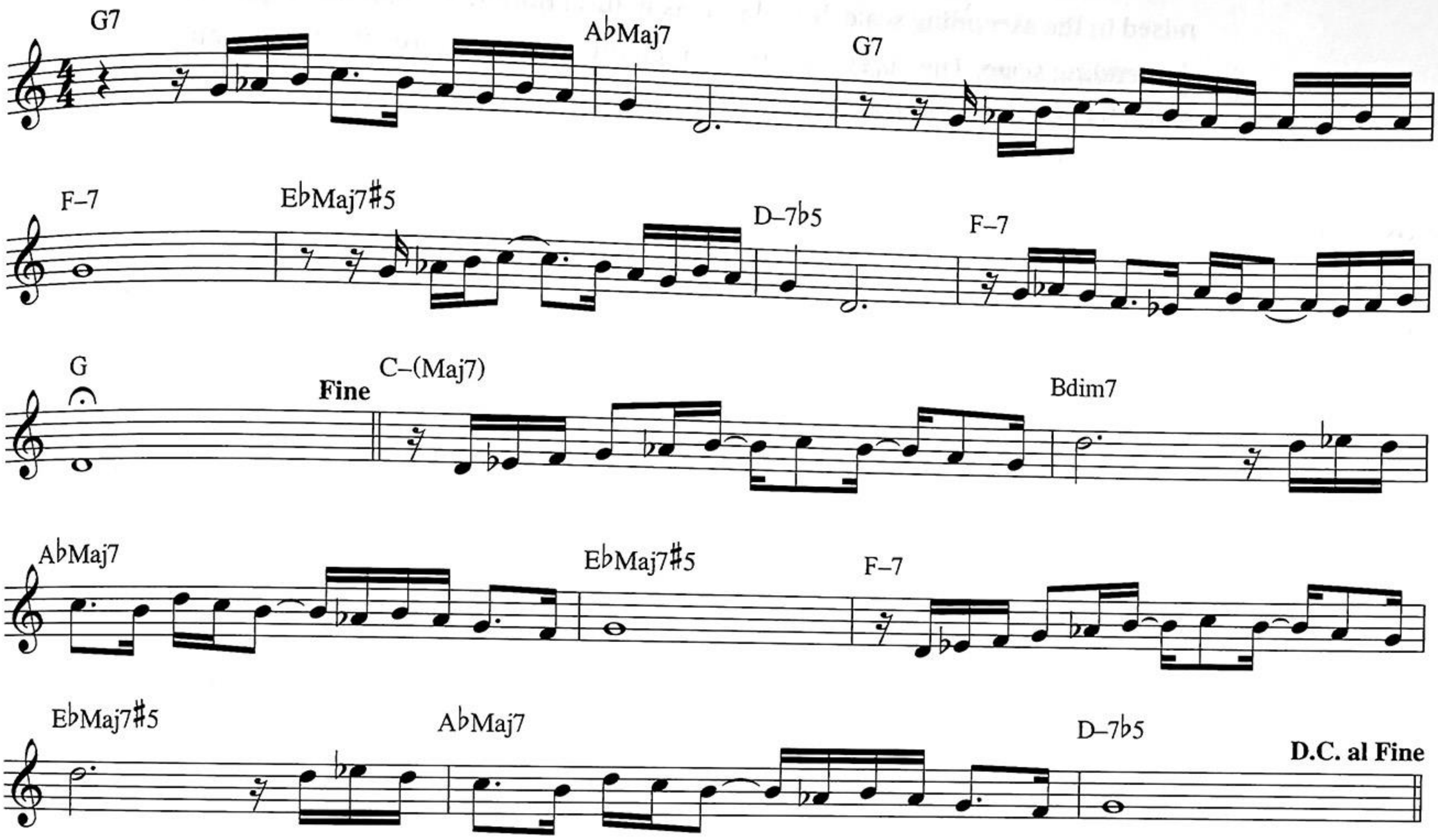


Fig. 9.6. C Harmonic Minor Etude in G

This is an example of how to use the mode of an interesting scale to create some lovely, surprising, and mysterious music. When you create your own music, there is no limit to how you can mix and match the scales, modes, and keys.

MELODIC MINOR

The melodic minor scale is a minor scale that features two notes raised a half step, requiring the use of accidentals: the sixth and seventh scale degrees.

Fig. 9.7. A Melodic Minor Scale

As was discussed, the sharpened 7th is the third of the dominant chord in that key. The sharpened 6th scale degree has traditionally been used to smooth the scale approach to the raised 7th, the leading tone, and 3rd of the dominant chord. The raised 6th, then, is the difference between the harmonic and the melodic minor scale. The melodic minor does not have that large step, the augmented second—the Arabic-sounding interval between the 7th and 6th.

The term "melodic minor scale" is used in two ways. When referred to as a "classical" (or "traditional") melodic minor, the 6th and 7th scale degrees are raised in the ascending scale, but played as natural minor, Aeolian mode, in the descending scale. The "jazz" (or "real") melodic minor features the raised 6th and 7th in both ascending and descending scales. We will be using jazz melodic minor, here.

Classical Melodic Minor

Jazz Melodic Minor

Fig. 9.8. Classical vs. Jazz Melodic Minor

As you practice this scale, you will discover your own way of understanding it. I see it as a minor scale on the bottom (lower *tetrachord*—four notes) and a major scale on top (upper tetrachord).

SINGING SCALES

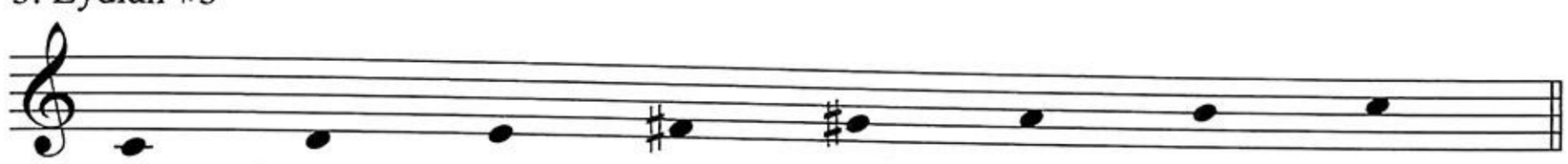
Use your voice to further integrate these colorful scales. Learn the feel of the intervals vocally, and sing along with a drone to ground your intonation and to integrate the sound of each note as an interval to the root.

Let's look at the modes of the melodic minor scale:

1. A Melodic Minor

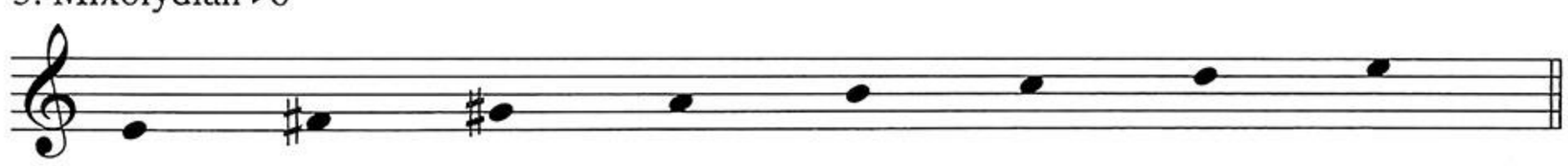
2. Dorian ♭2

3. Lydian ♯5



4. Lydian Dominant

5. Mixolydian ♭6



6. Aeolian ♭5

7. "Altered" Scale (Locrian ♭4)

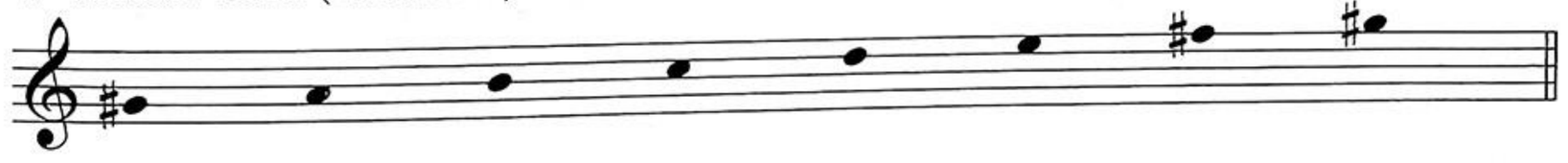


Fig. 9.9. Modes of the Melodic Minor Scale

As we did with the harmonic minor, let's examine the diatonically occurring seventh chords of the melodic minor scale.

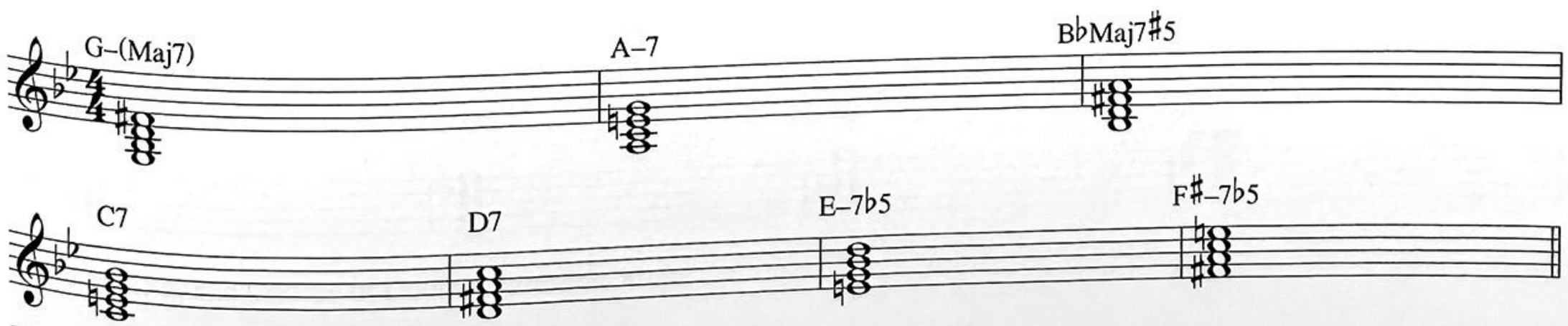


Fig. 9.10. Diatonic Seventh Chords of Melodic Minor

TRACK 45

Here's a little tune using one of the modes of the melodic minor scale as our root. You can play this along with the accompaniment on the CD (track 45).

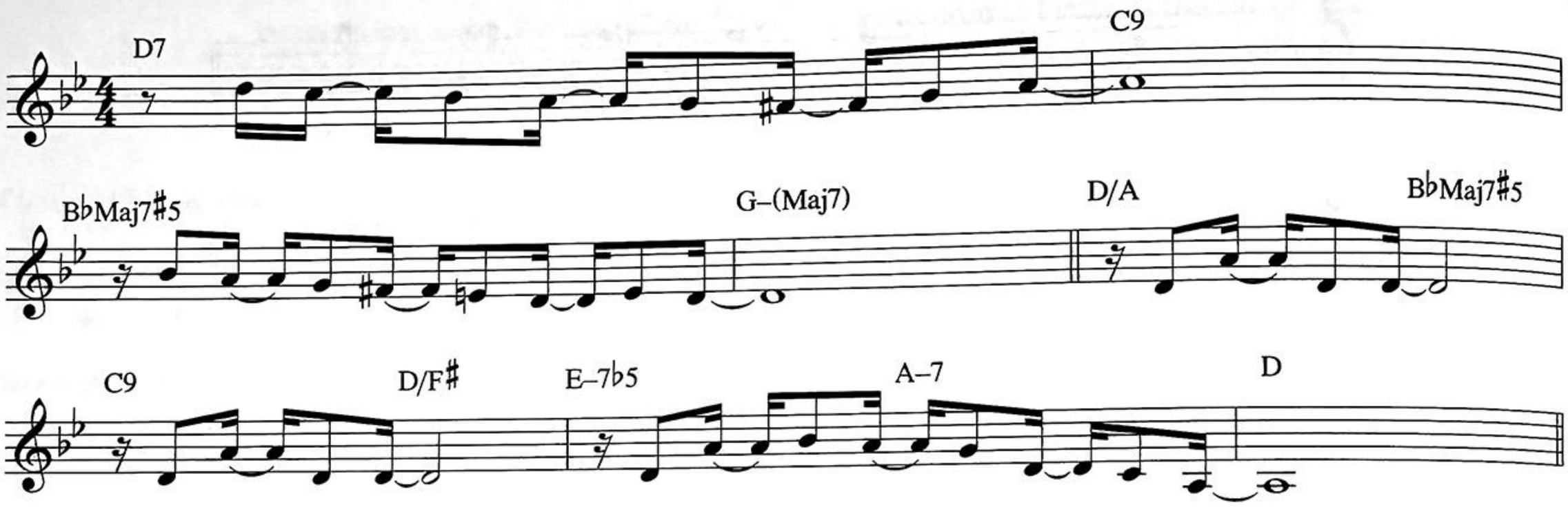


Fig. 9.11. Mode of Melodic Minor Melody

To continue with this modal concept, let's now take an unusual scale and give it the same treatment.

The harmonic *major* scale contains the same augmented second between the 6th and 7th scale degree as the harmonic minor.

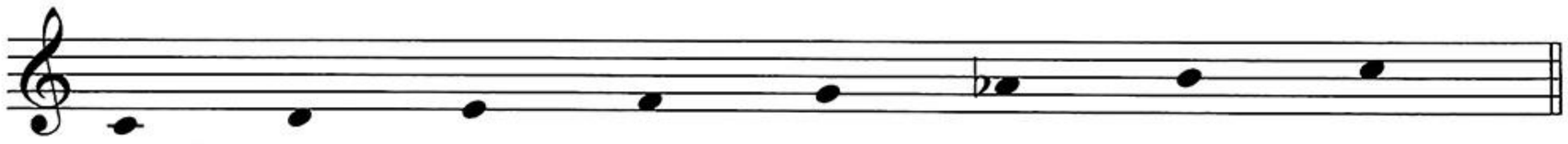


Fig. 9.12. Harmonic Major

The double harmonic major scale, similar to the Arabic *Maqam Sikah Baladi*, has an additional augmented second between the 2nd and 3rd scale degrees, creating two symmetrical tetrachords:

Fig. 9.13. Double Harmonic Major

Here are the modes of the double harmonic major scale.

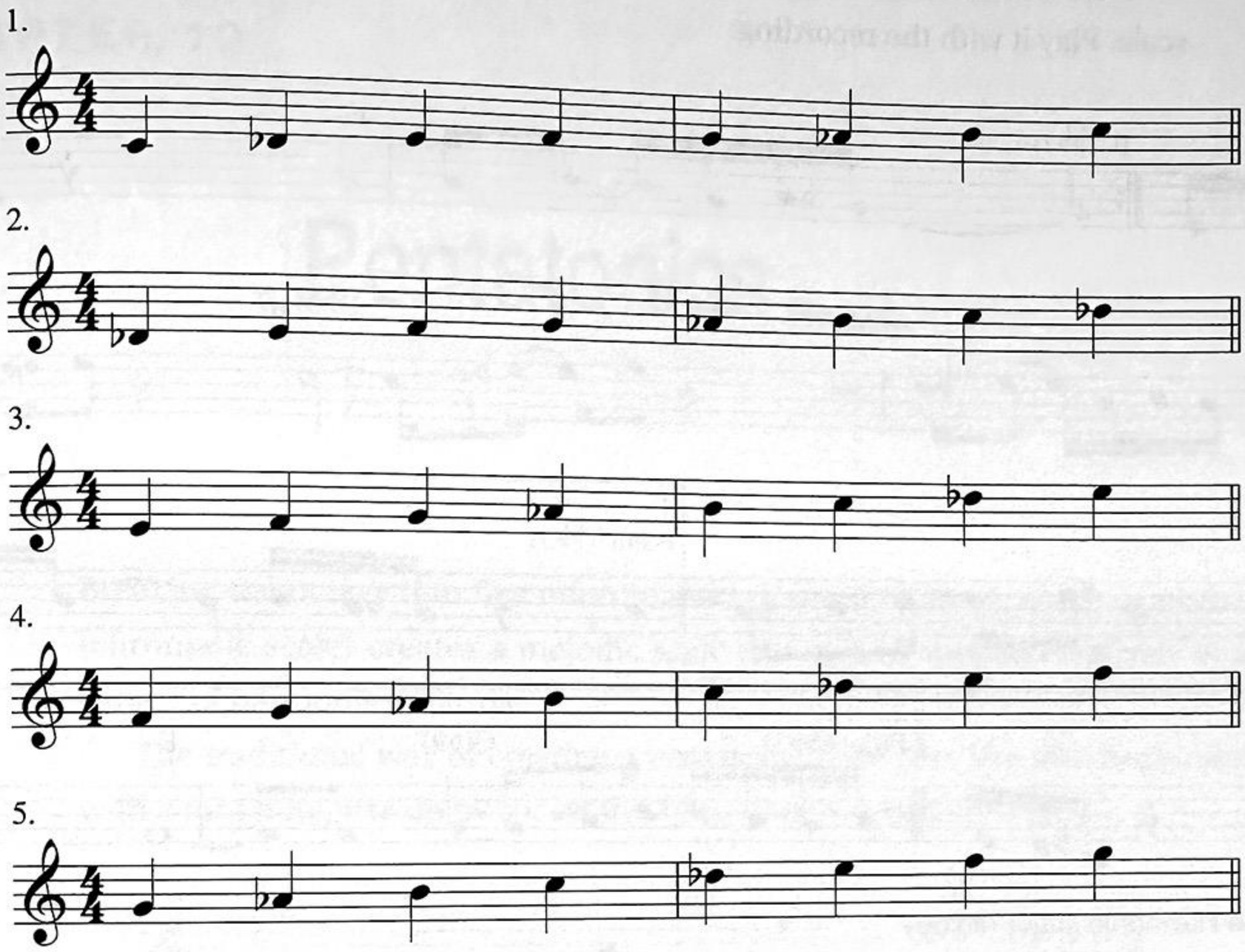


Fig. 9.14. Modes of Harmonic Major

And here are the diatonically occurring seventh chords of the double harmonic major scale.

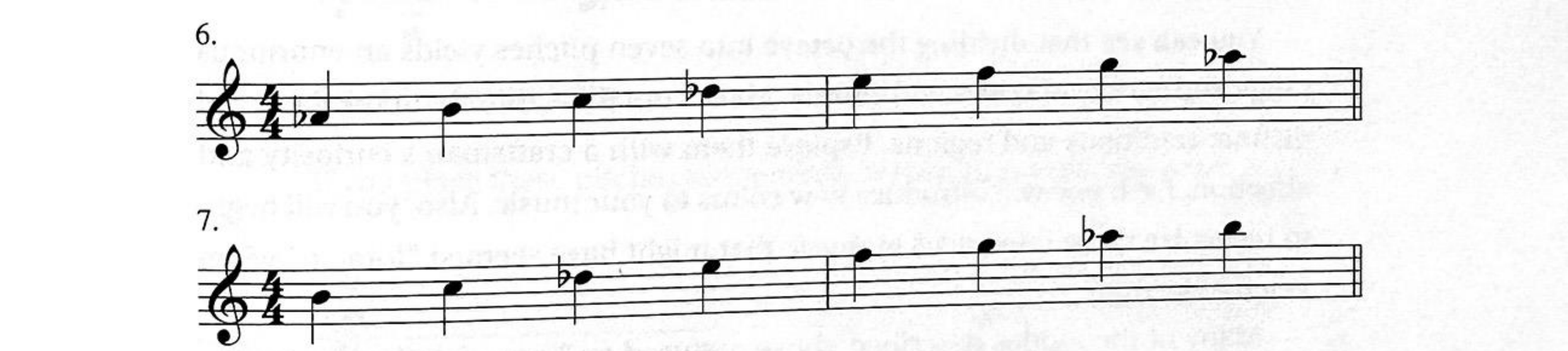


Fig. 9.15. Diatonic Chords of Double Harmonic Major

TRACK 46

Here's a tune in F using the fourth mode of the C double harmonic major scale. Play it with the recording:

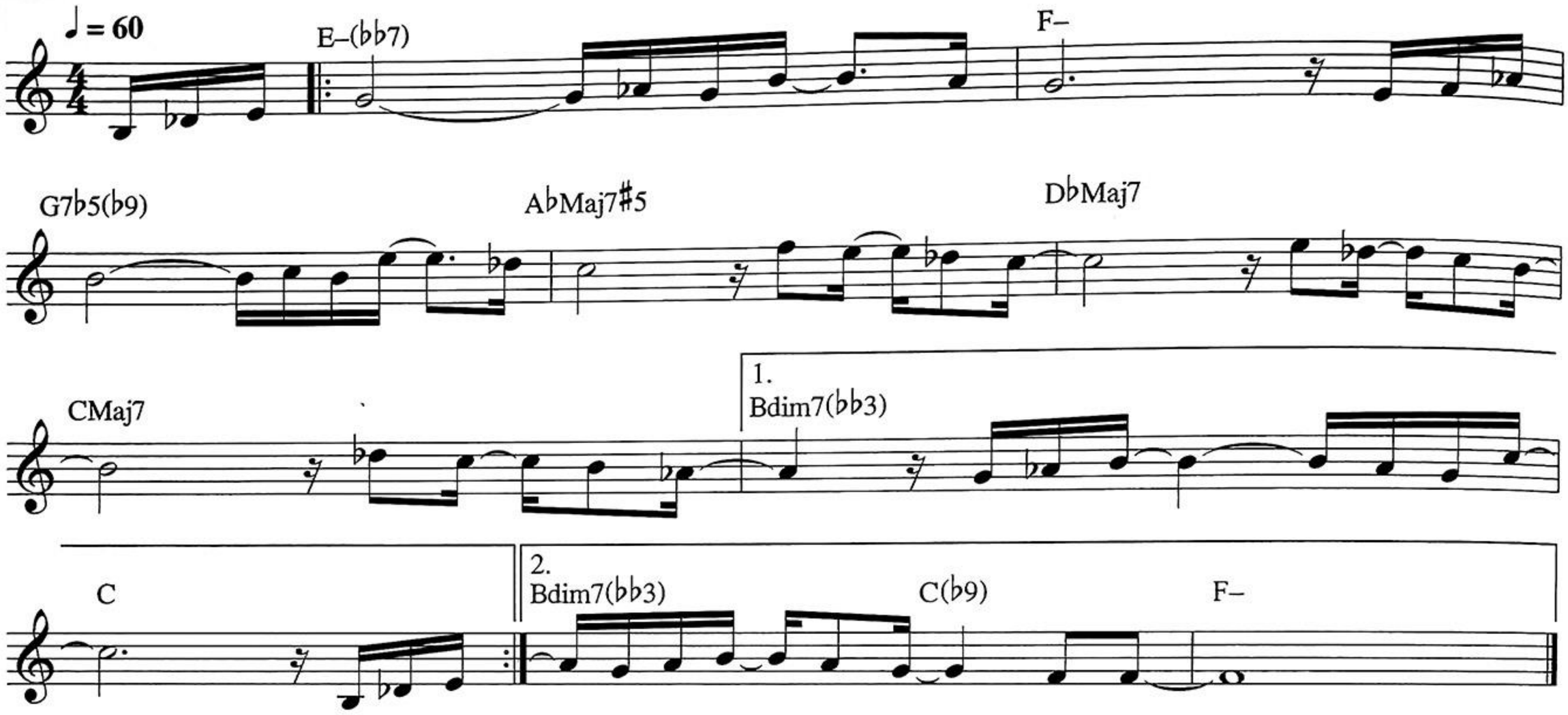


Fig. 9.16. Double Harmonic Major Melody

You can see that dividing the octave into seven pitches yields an enormous range and variety of scales and chords. Many contain within them the flavors of distinct traditions and regions. Explore them with a craftsman's curiosity and affection. Each one will introduce new colors to your music. Also, you will begin to recognize these influences in music that might have seemed "foreign" when you first heard it.

Many of the modes described above are used and associated with specific regions and cultures of the world. Sometimes a mere half step in a scale can summon an entire world of associations. The thoughtful player will be curious about how these modes are employed in their "native tongue," and will summon their colors and meanings with care, taste, and respect.

CHAPTER 10

Pentatonics

Breaking the octave into five notes instead of seven (diatonic scale) or twelve (chromatic scale) creates a melodic scale that can be applied creatively in a variety of harmonic contexts.

The traditional way of creating a pentatonic scale goes like this: Beginning with a root note, rise up by successive fifths until you have five notes.

Fig. 10.1. Rising Fifths

If you place these pitches sequentially within an octave, you have:

Fig. 10.2. G Major Pentatonic

We now have a scale—G major pentatonic, in this case—which includes the following tones: a root, major second, major third, perfect fifth, major sixth, octave. This is a pleasing scale that has created a world of lovely melodies, including, for example, "Amazing Grace":

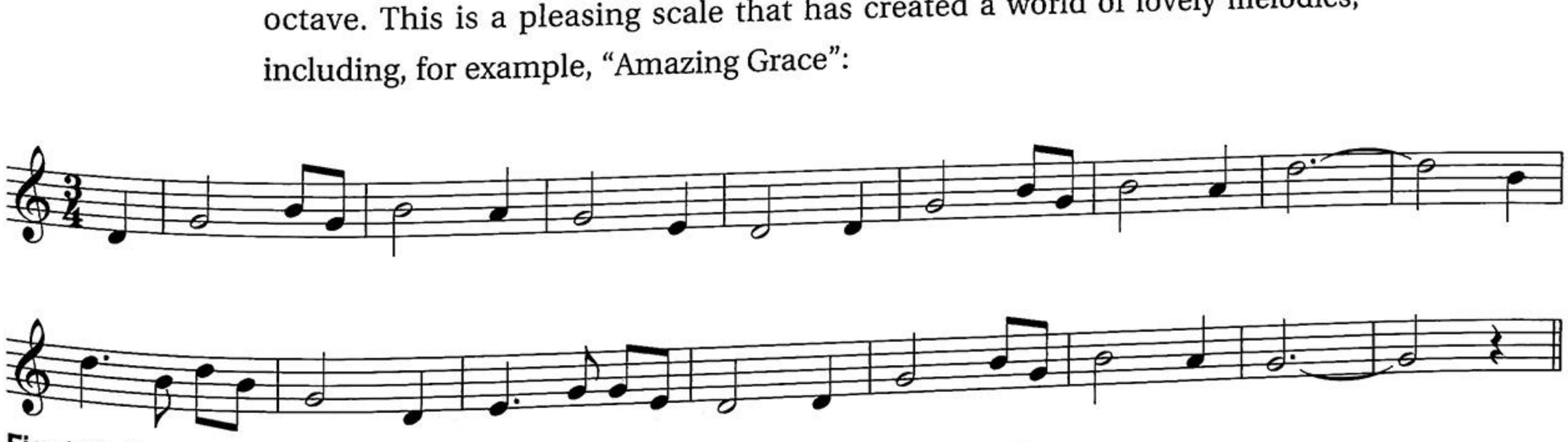


Fig. 10.3. "Amazing Grace" in G

Of course, you can play this in any key. The melody begins with a pickup on the 5th of the key. Your ear can take it from there.

Just as in major scales and keys, the minor mode of this scale—the minor pentatonic scale—is made by playing the same notes but beginning on the 6th scale degree.

Fig. 10.4. E Minor Pentatonic Scale

This scale contains a root, minor 3rd, 4th, 5th, minor 7th, and octave.

Just looking at this pentatonic scale, we notice there are no half steps, just whole steps and minor thirds. This is one sturdy little scale, and because of its "open" sound and intervallic integrity, it has an internal logic and gravity that makes it work as a melodic tool in tonal centers that are far removed from it. But it is also extremely handy in conveying the tonality of some common chords, both major and minor.

We discussed earlier how the Ionian mode (major) and the Aeolian mode (minor) are made of the same diatonic pitches. The major and minor pentatonic scales share the same trait: They are both modes of the same five notes.

In order to work fluently with these colors, let's play these scales all over our instruments. To start, choose a drone and, starting with that root, play and sing the scale up and down a couple of times before you begin improvising. You might also play the modes of each pentatonic scale. Here are the modes of the E minor pentatonic scale, as an example:

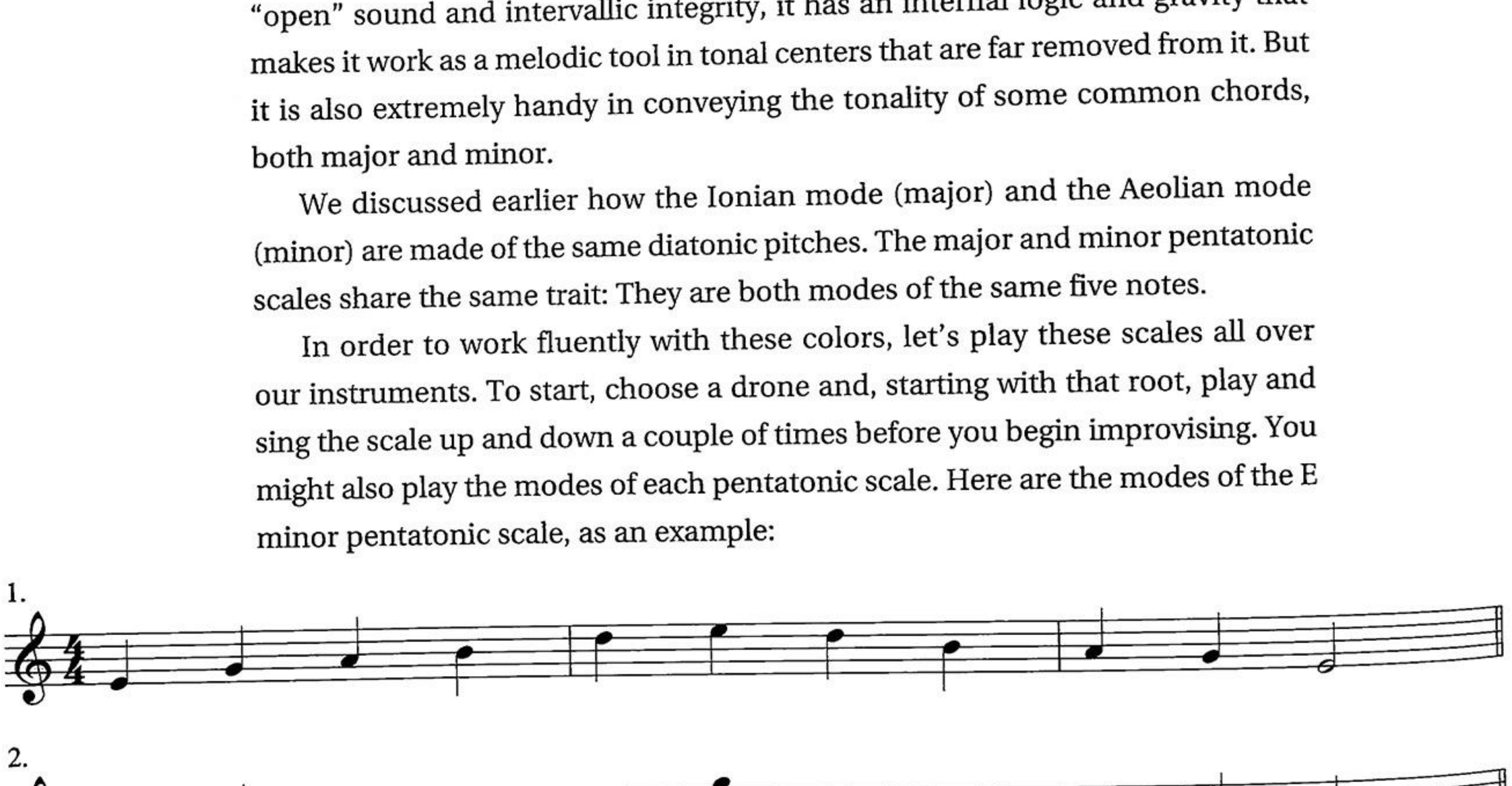


Fig. 10.5. Modes of E Minor Pentatonic

At first, take one drone per day, and explore its minor and major pentatonic scales. Improvise melodies, trying intervals from octave to octave, getting familiar with the kind of contented quality of the pentatonic scale.

As you play on the minor pentatonic scale, you'll notice that the predominant sound of this scale (when played with its root as a drone) is a minor seventh chord. And looking at the scale, it's practically a minor seventh arpeggio with the addition of the 4th as a passing tone between the 3rd and 5th. So, using this scale to express a minor seventh chord is effective.

Using the major pentatonic scale to convey a major chord melodically is also effective. As you may have noticed in figure 10.5, the second mode of the E minor pentatonic scale, is the major pentatonic scale: G A B D E. In practicing with a drone, you might toggle between the major and minor pentatonic scale of each drone:

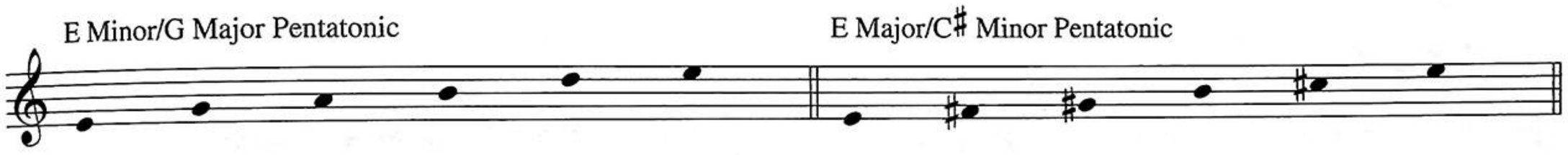


Fig. 10.6. E Minor/G Major Pentatonic; E Major/C♯ Minor Pentatonic

Doing this will greatly help you in learning the distinctive sounds of these scales.

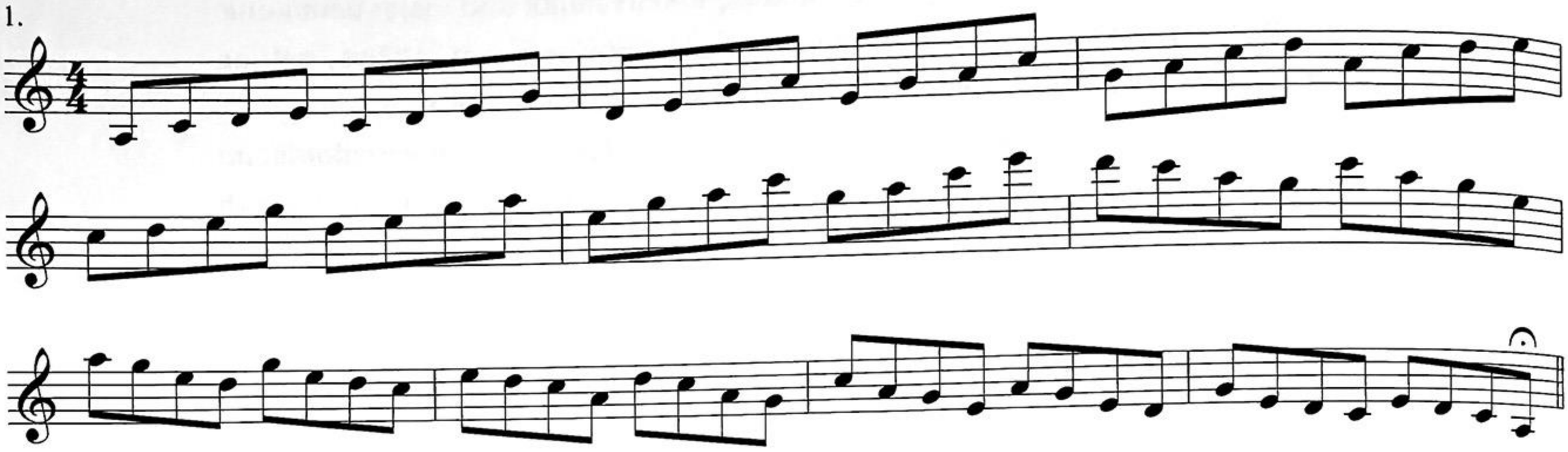
Next, make a play-along track that you can use to explore the minor pentatonic scale. Your track can be just a bass line (root to 5th), keeping a beat of some kind. Make it medium-tempo in either common time or three, changing the harmony every four bars. Using the circle of fourths (described in chapter 8), go through all twelve keys. As you play along with your track, you may find it useful at first just to play the root a few times to get used to matching the pitch of the bass note on your play-along, but when you're ready, play the minor 3rd of each, the 5th, the 7th, until you can play each scale over the changing harmonies.

Use the same play-along to practice the major versions too. Then combine!

You may be tempted to make yourself a lead sheet so your eye can identify the scale and sound as you approach it. That's not "wrong" by any means, but if you can get used to your ear—instead of your eye—taking the lead, you ultimately will be well served. The goal is to listen and make a musical contribution. That starts in the practice room.

To gain further fluency with pentatonic melodic play, it can be helpful to practice some melodic patterns. These patterns can be useful when looking to add sweep and motion to your improvisations. Further, they will integrate the pentatonic shapes into your playing. Here are a handful of melodic patterns in minor, though, of course, these same patterns will sound major when played with the root of the relative major (A minor/C major, D minor/F major, G minor/B♭ major, etc.).

1.



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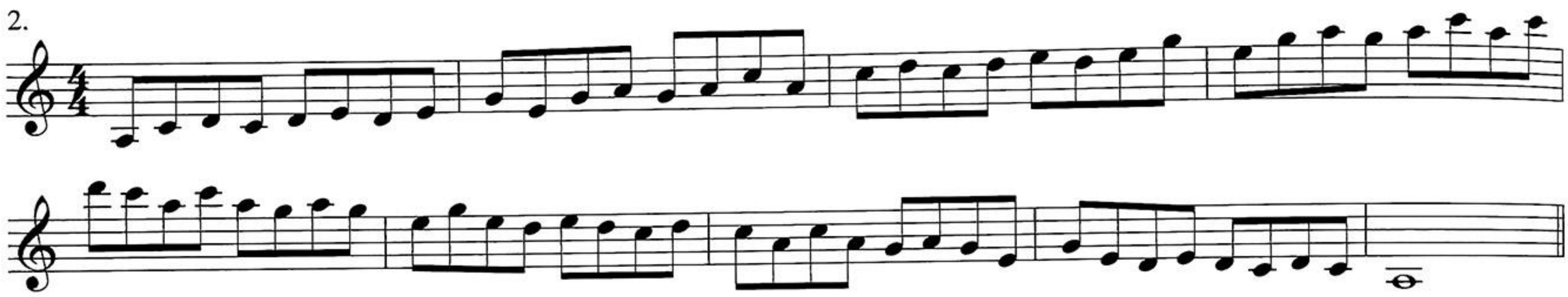

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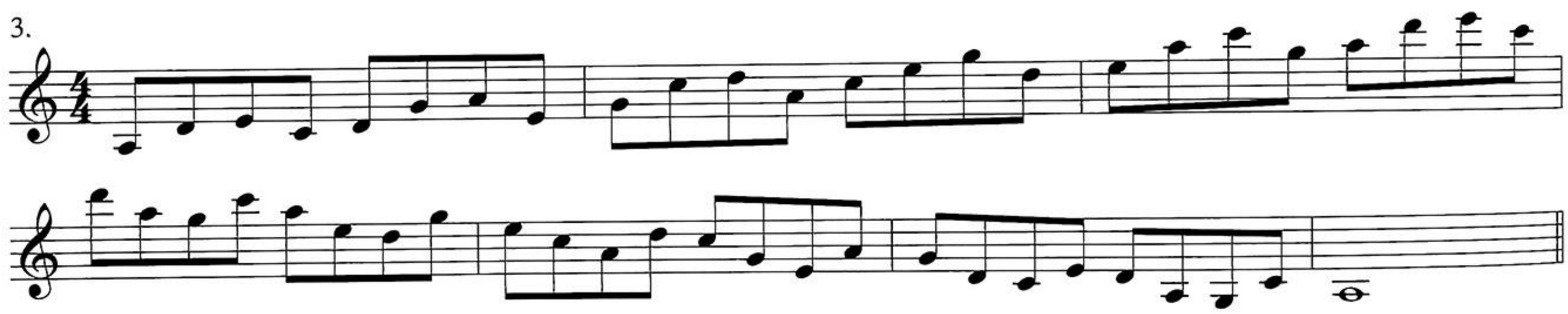

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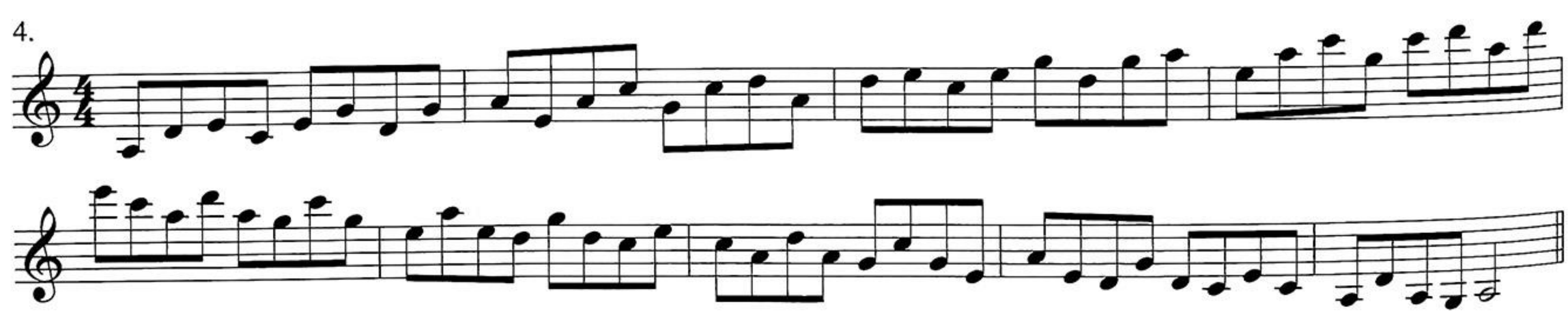

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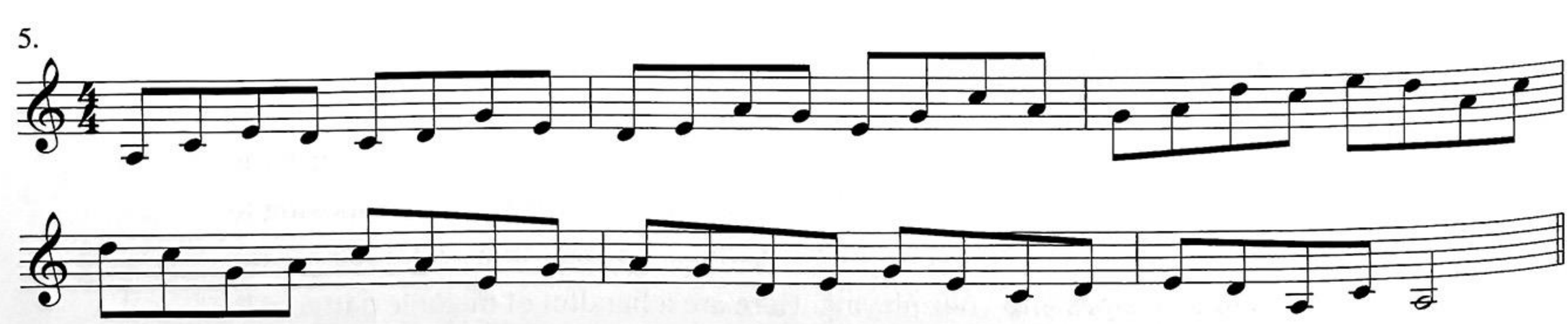

Fig. 10.7. Pentatonic Melodic Patterns

Play these in all twelve keys, and extend them to multiple octaves to cover the range of your instrument.

As mentioned earlier, there are many creative applications of pentatonics. As we explore the melodic possibilities within each scale, let's now shift the harmonic context to hear these scales in a slightly different way. To do that, let's take a look at a minor seventh chord and hold some pentatonic scales next to it for comparison.

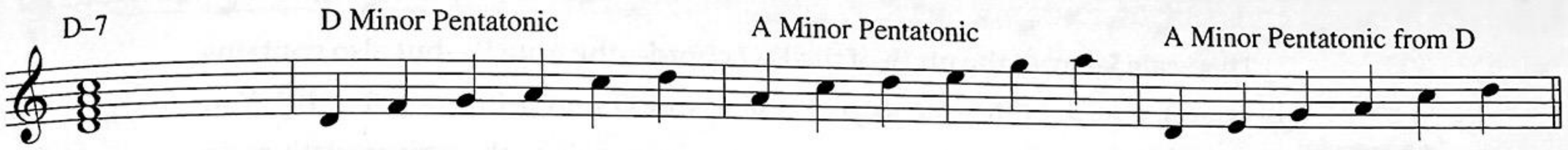

Fig. 10.8. D–7 with Two Pentatonic Scales

Looking at the A minor pentatonic scale, you see that it has four notes in common with the D minor pentatonic and only one note that's different: the note E instead of F. In the context of a D minor seventh chord, the E of the A minor pentatonic scale features the 9th—a pleasing coloration of the D minor chord. When you use the A minor pentatonic scale in this context, you may still feature the note D as a kind of home melodic note. In other words, your ear may still respect the tonality of D even though you are thinking A minor pentatonic, but you are featuring a little different coloration of the chord.

In the fourth bar of figure 10.8, you see the A minor pentatonic scale, but beginning on the note D.

If you play a minor pentatonic scale on the 5th of your minor seventh chord, you create a pentatonic scale that features the 5th, 7th, root, 9th, and 4th of the chord.

Let's practice that!

Using your drone, you now have three pentatonic scales with which to improvise: minor pentatonic scale of the root, major pentatonic of the root, and now the minor pentatonic scale on the 5th.

Using your play-along, improvise using the minor pentatonic scale of the 5th, or toggle between the scale of the root, either major or minor, and the scale of the 5th.

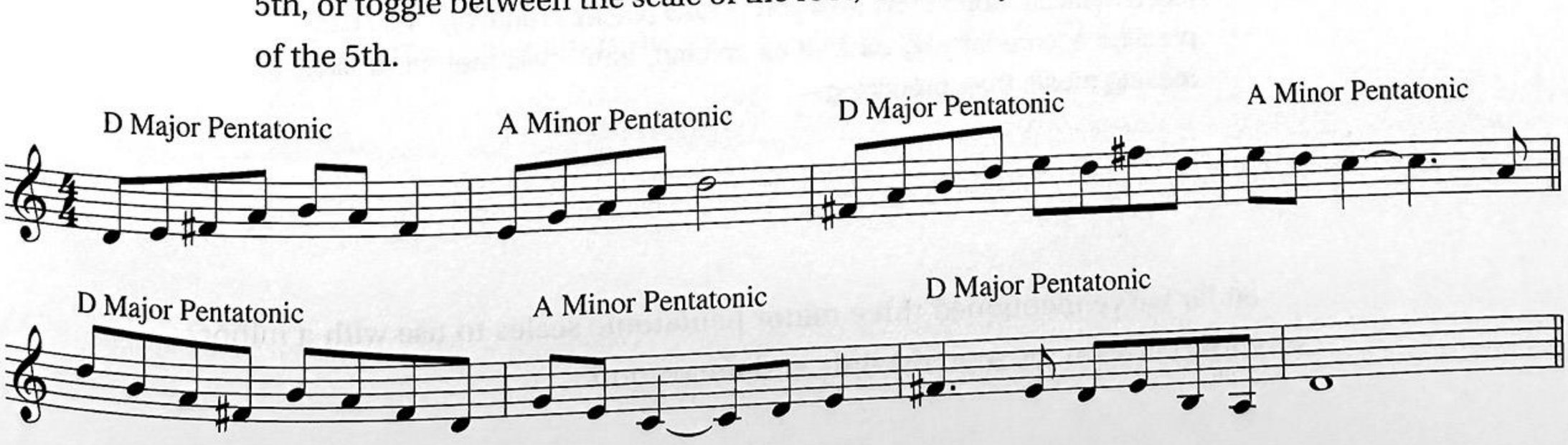

Fig. 10.9. Melody Using D Major Pentatonic and A Minor Pentatonic

Let's look at another common application of the minor pentatonic scale. If you build a minor pentatonic scale on the 2nd (or 9th) of the minor seventh chord, you get this:

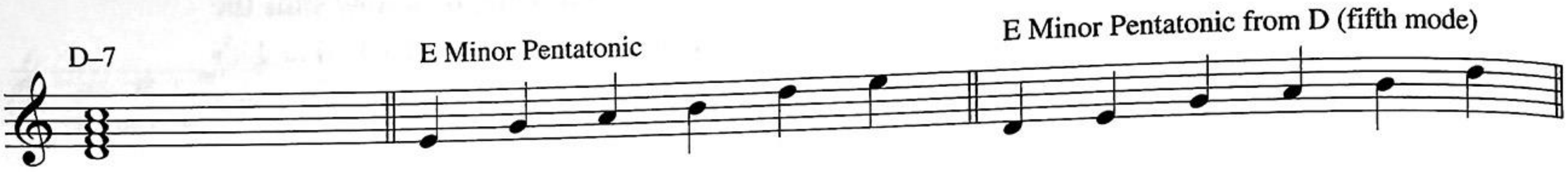

Fig. 10.10. D–7 with E Minor Pentatonic

This scale features the ninth of the D–7 chord—the note E—but also contains the note B, a raised 6th scale degree (the key of D minor has one flat, B♭). You may recall from studying the modes that a minor scale with a raised sixth scale degree is the Dorian mode. In the context of the D–7 chord, then, the B natural of the E minor pentatonic scale gives your melodic play a distinctly Dorian sound.

The "formula" for finding this sound is building a minor pentatonic scale a major second above the root of a minor 7 (or 9) chord.

Time to integrate this scale into your drone and play-along improvising. As you go through your play-along, first play the root of the chord: That note is the seventh of the minor pentatonic scale that creates the Dorian sound, as noted above.

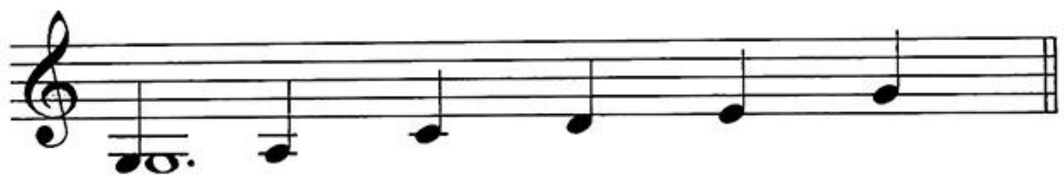

Fig. 10.11. G Root with A Minor Pentatonic

PRACTICE WITH OTHER MUSICIANS

Find a musical friend to practice with. You can start coming up with your own music by discovering ways to practice anything. Sometimes just a single note will spawn an idea for a tune, a jam, or a symphony. And the energy you get from playing with someone with whom you feel a musical rapport can take you to new places creatively. You can practice accompanying as well as soloing, and it will feel more like making music than practicing.

So far we've mentioned three minor pentatonic scales to use with a minor seventh chord: on the root, the fifth, and the second.

Once you're able to toggle between all three in a given key, try this little workout:

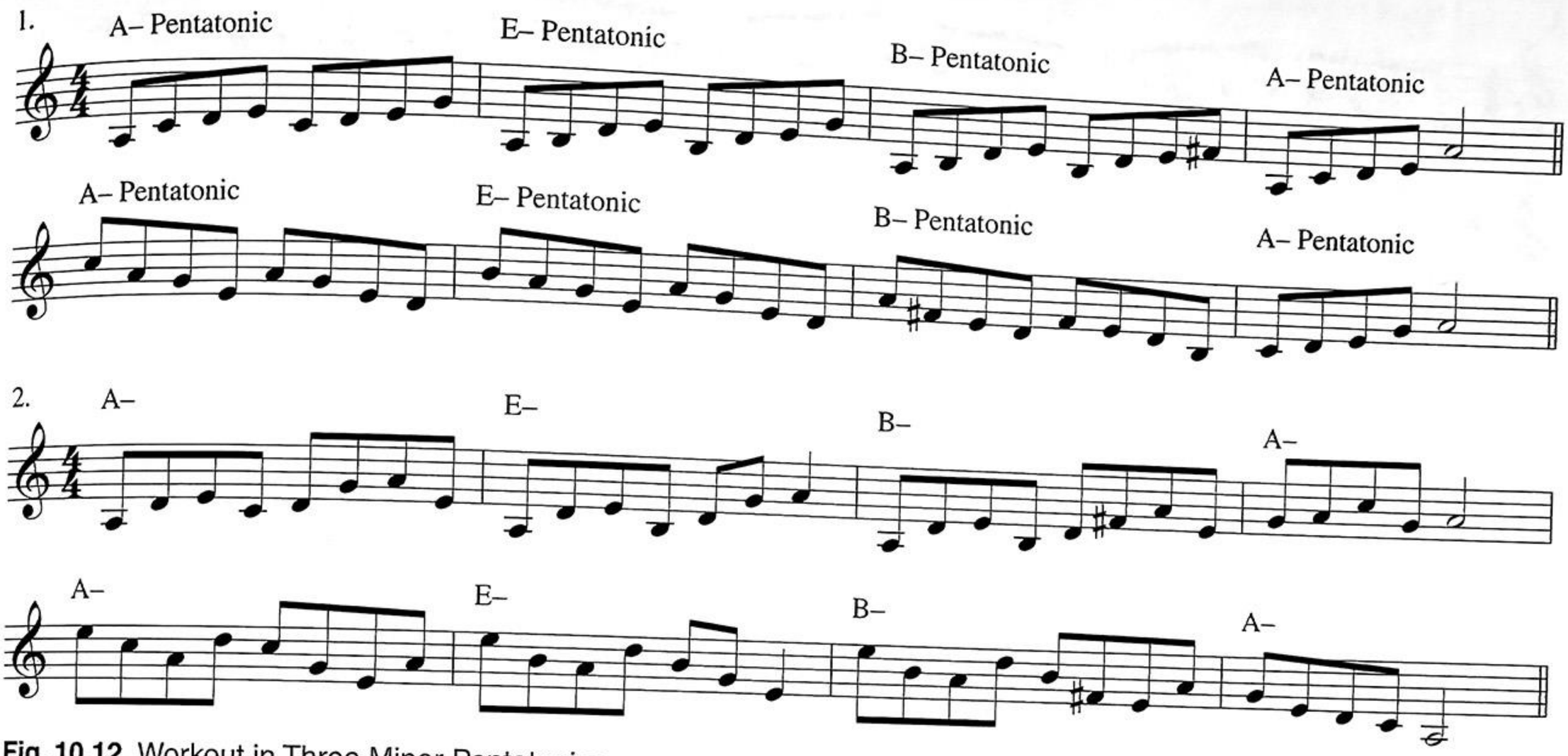

Fig. 10.12. Workout in Three Minor Pentatonics

The same formula can be applied to major 7 chords. By creating major pentatonic scales on the root, the 5th, or the 9th, we create different colorations of the chord.

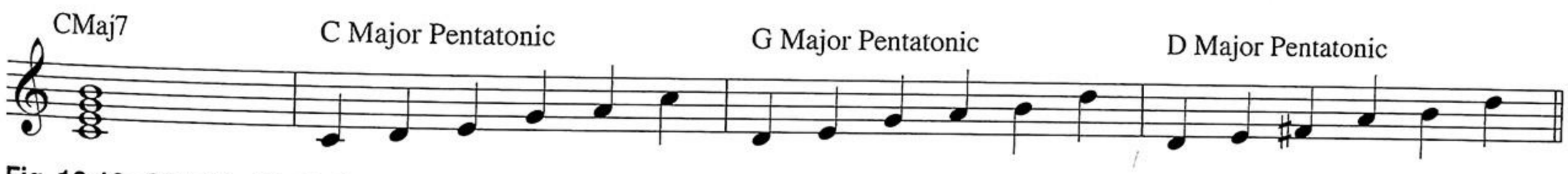

Fig. 10.13. CMaj7 with C, G, and D Major Pentatonic Scales

In figure 10.13, we see that the C major pentatonic scale includes the 9th and the 6th of the major chord, open-sounding additions to the C major 7. The G major pentatonic scale features the major 7 and the 9, also quite consonant in sound. The D major pentatonic scale adds the note F♯ to the mix. In the context of a CMaj7, that F♯ is a note associated with the Lydian mode, a raised fourth scale degree, and it alters the sound of the chord significantly.

Here's the workout from figure 10.12, but in major:

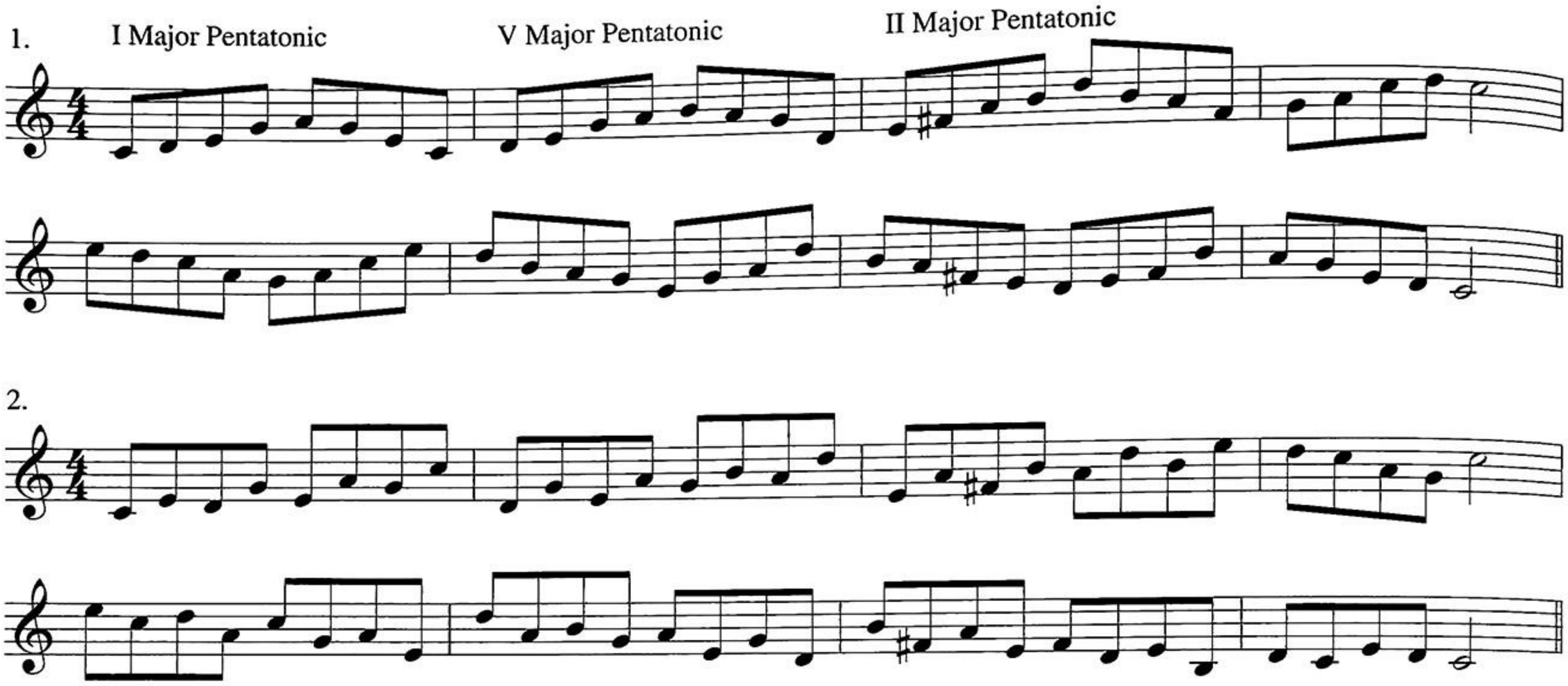

Fig. 10.14. Workout in Three Major Pentatonics

Before we explore a bit more how these scales sound with major 7 chords and dominant chords, let's add more harmonic detail to your play-along. At this point, you have a play-along that moves through all twelve keys, featuring a root to 5th bass move and four measures in each key. In order to convey the sound of specific chords, you'll want to add some additional chord tones. By adding only the guide tones of each chord you will be able to signal the quality of each chord, and you'll hear your play-along modulate through all keys in a new way:

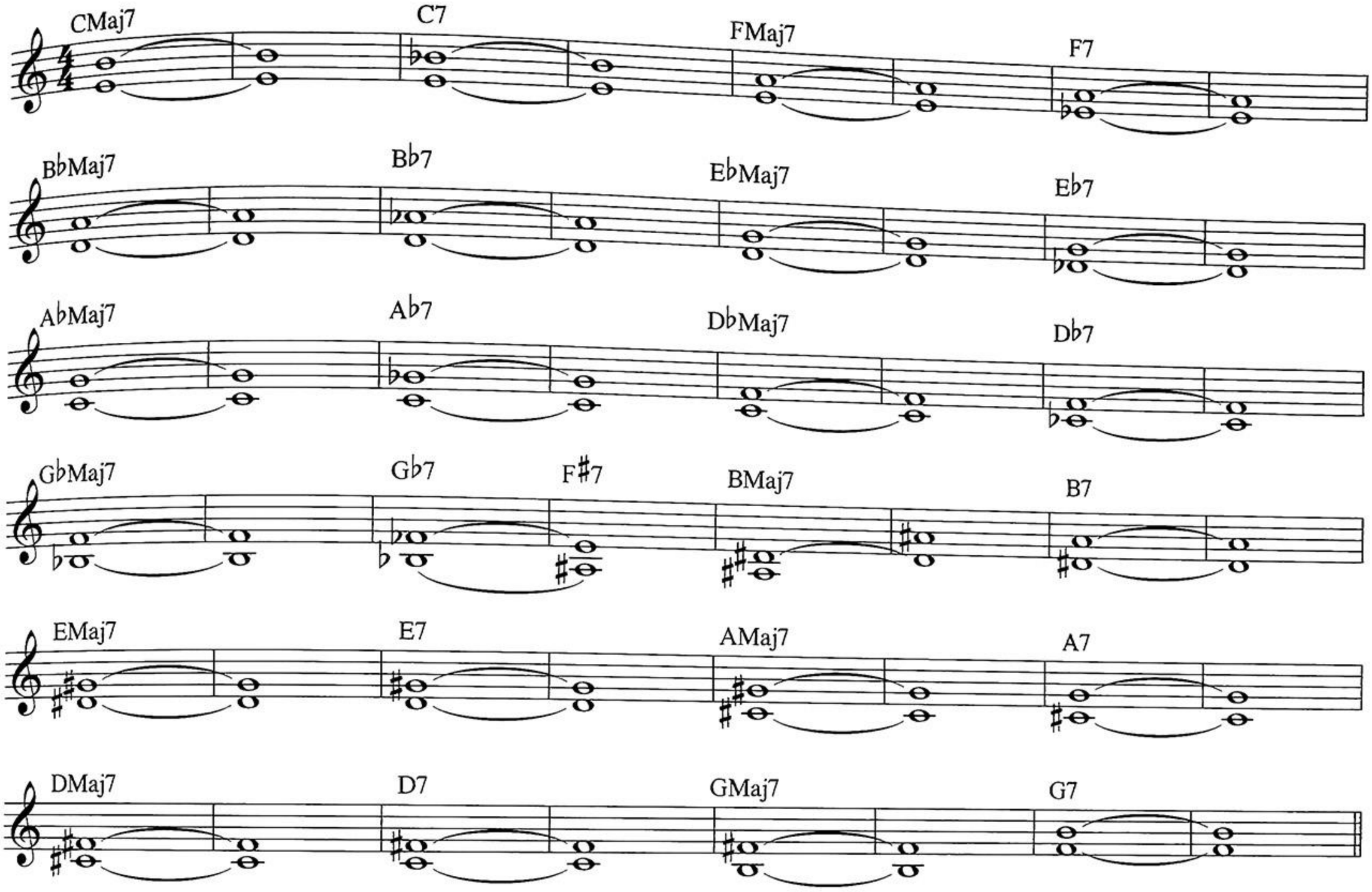

Fig. 10.15. Guide Tones for Play-Along

Remember, this should be added to your existing root-to-5th motion play-along through twelve keys, four measures each, to line up with the guide tones as notated above. You can sustain these guide tones on a keyboard, or play them rhythmically as off-beats or some other pattern. Simple is best. You don't need a distracting accompaniment, just something clear to practice with.

As you play over these chords pentatonically, start by playing the major pentatonic scale of each root. You'll be playing each major pentatonic scale for four bars. Since the major pentatonic scale does not include the 7th of the chord, the scale still will sound fine when the 7th changes from major to dominant.

Once you're comfortable with that, try maintaining the major pentatonic scale as you modulate from dominant to major 7. Look at the C major pentatonic scale in relation to the C7 and the FMaj7.

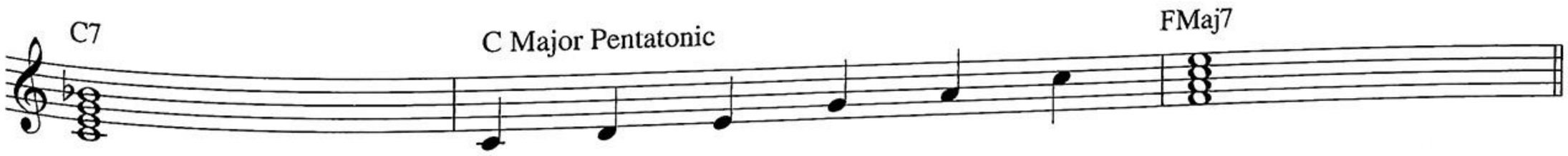

Fig Fig. 10.16. C Major Pentatonic with C7 and FMaj7

Over the FMaj7 chord, the C major pentatonic scale includes the 3rd of our FMaj7 (the note A) and the major 7th (the note E). The other pitches are common tones to both the C major and F major pentatonic scales: C, D, and G.

Use your play-along to explore that. You'll still be using each major pentatonic scale for four bars, but beginning now on the dominant chord and playing through the next major 7 chord.

In terms of voice leading, if you're enjoying the sound of the major 7 in your melody, you'll be resolving that up a half-step when the harmony changes to the dominant chord.

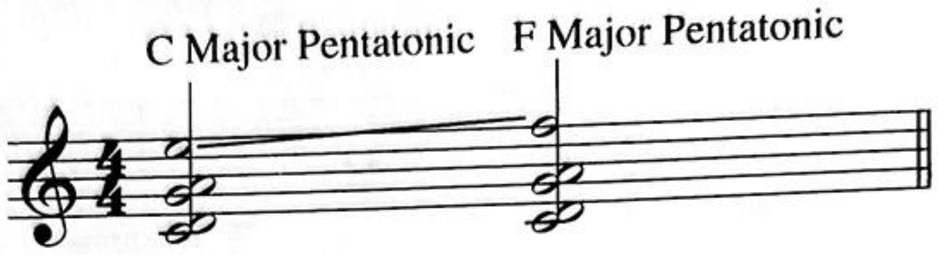

Fig. 10.17. FMaj7 to F7: Voice Leading C Major Pentatonic to F Major Pentatonic

The creative application of pentatonic scales to harmony and the creation of alternate pentatonic scales makes this topic nearly infinite. I hope that this introduction will give access to immediate melodic play and serve to stimulate further inquiry into pentatonics.

Remember, too, that you can use any pentatonic scale modally. That is, by taking any note of the scale and making that your root, you will be relating to that root in a unique way.

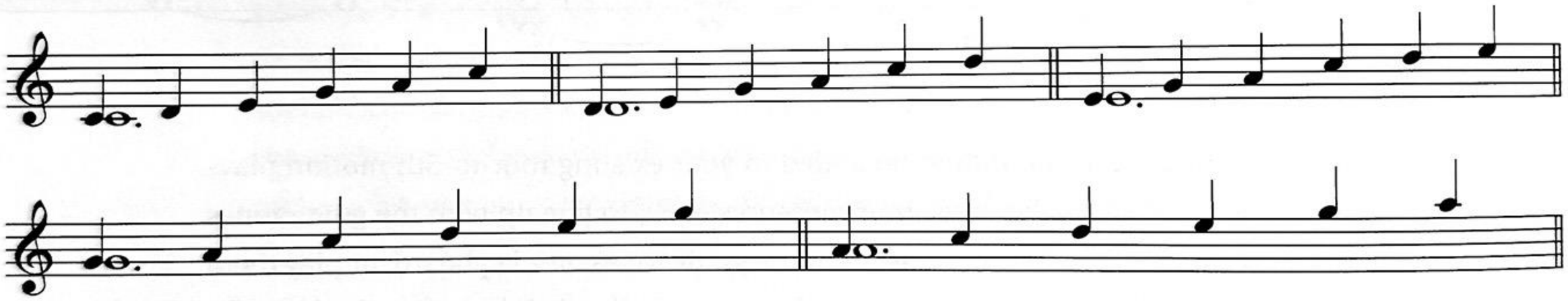

Fig. 10.18. Different Possible Roots in a Pentatonic Scale

Playing along with a drone is a great way to explore altering your pentatonic melodic options.

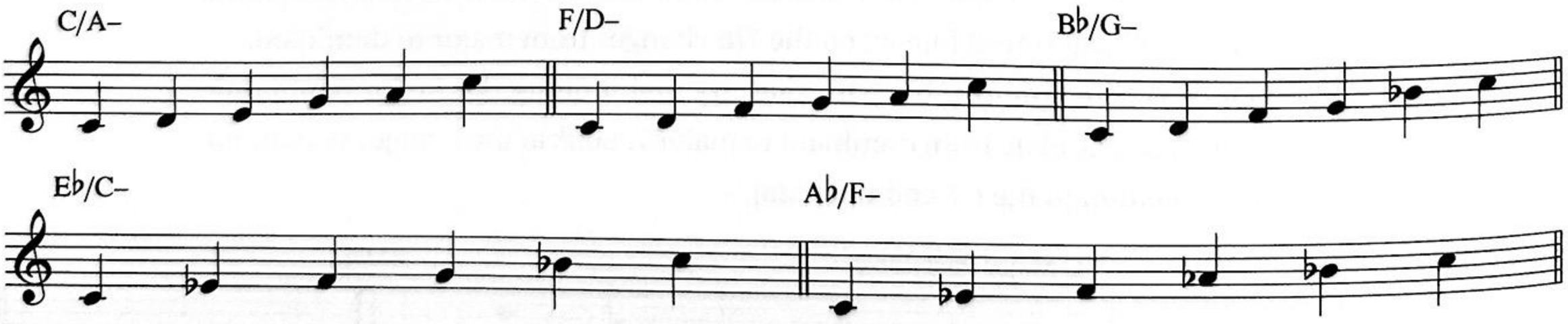

Fig. 10.19. Different Possible Pentatonic Scales with a Common Root

Before we move on, here are examples of two alternate pentatonic scales that you might find inspiring and/or fun to explore with other musicians.

Fig. 10.20. "Koto" Scale

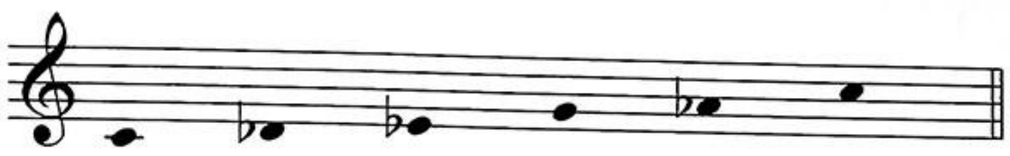

Fig. 10.21. "African" Pentatonic

CHAPTER 11

Transcription

One of the issues that keeps great players from improvising is the question of style. I've heard things like, "If I improvise, does that mean I need to play bluegrass music, because I don't like bluegrass music!" Or, "I like the idea of improvising, but I've never loved jazz enough to devote my practice time to it." Or, "I can play anything by ear, but I still sound all classical."

Many gifted and intelligent players choose not to improvise because they are aware that doing so reveals a great deal about their personal musical values and experiences. That is correct, of course. There is a certain sense of vulnerability one feels when playing something new, especially something personal. Playing music by certifiable musical geniuses in a style one has absorbed over the course of years feels much, much "safer" by comparison. In fact, there are a great many improvising musicians who feel the same way and respond the same way—staying on a path blazed by the gifted and courageous pioneers who preceded them.

One might define a trained musician as one who has gained mastery in emulating and embodying styles, performers, and repertoire from the past. Obviously, to play any music at a high level a performer invests personality, commitment, and some degree of interpretive innovation to a performance.

The most successful, however, rarely or never stray far from the path of a specific tradition, perhaps assuming that doing so might imperil the context—the form and the "message" of the medium they have worked so hard to master. There are players in every genre fitting this definition, from early music performers to bebop.

IMPROVISATION ENHANCES CREATIVITY!

This book is decidedly not about playing any certain style. The aim is to expand a player's awareness about the elements of music and encourage a creative and participatory curiosity about music. I believe that doing so will improve performances of any music, and will lead inevitably to enhanced creativity.

Performers of classical music undergo strenuous training, including many years of listening to great performers and becoming familiar with an enormous library of repertoire and associated playing styles. Good players in every genre of music do this no matter what instrument or style. A good rock guitarist knows specific solos from hundreds of notable recordings, while an Irish piper has literally grown up with that sound—the inflections, ornaments, and repertoire, all accumulated piece by piece over time.

For classically trained players who are not drawn to altering their style of playing, here are some suggestions. First, there exists a lot of "non-classical" music—music that allows and benefits from improvising—that lends itself very well to a classical approach. Tango, Brazilian *choro* music, bossa nova, flamenco, polka, much of Eastern European folk music (Gypsy, Bulgarian, Greek), Chinese and Japanese folk songs, and, in fact, folk music from nearly anywhere can be effectively played with a classical sensibility.

Secondly, creating original melodies in imaginative settings—*your* music—goes beyond the question of style entirely. A musician who plays with conviction, sincerity, and imagination will always be worth listening to, and the world is in constant need of this kind of positive musical stimulus.

But for players who are inspired by specific styles, today is the day to begin learning to play those styles. If you're drawn to a certain style, you've obviously heard some great performances or recordings in that genre. You can't listen too much; the style will work its way into you with consistent repetition. Listening is the first thousand lessons and the first step. And part of that phase is to dance and sing.

Get your body in sync with the music you love. Move any way you like; there's no correct way to get this going. As you listen, keep the beat with your feet, clapping, drumming, tapping the steering wheel, playing a single note or any sound on your instrument.

Sing along with recordings. When you're away from a recording, get the feel of your favorite tune in your head, choose a group of syllables that feel good in your mouth, and vocalize the articulations and phrasing you hear. You can mime playing your instrument as you do this. There's no need for good sound

or intonation, just a complete immersion into a totally uninhibited personal rendition.

This approach will get you started. But a big leap forward will occur by *transcribing*.

There are two kinds of transcribing: written and aural. Either method is effective, each has its challenges, and each method gets easier with consistent practice.

I've come to believe that transcribing with your instrument is the superior approach for most classical musicians. The fastest way to internalize a style you love, I believe, is by going to a good stylistic source (such as a recording that embodies that style), playing along, and matching its articulation, swing, dynamics, vibrato, embellishments, and phrasing.

A bonus: Given our natural tendency as classically trained players toward reading music, learning by ear is a great way to nurture playing by ear.

Start with a snippet—not a Hercules-sized blazing solo over complex changes, but an interlude, a verse, or even a particular phrase that catches your ear.

SINGING ALONG

Singing the solo or passage you're learning will help you memorize and "musicalize" it.

If you just can't get started with the aural method, by all means write it down first and then learn it from the notation. The written approach will teach you a lot about the variety of musical devices that comprise a style. Pacing, rhythm, glissandos, ties, triplets, syncopation—notating the music will bring many details into awareness.

Your written transcription does not need to be precisely accurate to be effective. One of my students made an astounding transcription of a Dizzy Gillespie solo that she didn't want to show me. When I persisted, she did show me: it was all *solfège*—in Korean! She had notated the pitches in her most comfortable language and memorized key elements like rhythms and phrasing.

Likewise, it's fine to simply write note heads and bar lines and let your memory do the rest.

Either transcription method may be slow, at first. Recognizing intervals and identifying the notes in a fast passage may require some trial and error. There are technical aids you can use to slow down a recording without altering the pitch, kind of like examining it under a microscope. It's not at all "wrong" or cheating to use these. Anything you can do to get at the inner workings of the style you want to absorb is fair game.

And you may have to work it out note by note, stopping your player constantly and rewinding until you get it. Be assured that this is perfectly normal and perfectly okay! It will get easier and faster the more you do it.

START WITH THE BLUES

In this day and age, we can all claim a certain ownership to some styles that are globally ubiquitous, and blues is the obvious example. (For a more thorough exploration of the blues, see chapter 12.) Wherever you live, wherever you will perform, the blues has been there already. By that I mean that as a citizen of planet Earth, you've probably heard blues and blues-inflected music from any number of sources. Integrating aspects of blues into your performance will give a quality of vocality and familiarity to your improvising that may make it more effective.

Listen to and study the styles of the great blues artists. You may absorb small details of each artist's style, or you may find an artist whose style you want to emulate completely. By transcribing, you can follow your curiosity and affection into imitation.

> *"Imitation is the highest form of flattery, but clones kind of get it wrong because we are promoting individuality and being proud of being ourselves."*
>
> —Brian Molko, Placebo

If jazz is the language you want to learn, you might start transcribing solos by Paul Desmond, Chet Baker (check out the album *She Was Too Good to Me*), and Miles Davis (the tune "So What" from *Kind of Blue*). These are examples of great jazz in a melodic style that lends itself well to first-time transcribers.

Memorizing great solos and stylistic details can lead you to a new sound and attitude—a new vocabulary of embellishments and articulations. Imitating the successes of others is useful if it reveals a new facet of yourself. But the importance of accessing your deep musical currents remains, no matter what style you can play.

The point is, your improvising will reflect the listening you have done and, for classically trained players, it will reflect the conscious efforts taken to adopt the style you most admire.

CHAPTER 12

Blues

The blues may be the most widespread and influential musical form in the world. So much great music has been made in blues form, and so much great music has been born by innovations on the blues: jazz, gospel, rhythm and blues, hip-hop—the list goes on and on. And, of course, the blues has influenced countless vocal and instrumental artists in the genres of rock, pop, world, new age, and even classical styles.

Blues has a directness and intensity of communication that is astonishing. And while blues is arguably America's most significant musical contribution to the world, it's now as international as sonata form, or the wheel!

With no pretense of being a blues authority myself, I do feel it's important to include some basic information about the blues, since every improvising musician will encounter some kind of blues jam sooner or later.

The first thousand lessons for those who want to play the blues effectively are to listen. W.C. Handy, Robert Johnson, Bessie Smith, Billie Holiday, Muddy Waters, John Lee Hooker, B.B. King, Professor Longhair—just a very abbreviated short list of my favorite blues artists, each of whom represents a fresh and personal perspective on the genre.

While listening, hone in on the groove. Keep the beat with your body, tap your foot, dance, walk around with it. Relating to the pulse is so incredibly vital to playing the blues that it's got to be first on your blues to-do list. Play along with recordings. Any note will do; just make your part tuck into the groove. Invest your physicality in the blues as totally as you can.

Feel the dynamics of the performance. It's the same twelve-bar structure repeated over and over, but the music is growing and swirling around you. Let yourself be caught up in it. Take your note up an octave, double the rhythm.

"Blues is easy to play, but hard to feel."

—Jimi Hendrix

As most often played, the blues has a distinctive swing, generally four beats to the bar, but with an internal feel of triplets, or 12/8 time—a nearly un-notatable time feel sometimes referred to as a *shuffle*. Again, listening to great blues players will communicate this the best, but getting this swing in your melodic play will have everything to do with your effectiveness in playing blues.

Sing along! Oh yeah, sing along! Lock your door, turn off the phone, and let loose. The musical dynamics are inside you already; just let them out through your voice. This is not about good sound, intonation, or anything but pure energy and flow. Get down!

The great thing about jam sessions with friends is that you can let your hair down and get wild in a "safe" setting. "What happens in Vegas, stays in Vegas."

Two other things you'll notice about the blues are its simple melodies and unique 12-bar phrase structure, comprised of three 4-bar phrases. Most of the world's music falls into groups of two phrases. Most common are two 4-bar phrases—a kind of call and response, you might say. The blues repeats the call part of that: eight bars, plus a 4-bar response. Even in well-disguised alterations, the phrase structure is unmistakable. In its basic form it goes like this:

TRACK 47

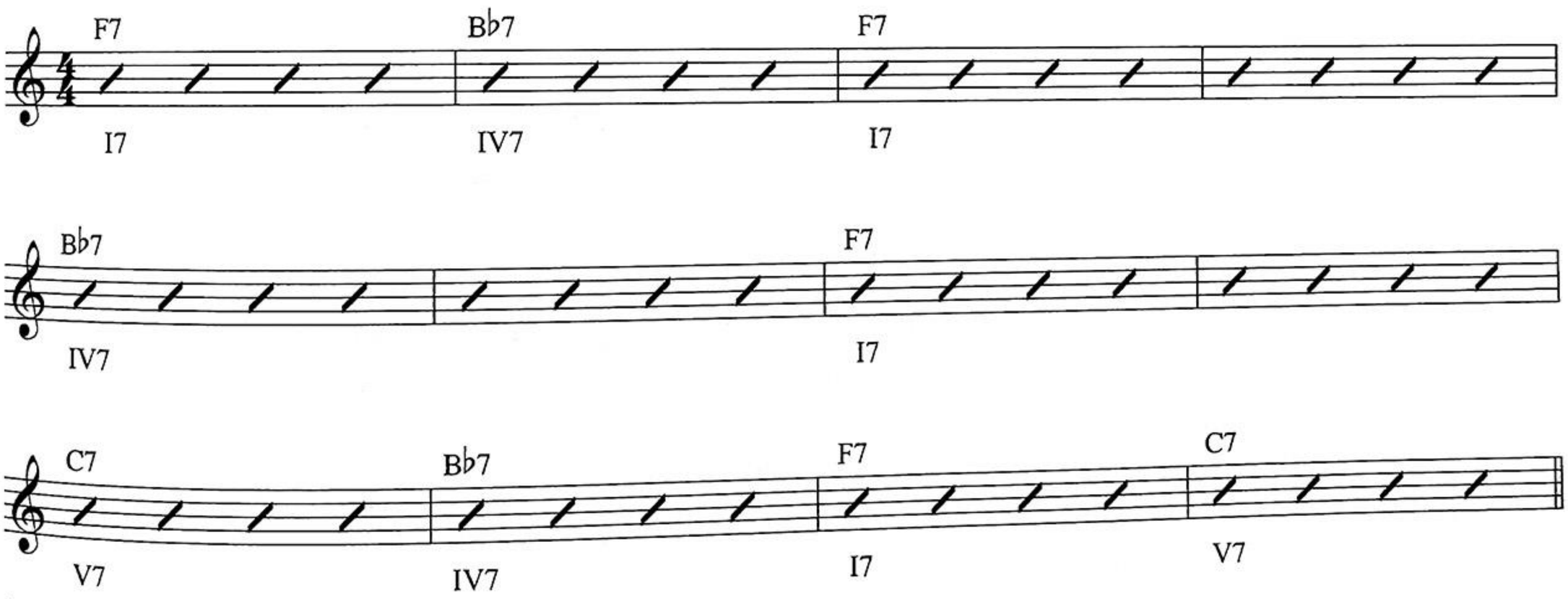

Fig. 12.1. Basic Blues in F

Just three chords, but a world of expression resides therein. This example has the chord symbols, as well as the Roman numerals. It's a good idea to think of these chords as "one" chords, "four" chords and "five chords," since that's such a part of musicians' vernacular.

Assuming you're getting comfortable with the swing feel, the next issue is to make friends with how the phrase structure feels. It's a good idea to listen to blues songs when learning about the blues, because there the phrase structure is very clear. So often, you will hear the same lyric repeated in the second phrase

as the first. The third phrase is often very similar melodically, and has the effect of setting the first two in a different context:

> 1st phrase: My best friend left me, and he took my Cadillac.
>
> 2nd phrase: My best friend left me, and he took my Cadillac.
>
> 3rd phrase: Just 'cause I burned his house down, well, he ain't comin' back.

Like I said, listen to some great blues songs and singers, and you'll get it. Just remember: Keeping in mind the traditional phrase structure will help you make clear phrases and keep your place in the 12-bar form.

But notice also how the repeated phrases never get boring or sound repetitive. The performer is constantly imbuing the words with "soul": personality, variation, dynamics, passion, storytelling.

As you listen to the great blues performers, you might notice some melodic phrases that catch your ear. Please take note of these—literally. Transcribe them either by notating them into your journal or by learning to play them by ear. Know what key they relate to, and then play them in different keys—all twelve, for example!

Something you'll notice as you survey the traditional players is the fairly narrow use of register. You will hear very effective blues solos that don't move away from a small range of notes. These are great solos to transcribe because they teach the style, the melodic pacing, the embellishments, the slides, inflections, and swing that combine to make the blues sound like blues.

There are examples of great blues players on many different instruments (though the list is fairly small for some classical instruments like viola, cello, bassoon, oboe, tuba, or tympani). But all of us can learn from and adapt blues style and vocabulary from any source. Here are some of my personal favorites (in addition to the artists already mentioned in this chapter), mentioned here to serve as a starting point for listening by instrument and player. While not all the players listed below are mainly blues players, they have all been influenced by blues and have made important recordings playing blues.

Guitar: Robert Johnson, Wes Montgomery, George Benson, Pat Martino

Violin: Joe Venuti, Eddie South, Stuff Smith, Stephane Grapelli, Papa John Creach, Don "Sugarcane" Harris

Trumpet: Louis Armstrong, Harry James, Miles Davis

Clarinet: Johnny Dodds, Artie Shaw, Jimmy Dorsey, Sydney Bechet, Ted Lewis

Cello: Fred Katz, Oscar Pettiford

There are a world of resources for listening and learning blues. We've mentioned a few to spark your curiosity and to initiate your search. Assuming you've done some significant listening, let's play some blues now.

Here's a jazzier version of the 12-bar blues:

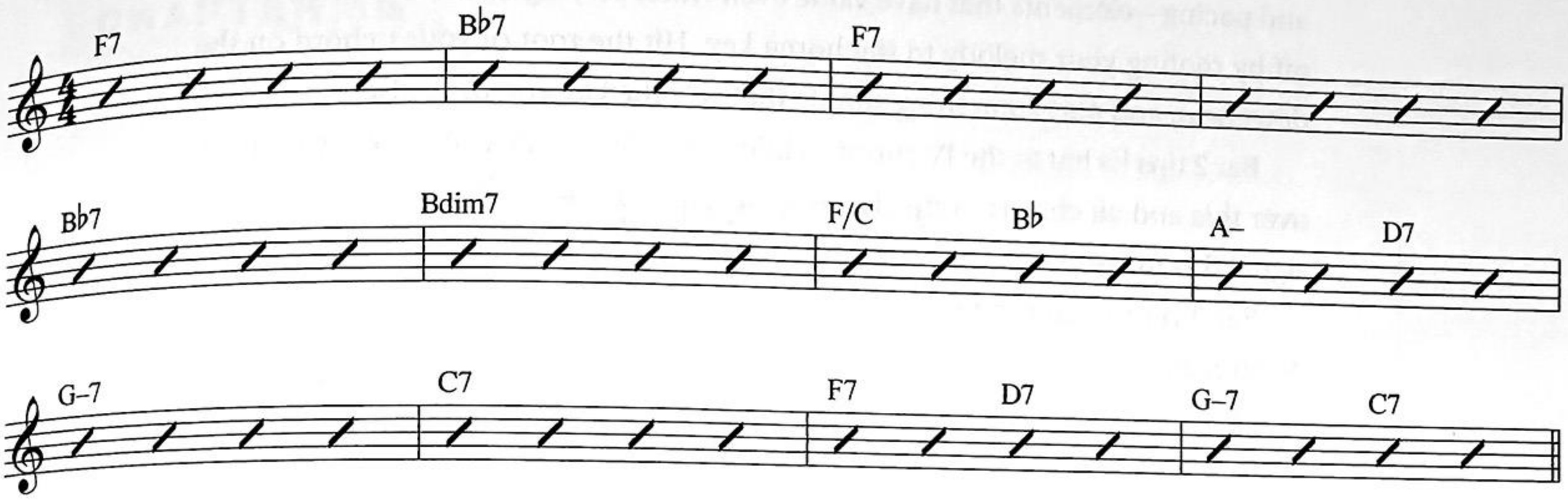

Fig. 12.2. Jazz Blues in F

You see a lot more chords here, but the blues was a vocal medium first and, while it's not unusual to hear virtuosic, mind-blowing instrumental soloing over the blues, it's also fine to play simply, especially at first.

In fact, the first step in playing blues might be to simply play pentatonically. You will find that one pentatonic scale will work over all the chords.

For a blues in F, use the F minor pentatonic scale, adding one more chromatic approach note between the fourth and fifth. Here's an adjusted minor pentatonic scale, the *blues scale.*

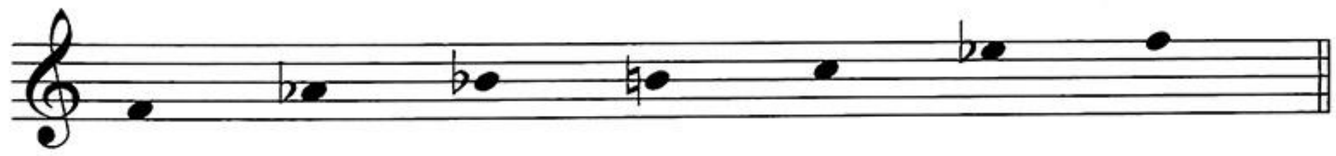

Fig. 12.3. F Blues Scale

The notes that make this a bluesy sounding scale are the minor 3rd, the flatted 5th, and the minor 7th. These are the *blue notes*, notes outside the strict confines of major chords that characterize the *polymodal* sound of the blues. Learn this scale in all twelve keys, and you will have an immediate solution for entering any blues jam.

For first-time improvisers, the *tritone* (flatted 5th) holds a powerful lure, and it's easy—very easy—to use it too much. As in learning other primarily aural traditions, it's best to listen, listen, listen to how this music is performed by the best artists. Gradually, your sense of taste will evolve to reflect the best performers' styles, and you can build on that with your own distinct background, values, technique, and instincts.

The blues scale will work throughout the blues form. It contains within it some key pitches of the main chords and always points to the tonic. So use that, plus your growing sense of blues vocabulary, to play a blues as an unaccompanied solo. Begin with a basic blues progression (figure 12.1), for example and see if you can convey the 12-bar phrase structure and harmonic motion with a bluesy time feel.

To begin with, be sure you're playing a melodic line with a rhythmic quality that gets across the pulse and meter you are feeling. Count and feel a couple of bars

internally before you begin playing. Keeping in mind what we know about breathing and pacing—elements that have value even when playing unaccompanied—start off by rooting your melody to the home key. Hit the root of your I chord on the downbeat, and play something simple that sets the key and the pulse.

Bar 2 tips its hat to the IV chord. While the F blues scale will work melodically over this and all chords in this blues, play a low B♭ on the downbeat of bar 2 to signal this move.

Bar 3 returns to the home key so, for now, again feature the root (F) on the downbeat, and continue your phrase to complete the first four bars.

The downbeat of bar 5, the beginning of the second 4-bar phrase, moves back up to the IV chord. For now, hit that new bass note squarely on beat 1 to set the new harmony, and move again into melody, perhaps referring to what you played in the first four bars.

Bar 7 is a return to the first chord, I7, so play that root in a low register to signal the return, and improvise for two more bars.

Bar 9 requires the root of the V7 chord, bar 10 the root of the IV7, 11 the tonic again, and 12 the root of the V7 to return to the top of the form. These last four bars can introduce some new melodic ideas or not, but will require—at least at first—playing bass notes on downbeats, plus melodic material. Since these harmonies change with each bar, you might want to spend some time practicing these slowly as a group, as you discover how to convey the chord changes and play melodically with fluency.

Here's an example of a single-line blues:

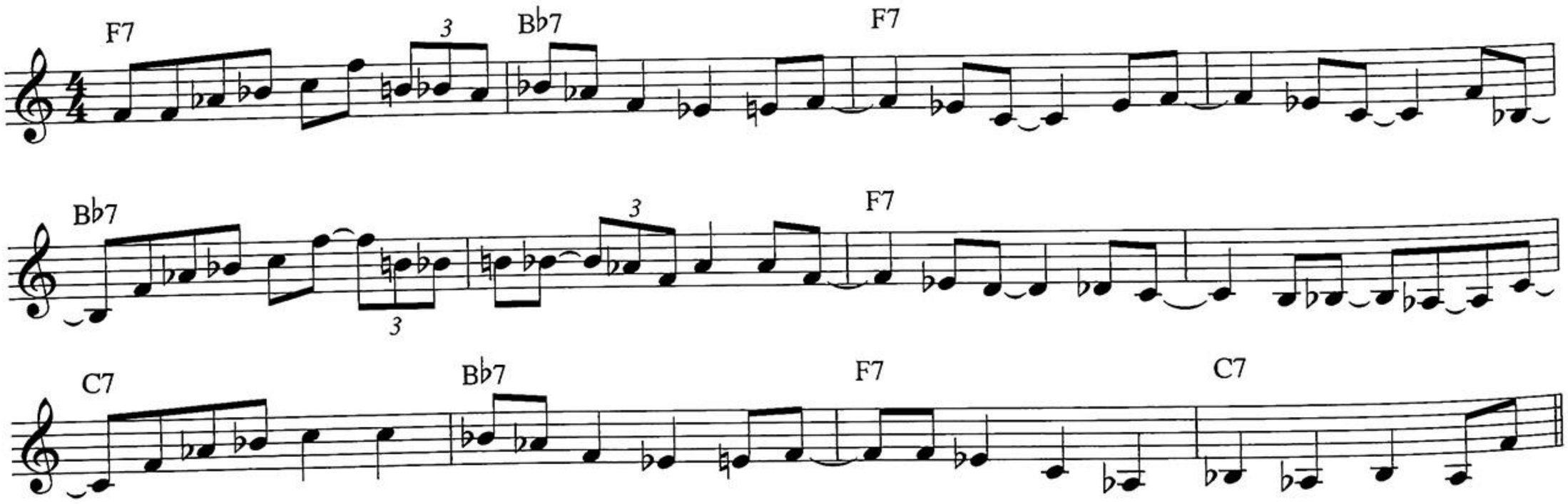

Fig. 12.4. "Blues Riff" in a Single-Line Blues

So much more can be said about the blues, but analyzing the blues is not our goal; that has been done exhaustively by many great academic minds. It's not the point, anyway. *Blues is best learned by listening and imitating.* As you listen to the range of great blues players and singers, your own sense of taste will emerge, and you'll be motivated to learn the style and techniques of performers you truly love. The blues may become "your" music, or it may be for you as it is for countless numbers of contemporary musicians, an indispensable influence on your sound and style.

CHAPTER 13

Transposing

We've mentioned the importance of being able to read lead sheets in treble clef, and for some players, that's enough of an initial challenge. This chapter is about a different facet of transposing: transposing by ear as a pathway to enhanced playing by ear.

Transposing is a great way, and ultimately a quick path, to integrate the intervals and melodies you hear into your fingers.

Take a tune or phrase you know, and play it in all keys. Start with a simple tune that doesn't modulate or require the use of accidentals. I've included ten in this chapter, but you can go on to find the tunes that you know from childhood. Hymns, children's songs, folk songs, Beatles tunes—anything you know well is suitable.

At first, you may find that it requires some painful trial and error to find the note on your instrument that you hear in your mind. You may want to take note of certain intervals. It might even be helpful to consult a notation of the tune so that you can match its contour of intervals. When you can, though, take your eye from the notation, and let your ear guide you.

The goal is to hear the melody accurately enough to allow your intuition to realize it through your instrument. For many, that requires an initial period of intense confusion, so just laugh as much as possible! It's a transitional period, and you might as well enjoy it. But strive to work through it: The more consistently you place yourself in this state, the shorter it will be.

"We are what we repeatedly do. Excellence, then, is not an act, but a habit."
—Aristotle

It's also fine to stick with a tune for several days until it gets easier and more familiar. Find your own pace, but be willing to experience the baffling sense of being "at sea," because that's what learning can feel like. I heard someone refer to this state as the dark hallway between two well-lit rooms. In one well-lit room you're reading the notation, and in the next, you're playing anything by ear in any key. But between those two rooms....

If you're not playing a wind instrument, sing along. Sometimes, integrating your voice will be nearly magical in its effect on your transposing. If you are

playing a wind instrument, or if singing along is impossible for any reason, sing it *before* you play it in each key, and sing it again to regain your footing if and when you lose it.

Once you notice that you're gaining some facility and ease transposing simple, familiar things, go to more complex familiar things. Some common jazz tunes to transpose include "Billie's Bounce," "Blues for Alice," and "Straight No Chaser." I've suggested some additional possibilities below to activate your imagination, but you may enjoy your own choices more fully, and that's important.

This is a short chapter, but a crucial one. Please remember this (it's a hint and a clue): If you're looking for a fast path to a "good ear," transpose something every day.

TUNES FOR TRANSPOSITION PRACTICE

Amazing Grace

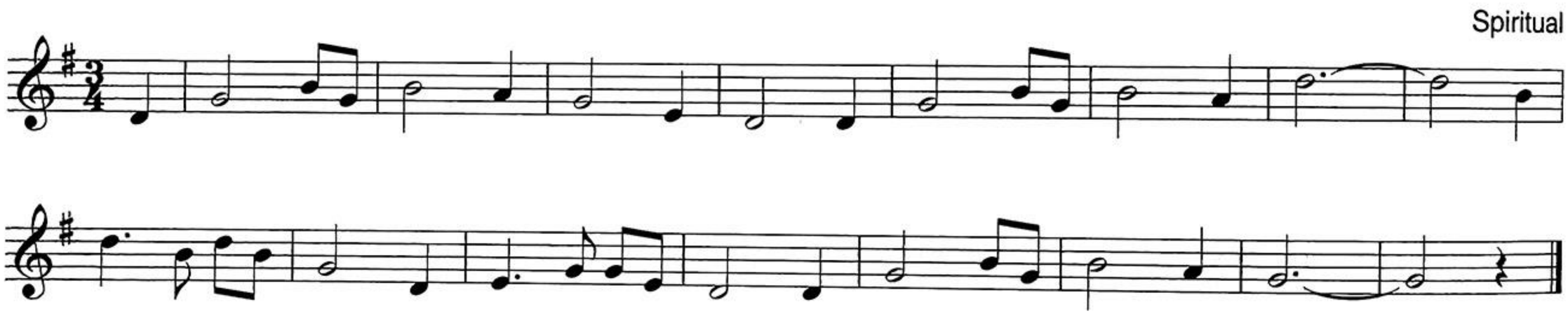

Fig. 13.1. "Amazing Grace"

The Happy Farmer

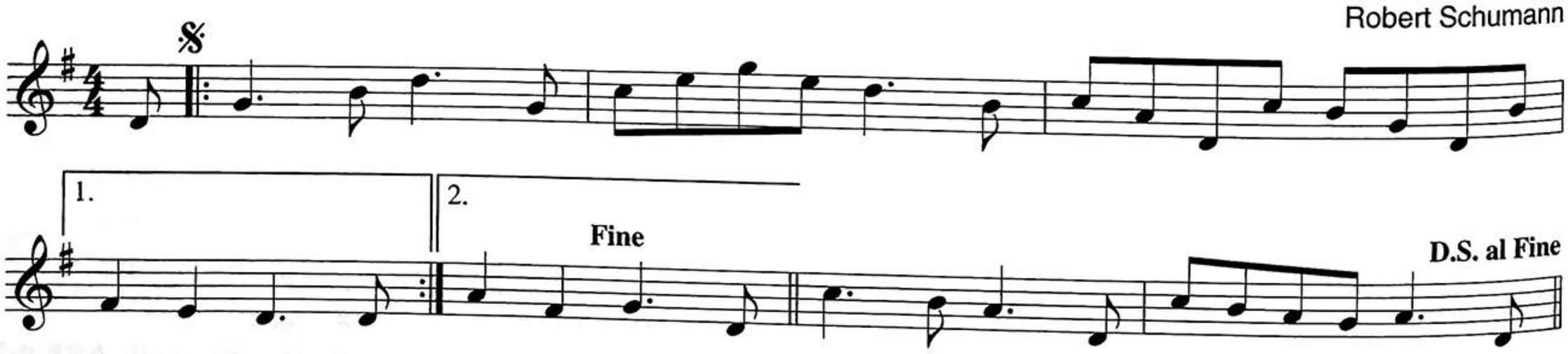

Fig. 13.2. "The Happy Farmer"

The Water Is Wide

Traditional

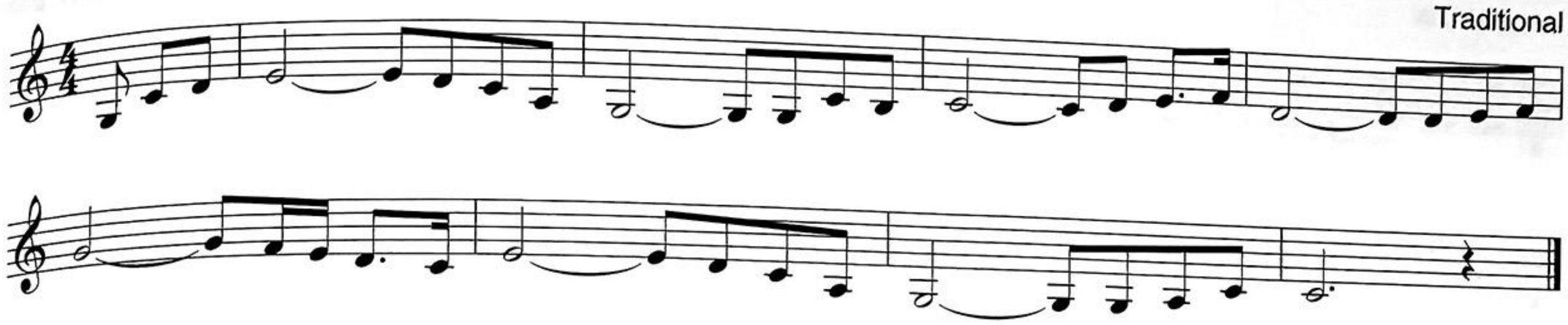

Fig. 13.3. "The Water Is Wide"

Arkansas Traveler

Colonel Sanford C. Faulkner

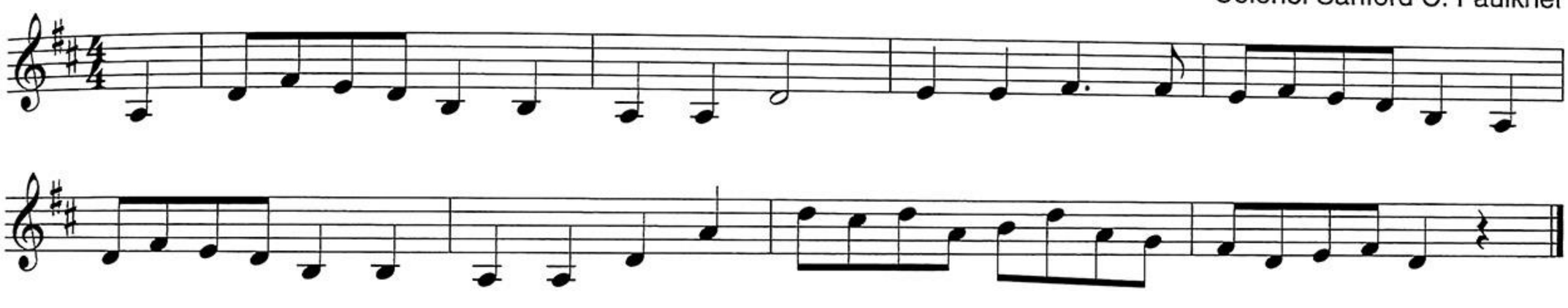

Fig. 13.4. "Arkansas Traveler"

Simple Gifts

Joseph Brackett, Jr.

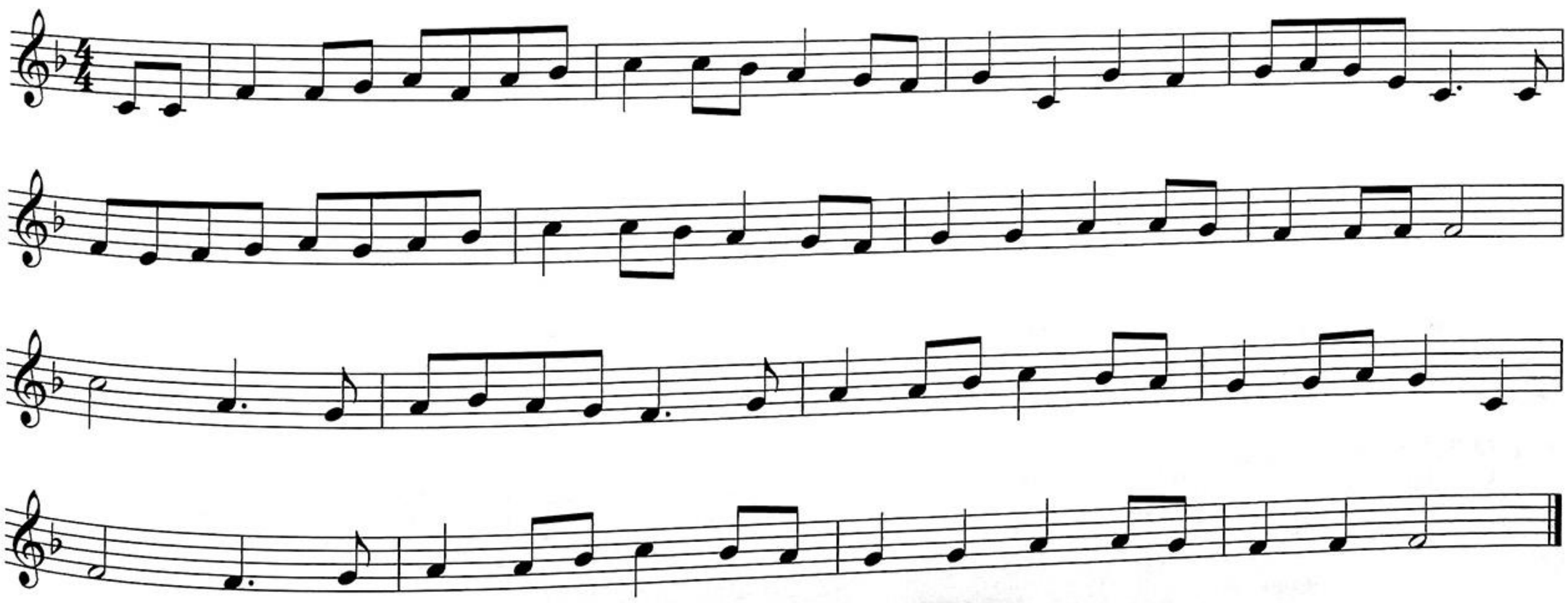

Fig. 13.5. "Simple Gifts"

When Irish Eyes Are Smiling

Ernest R. Ball

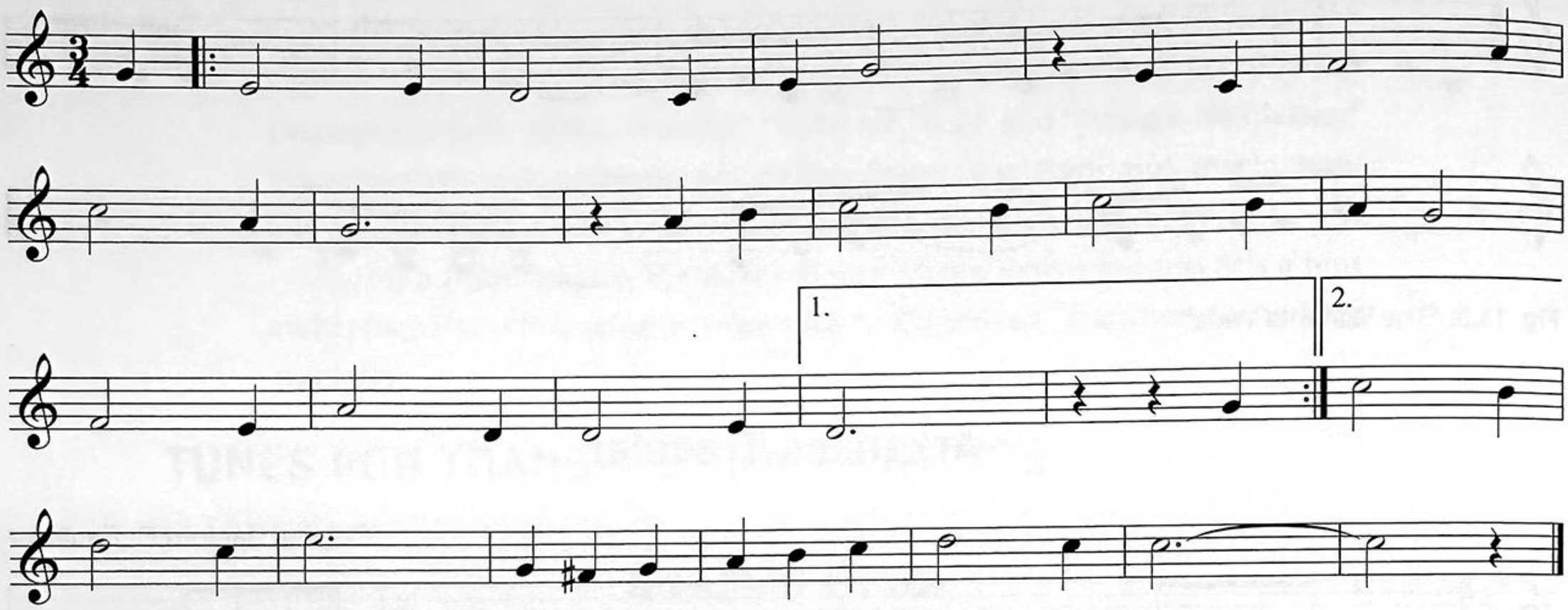

Fig. 13.6. "When Irish Eyes Are Smiling"

Londonderry Air
(Danny Boy)

Traditional

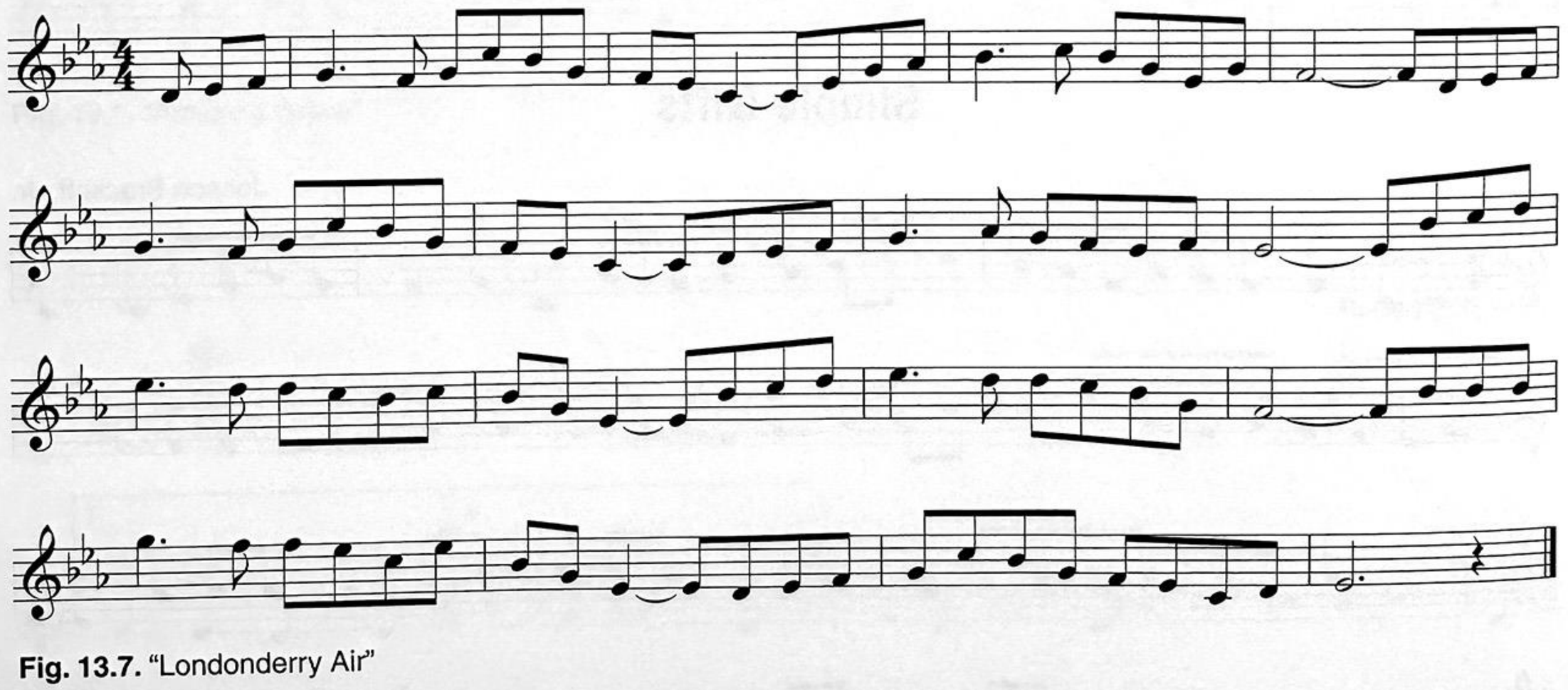

Fig. 13.7. "Londonderry Air"

Eine Kleine Nachtmusik

W.A. Mozart

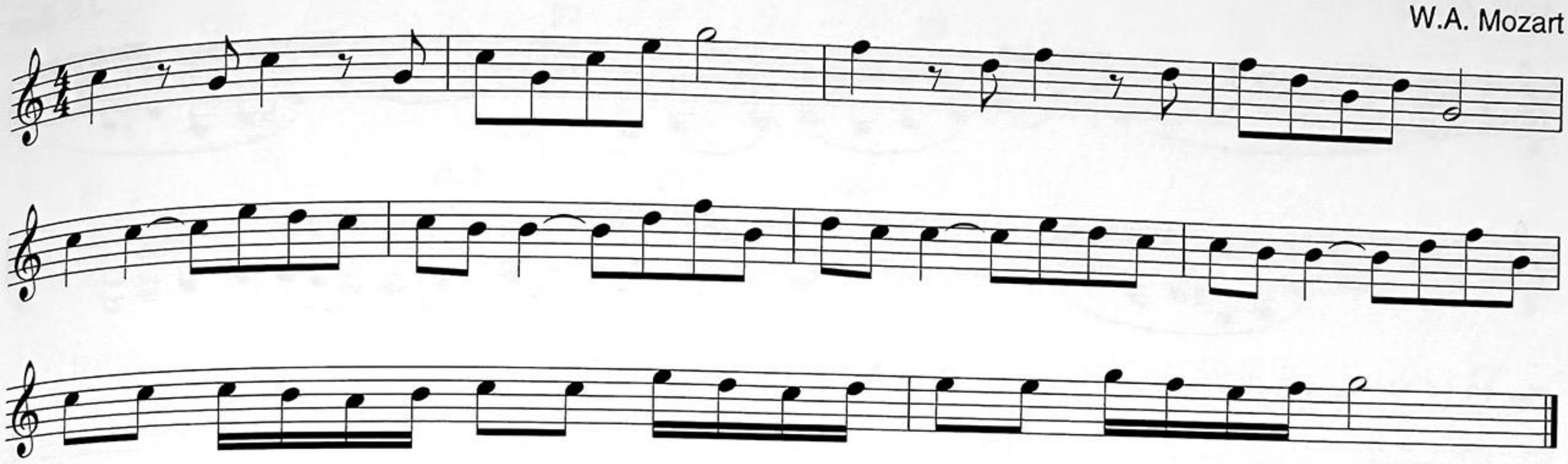

Fig. 13.8. *Eine Kleine Nachtmusik* (Mozart)

The Entertainer

Scott Joplin

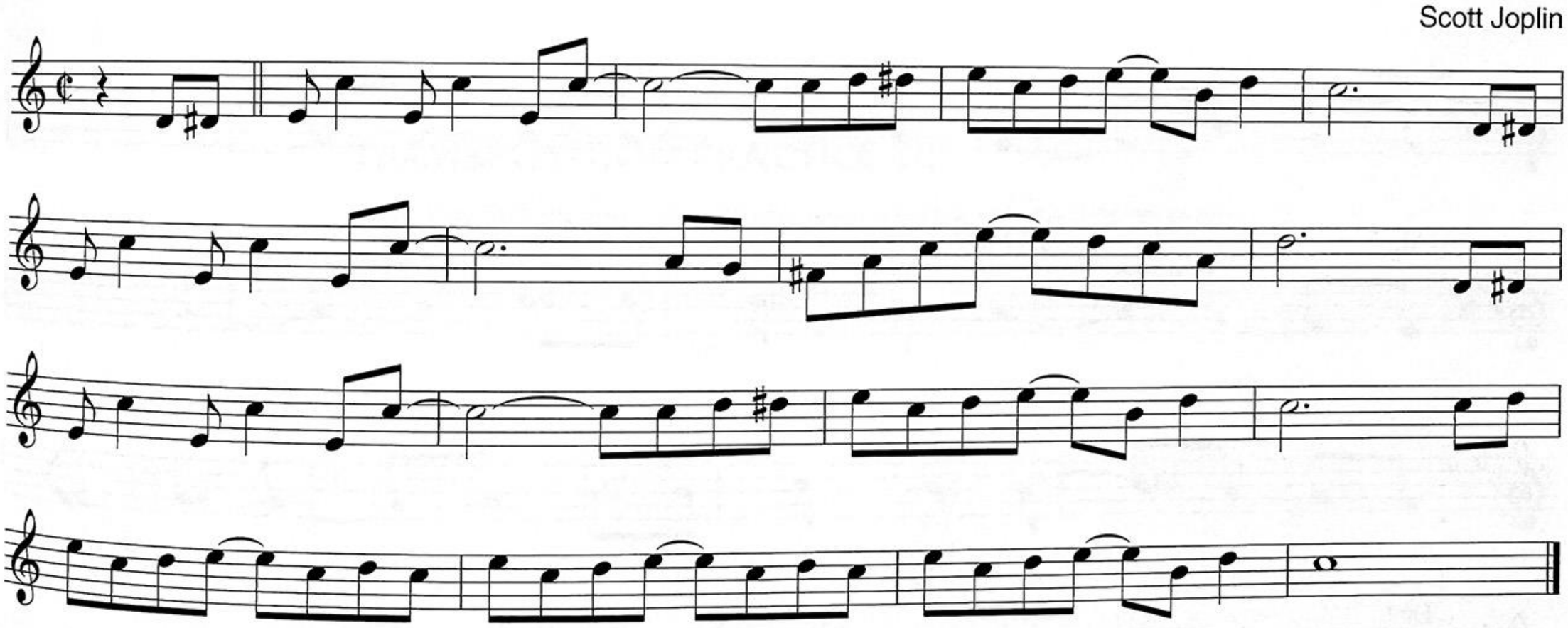

Fig. 13.9. "The Entertainer" (Joplin)

Sheep May Safely Graze

J.S. Bach

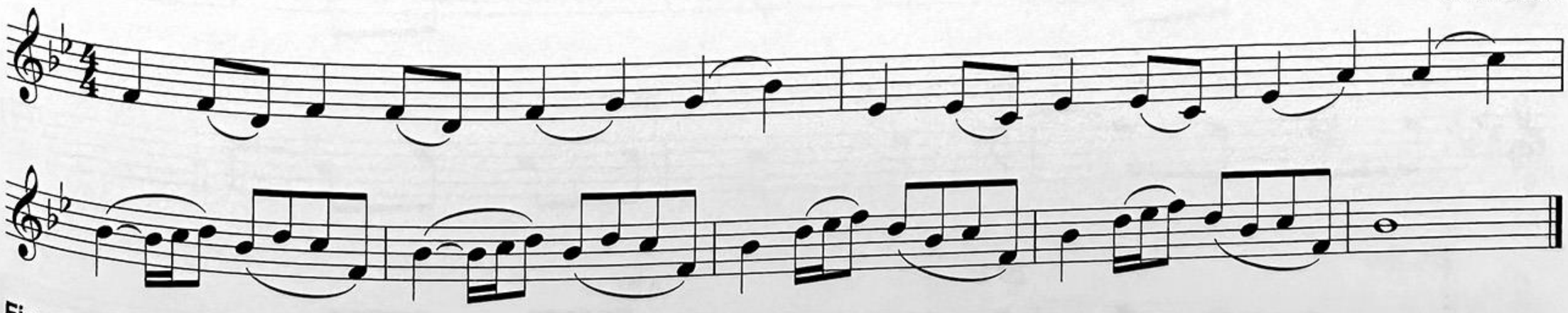

Fig. 13.10. "Sheep May Safely Graze" (Bach)

Air on a G String

J.S. Bach

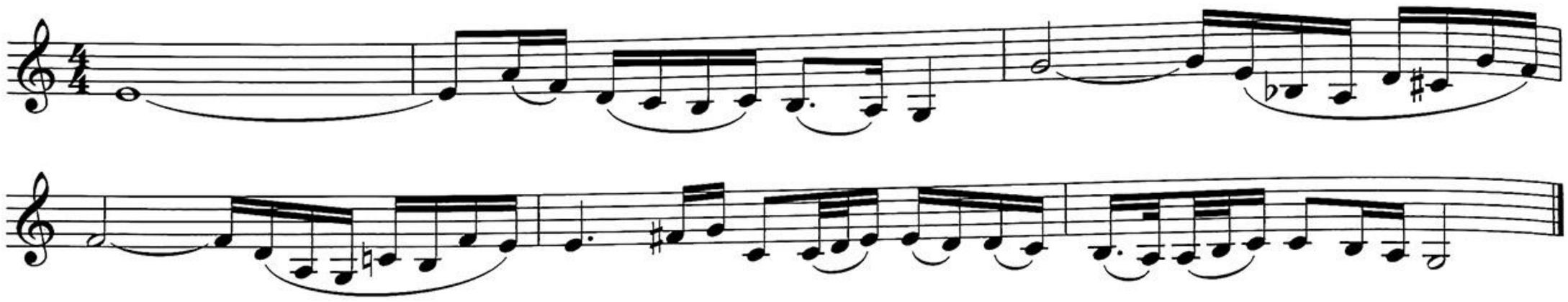

Fig. 13.11. "Air on a G String," from *Orchestral Suite No. 3 in D Major* (Bach)

Limehouse Blues

Phillip Braham

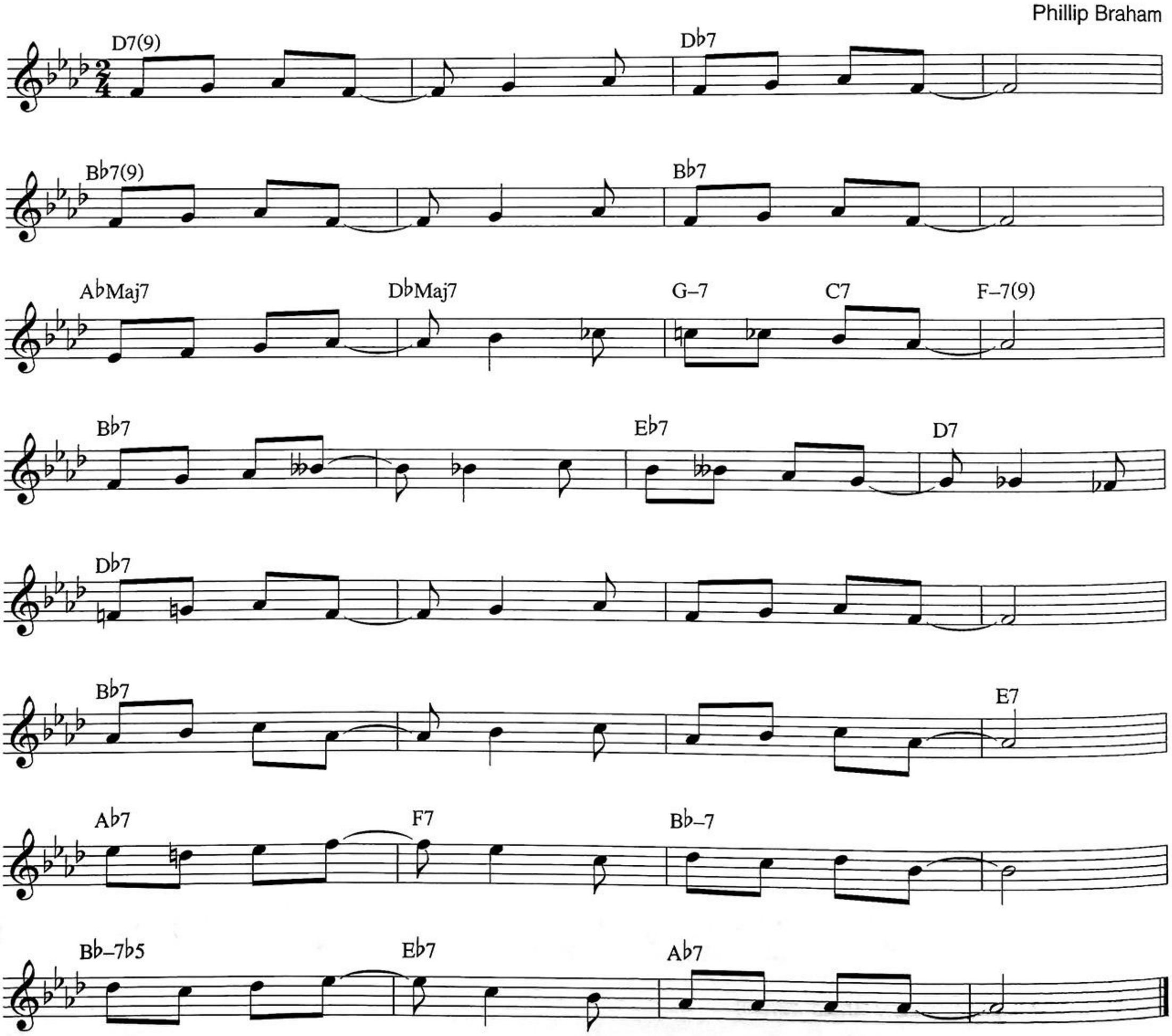

Fig. 13.12. "Limehouse Blues"

Avalon

Jolson–Rose

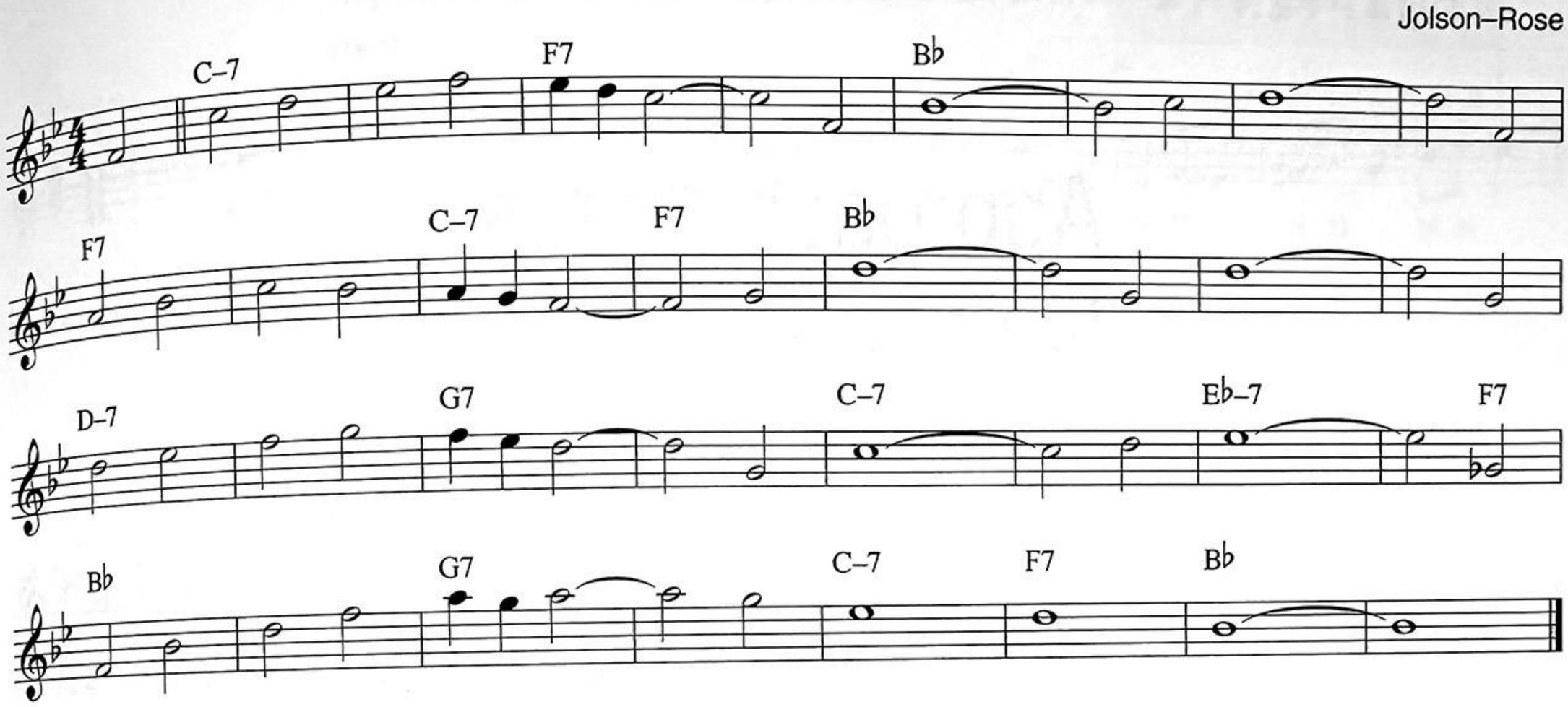

Fig. 13.13. "Avalon" (Jolson and Rose)

TRANSPOSITION PRACTICE TIP

Take the first sixteen bars of any tune and transpose it to all twelve keys.

CHAPTER 14

Approach Notes, Neighbor Tones, and Embellishments

An *approach note* is a non-chord tone that resolves stepwise to a chord tone.

Many common embellishments and ornaments can be considered variations on approach notes. The variety of approach notes can be broken down into several categories.

1. Passing Tones: connecting chord tone to chord tone by diatonic step.

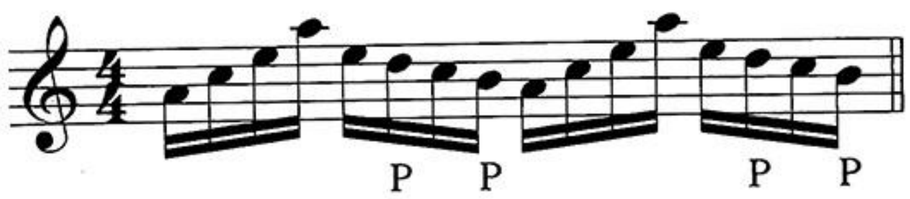

Fig. 14.1. Passing Tones in Bach *Sonata No. 2 for Unaccompanied Violin*, "Allegro"

2. Auxiliary Tones: a half or whole step above or below a chord tone, used as an embellishment, moving away and returning to the same pitch.

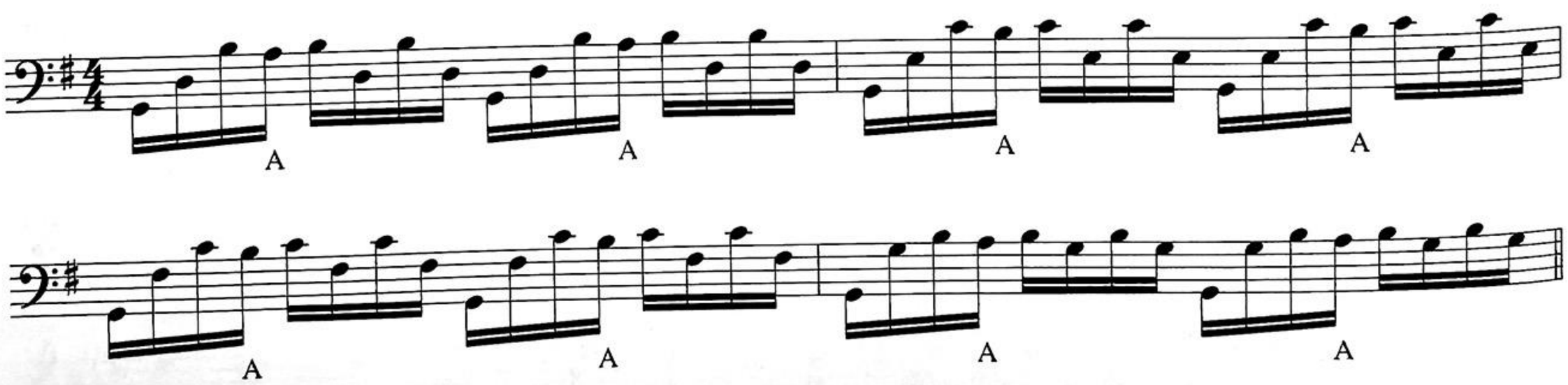

Fig. 14.2. Auxiliary Tones in J.S. Bach, "Prelude in G," from *Suite for Unaccompanied Cello No. 1*

3. Neighbor Tones: a half step below the chord tone and a diatonic scale step above the chord tone (sometimes a half step, sometimes a whole step).

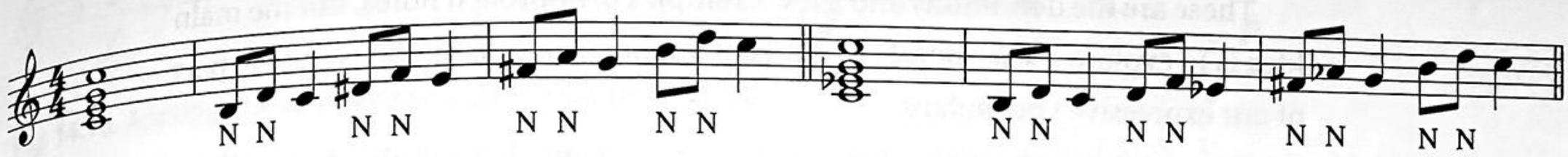

Fig. 14.3. Neighbor Tones in C Major and C Minor

Here are some neighbor tones at work, drawn from the opening of Mozart's *String Quartet No. 18 in A Minor*:

Fig. 14.4. Neighbor Tones in Mozart's *String Quartet No. 18 in A Minor*

4. Chromatic Approach Notes: a half step below or above a chord tone.

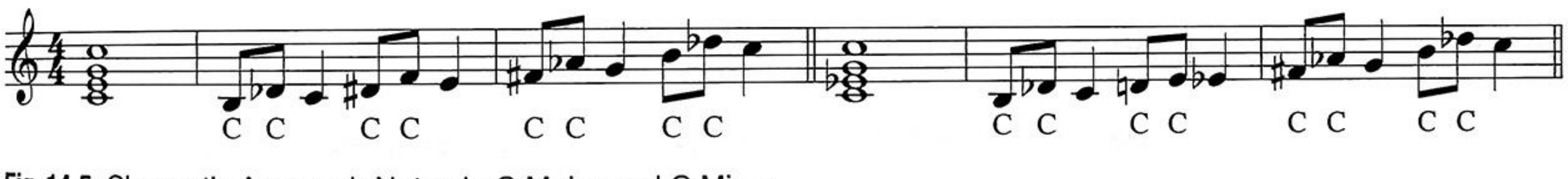

Fig. 14.5. Chromatic Approach Notes in C Major and C Minor

Mozart loved these chromatic approach notes and passing tones, and they must have sounded excitingly edgy and avant garde when he introduced them. Here's the opening violin melody from his *String Quartet No. 14 in G.*

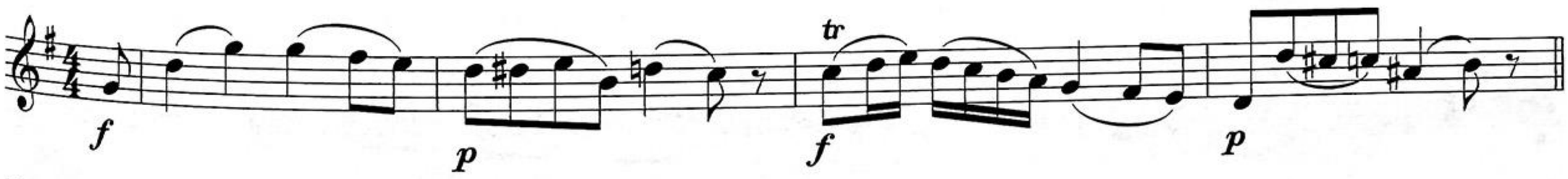

Fig. 14.6. Chromatic Passing Tones in Mozart's *String Quartet #14 in G*

And, just to look at another example through the lens of approach notes, here's the infamous opening of the *Toccata and Fugue in D Minor* by J.S. Bach:

Fig. 14.7. Approach Tones in *Bach's Toccata and Fugue in D Minor*

As commonly played, the opening mordant uses an auxiliary tone one step lower. That's followed by a scale, or to look at it differently, passing tones and chord tones of D minor down to C♯, the lower neighbor tone of D.

Neighbor tones and chromatic approach notes can be *unprepared*—that is, preceded by a leap or a rest, whereas passing tones and auxiliary tones are by definition preceded by stepwise motion.

These are the definitions and a few examples of approach notes, but the main idea is to explore these sounds in our ears and instruments so they become part of our expressive vocabulary.

Since we've used passing tones when improvising diatonically, and we'll be referring to auxiliary tones when we work on embellishments, we will now focus on neighbor tones and chromatic approach notes. These serve to bring some tension into your melodies—sounds that were pioneered and brought to high artistic fruition in the eras of Baroque and Classical music, but widely used ever since by improvisers and composers alike across the gamut of musical style.

First, let's explore these sounds using a drone. With the C drone humming around you, refer back to the neighbor tones in C major/minor.

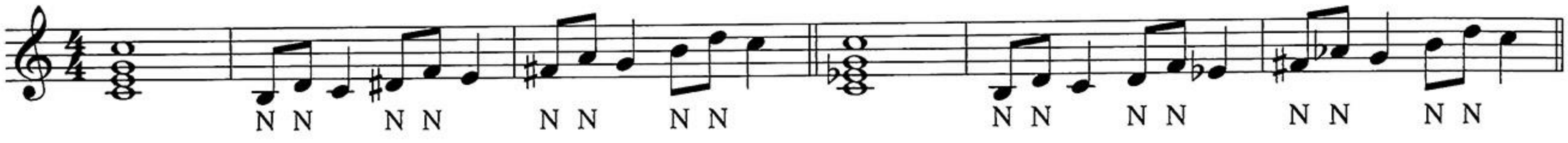

Fig. 14.8. Neighbor Tones in C Major and C Minor

Now, create some melodic motion integrating these non-chord tones. Here's a suggested melody, just to get you going. As always, you are encouraged to create your own.

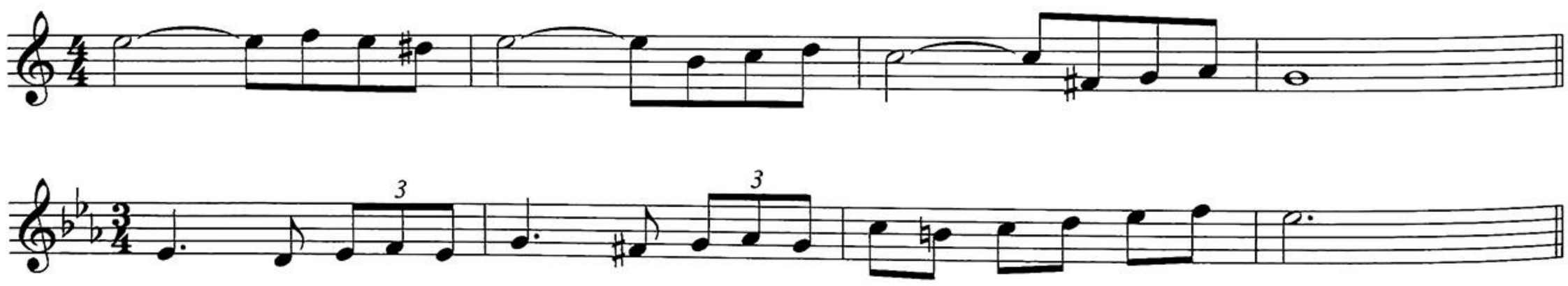

Fig. 14.9. Neighbor Tone Melodies in C Major and C Minor

The melody in figure 14.9 uses neighbor tones to approach chord tones that are on the strong beats, but neighbor tones also can be used on the strong beats. An approach note on a strong beat is a sound associated with the term "appoggiatura," from the Italian *appoggiare*, "to lean upon." An appoggiatura occurs on a strong beat and when leaned on—stressed with a tenuto or *rinforzando* (*rfz.*)—has a lilting and emotional effect. It's a non-chord tone resolving to a chord tone.

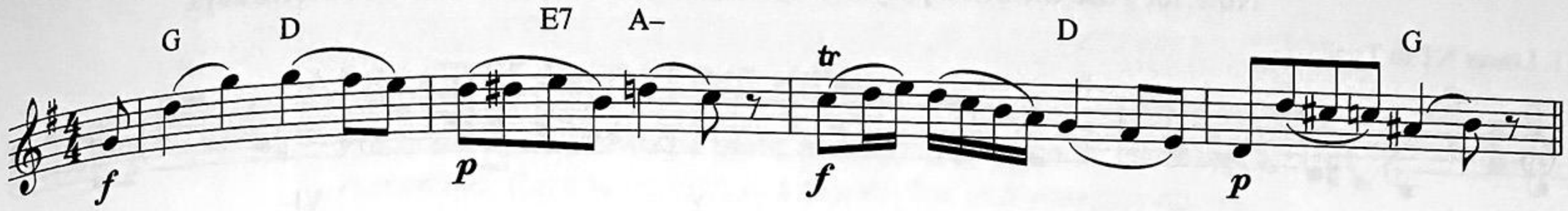

Fig. 14.10. Appoggiaturas in Mozart's *String Quartet No. 10*

Looking at the Mozart example again, in bar 2, the violin moves chromatically upward, landing on a D upper-neighbor tone (appoggiatura) resolving to C, the minor third of the A minor chord. Bar 3 features a trill (auxiliary tones) followed by a stream of quick appoggiaturas, and completing the scale in bar 4, where the line jumps up an octave then descends chromatically from the root of the D chord to the minor seventh, C natural, and then to a radical sound: the lower-neighbor tone to the major third, essentially the minor third resolving to the major.

But note the careful spelling of this: it's an A♯, not a B♭; it's the lower neighbor tone of the B.

This use of an approach note is very expressive, preceding an approach note either by step or leap, but stressing the non-chord tone so it reveals its dissonance in living color.

Using the drone, play these tensions with conviction and allow them to resolve upward or downward.

I suggest you go through the twelve keys with a drone, improvising in different modes and using approach notes and appoggiaturas. Since the drone is neutral in regard to major or minor, you can select either, or change back and forth, if you wish.

Once you are enchanted with the new colors, the tension and release these notes bring to your melodic play, you will be ready to start changing chords diatonically and focus first on appoggiaturas.

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Here's a melody featuring appoggiaturas using a progression you'll remember from chapter 6 (figure 6.1, and play-along track 19 from the CD). You can play this in all keys.

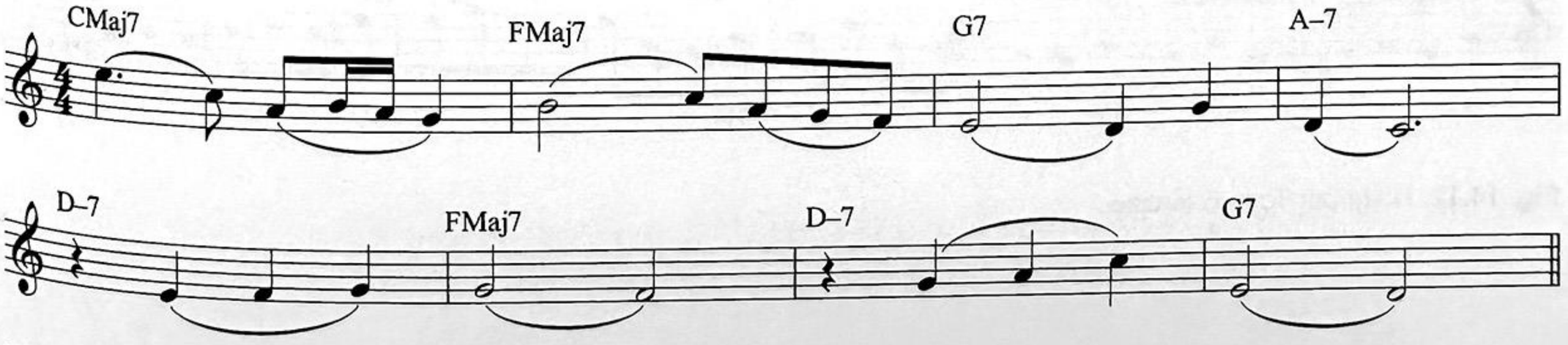
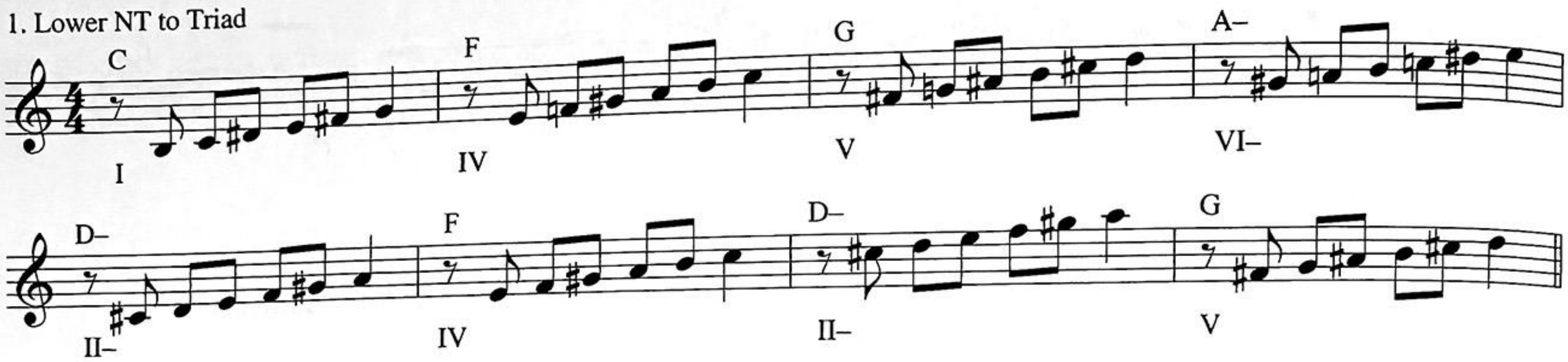


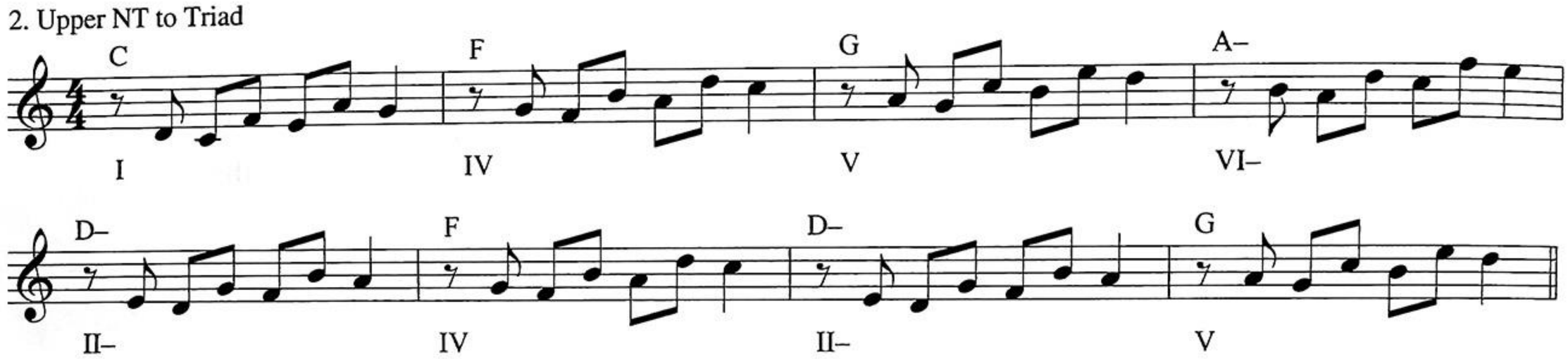
Fig. 14.11. Appoggiatura Melody in C

Now, let's use the same play-alongs to practice neighbor tones in twelve keys.

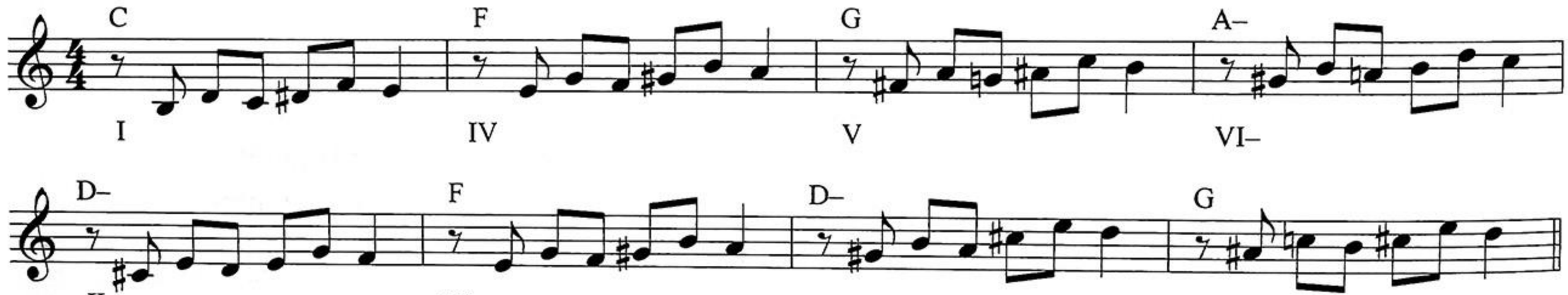
1. Lower NT to Triad



2. Upper NT to Triad



3. Lower to Upper



4. Upper to Lower

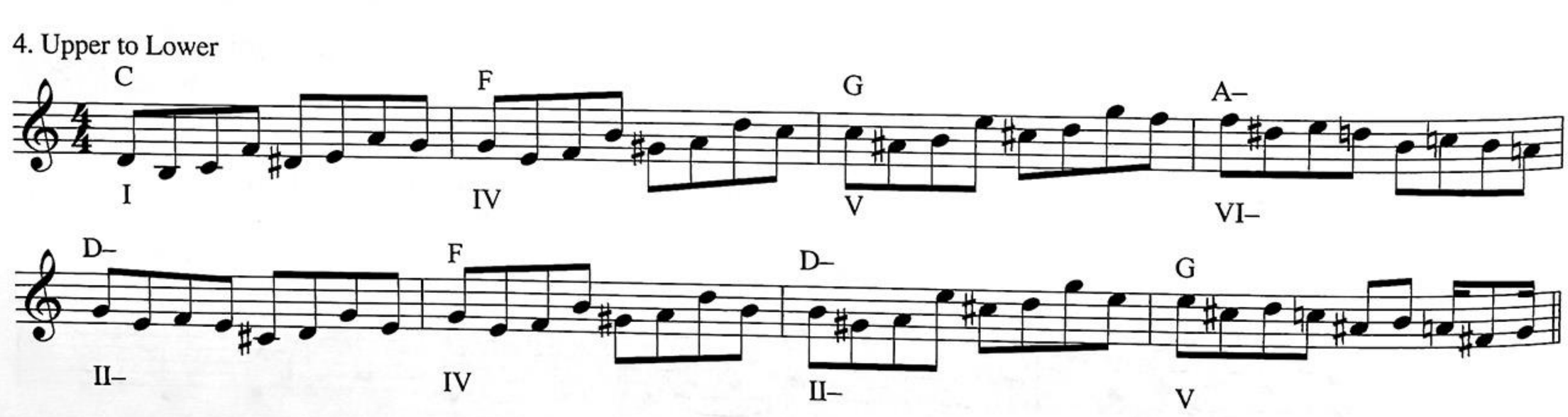


Fig. 14.12. Neighbor Tone Exercise

PRACTICE IN TWELVE KEYS

Practice this in all twelve keys, and take your time in each key. Remember, there is no rush to integrate this into your playing. It's simply part of your daily practice, curiosity, playfulness, and imagination. You might return to this over the course of months and years as you continually evolve and develop your ear.

You may already have noted the difference between neighbor tones and chromatic approach notes. The upper-neighbor tone can sometimes be a whole step above the chord tone, but using the chromatic approach it will always be, well, chromatic—a half step.

The chromatic approach is a sound closely associated with jazz—bebop in particular. The myriad applications of chromatics in jazz exceed the scope of this book, but here are a dozen basic chromatic approaches you can try to get this sound in your ear and under your fingers.

In jazz the most common chromatic approaches are from below the target note. And as you see below, chromatic approaches can be resolved directly to the target note, or indirectly from above or below.

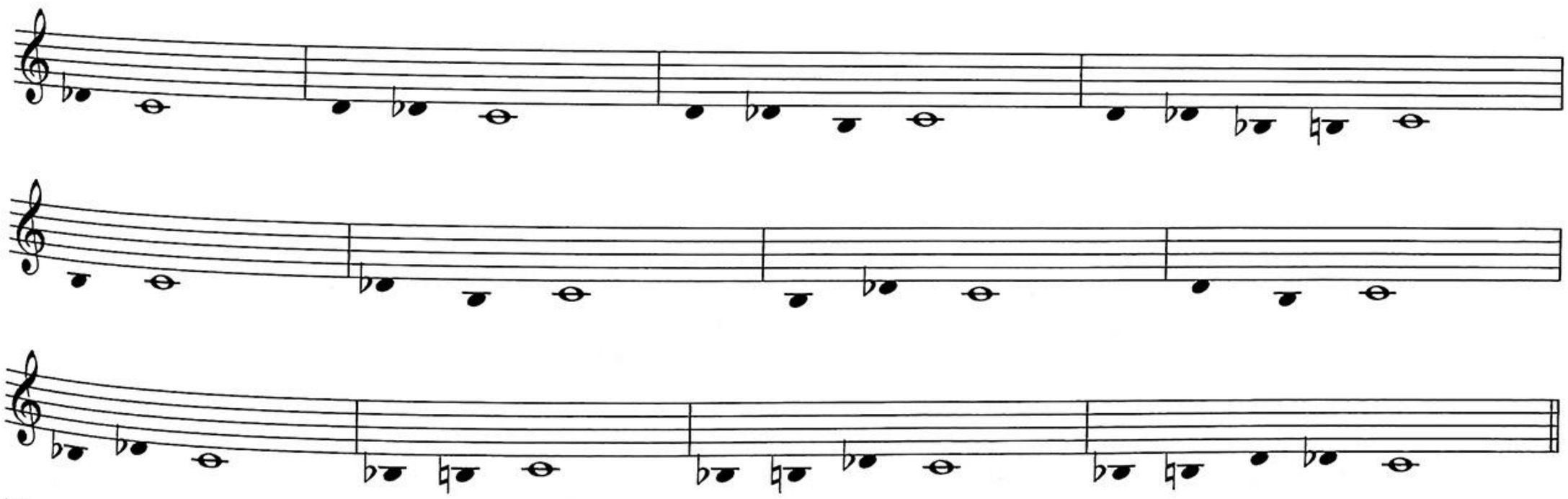


Fig. 14.13. Twelve Chromatic Approaches

Here are a few more basic examples of chromatic approach notes in action. These can be used with the progressions on the CD and transposed to all twelve keys.

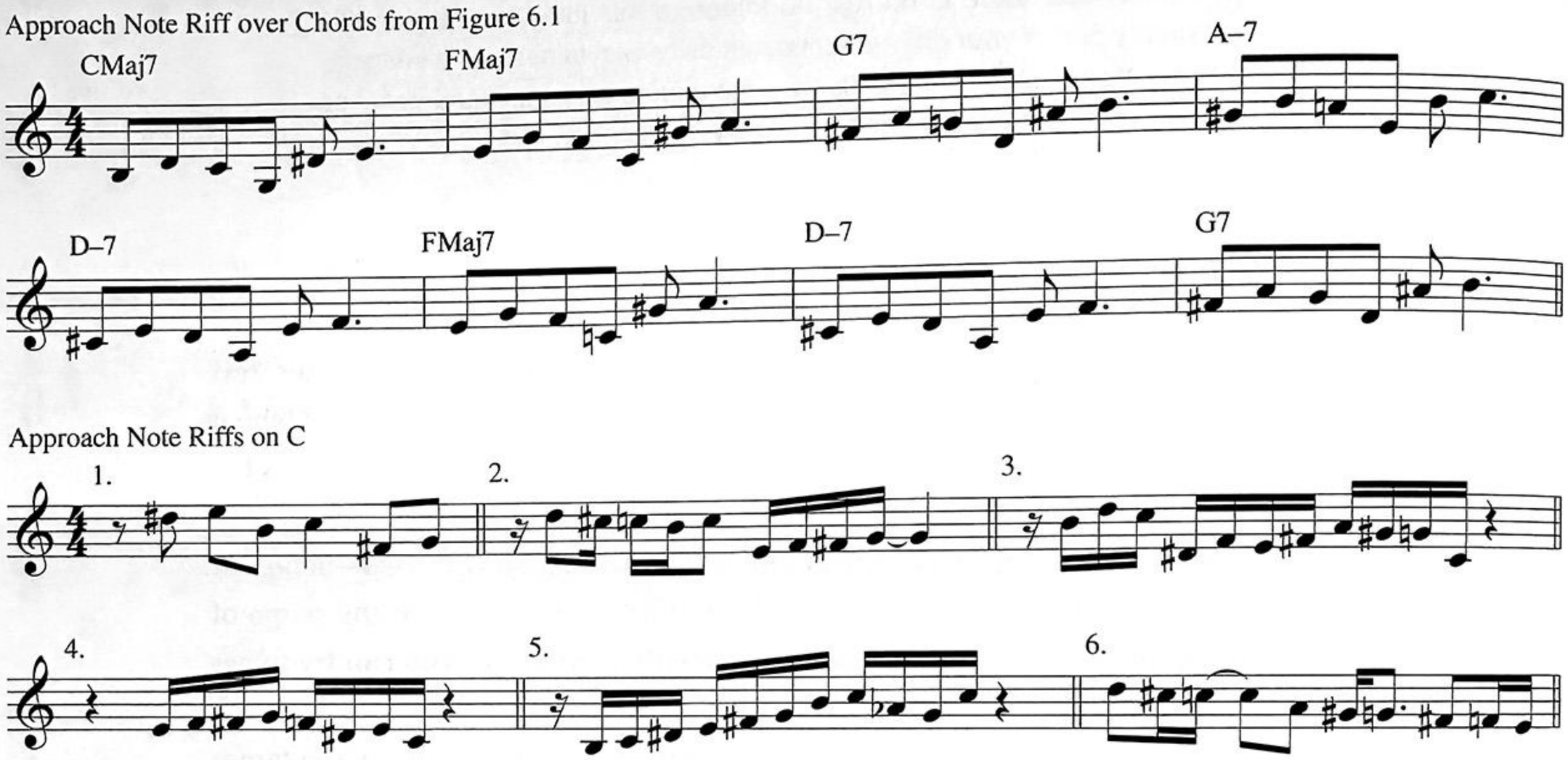


Fig. 14.14. Chromatic Approach Phrases

Try using chromatic approaches to some familiar arpeggios:

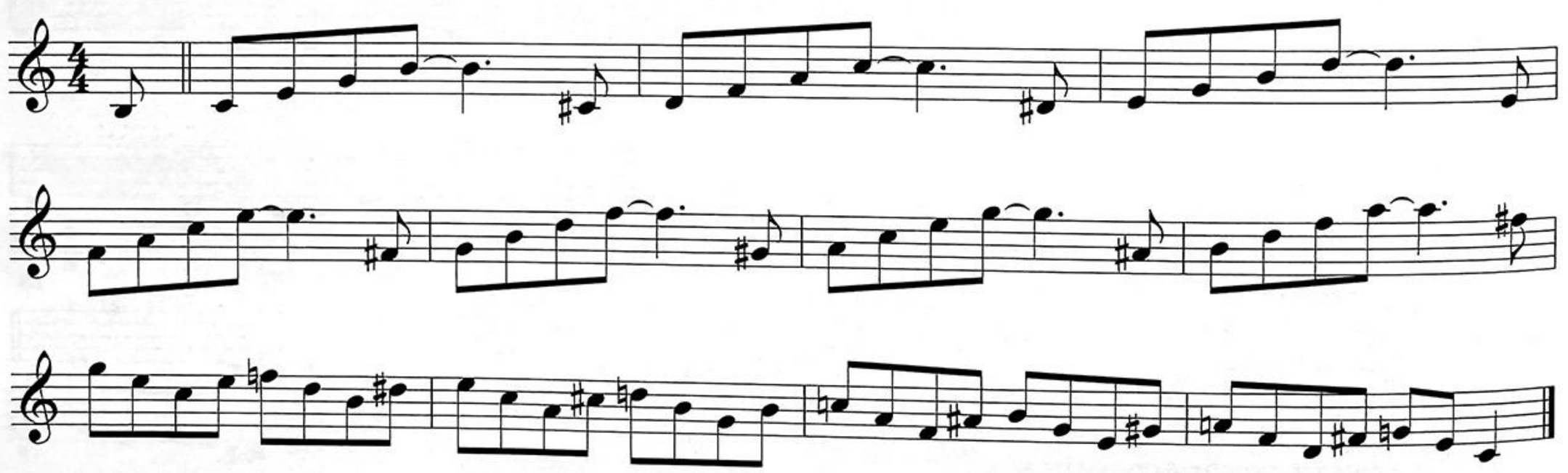


Fig. 14.15. Chromatic Approaches to Arpeggios

Finally, here are some simple embellishments you can use to add a sense of freedom to your melodic play. You may want to adjust these to suit the demands of your instrument, technique, or taste. Feel free! Try these in all keys, two or three octaves with different tempos and time feels, swing, anticipations, syncopations. And be aware that different styles of music have embellishments that are unique and trademark to that style. Keep your ears open to these details when listening, and adopt and adapt them to your taste and preferences.

Use chromatic or diatonic approaches from below.

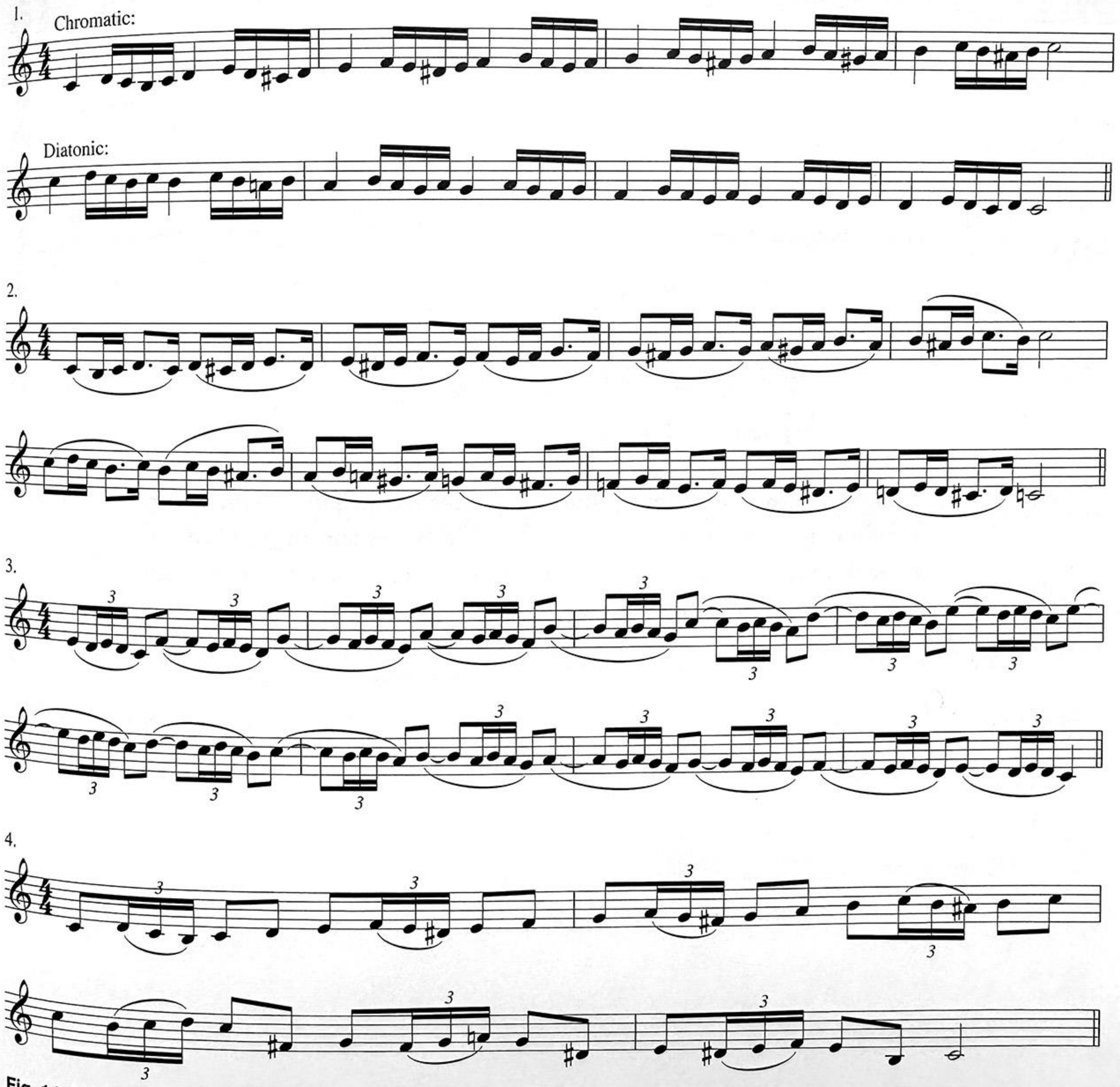


Fig. 14.16. Simple Embellishments

CHAPTER 15

II V I

Second to V I cadences, the II V I cadence is the most commonly occurring progression in music. This cadence features the same satisfying circular motion of descending fifths practiced in chapter 6 and precedes it with another descending fifth/ascending fourth move.

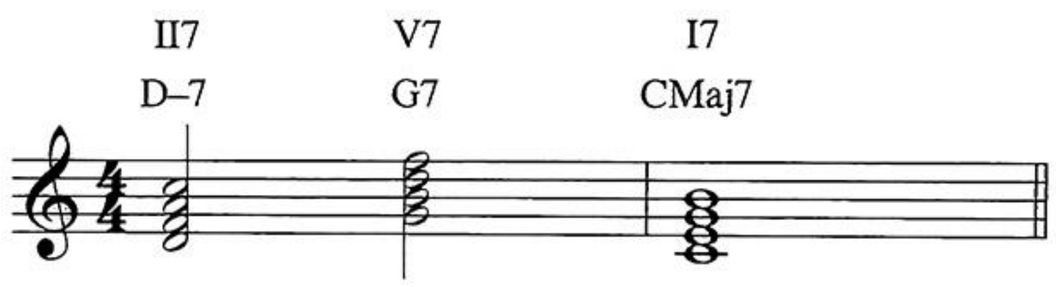


Fig. 15.1. II V I in Major

This progression not only firmly establishes the tonality of a phrase or a piece, but it is a common tool for modulating to a new tonality. By identifying these three chords as a single entity, we can apply some common voice-leading attributes in our melodic play, plus recognize and approach modulations with confidence.

Perhaps the first thing to point out is the diatonic nature of this progression. If you know what key you're in, you'll know what scale will reflect the tonality of these three chords. To integrate this, get the sound of this progression under your fingers by arpeggiating from the root. Here's a pattern that moves through all twelve keys in two groups of six. The pattern modulates down by whole step, so after these six keys you can go up a half step and begin the pattern anew.

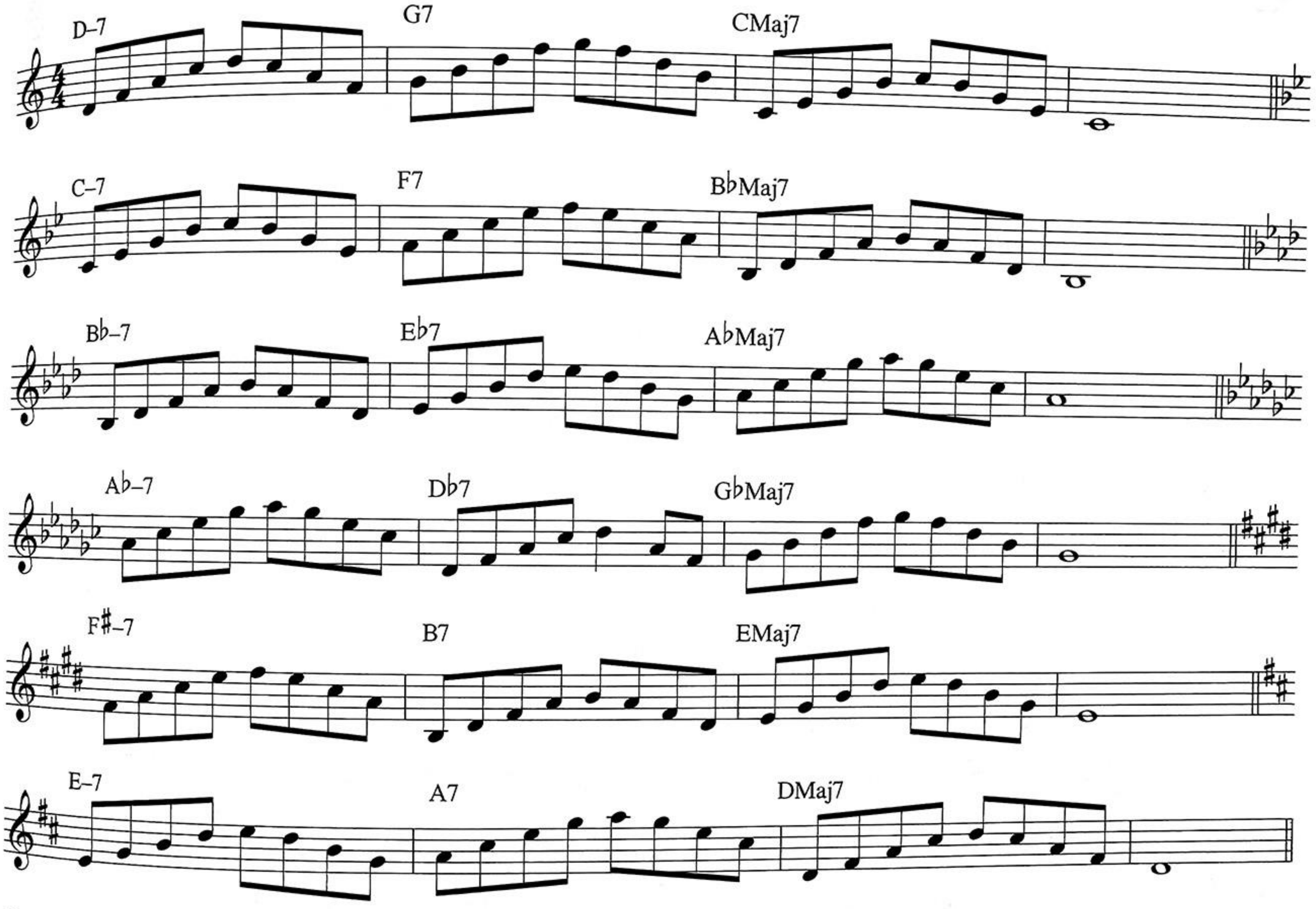


Fig. 15.2. Exercise: II V I's in Major

Figure 15.2 highlights one possible voice-leading move: root-3, root-3, root:

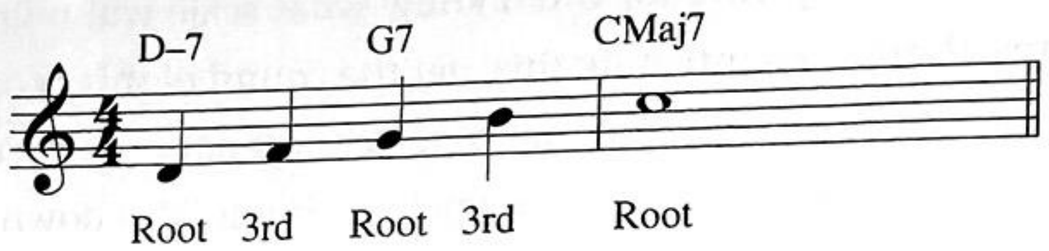


Fig. 15.3. R-3, R-3, R

This is a solid motion to help integrate this cadence, though melodically a bit weak. Since it features the root so strongly, it's more effective as a bass part. By practicing inversions of the above exercise, you'll be featuring other ascending voice leading, and more melodically pleasing options. If you begin on the 3rd: 3-5, 3-5, 3.

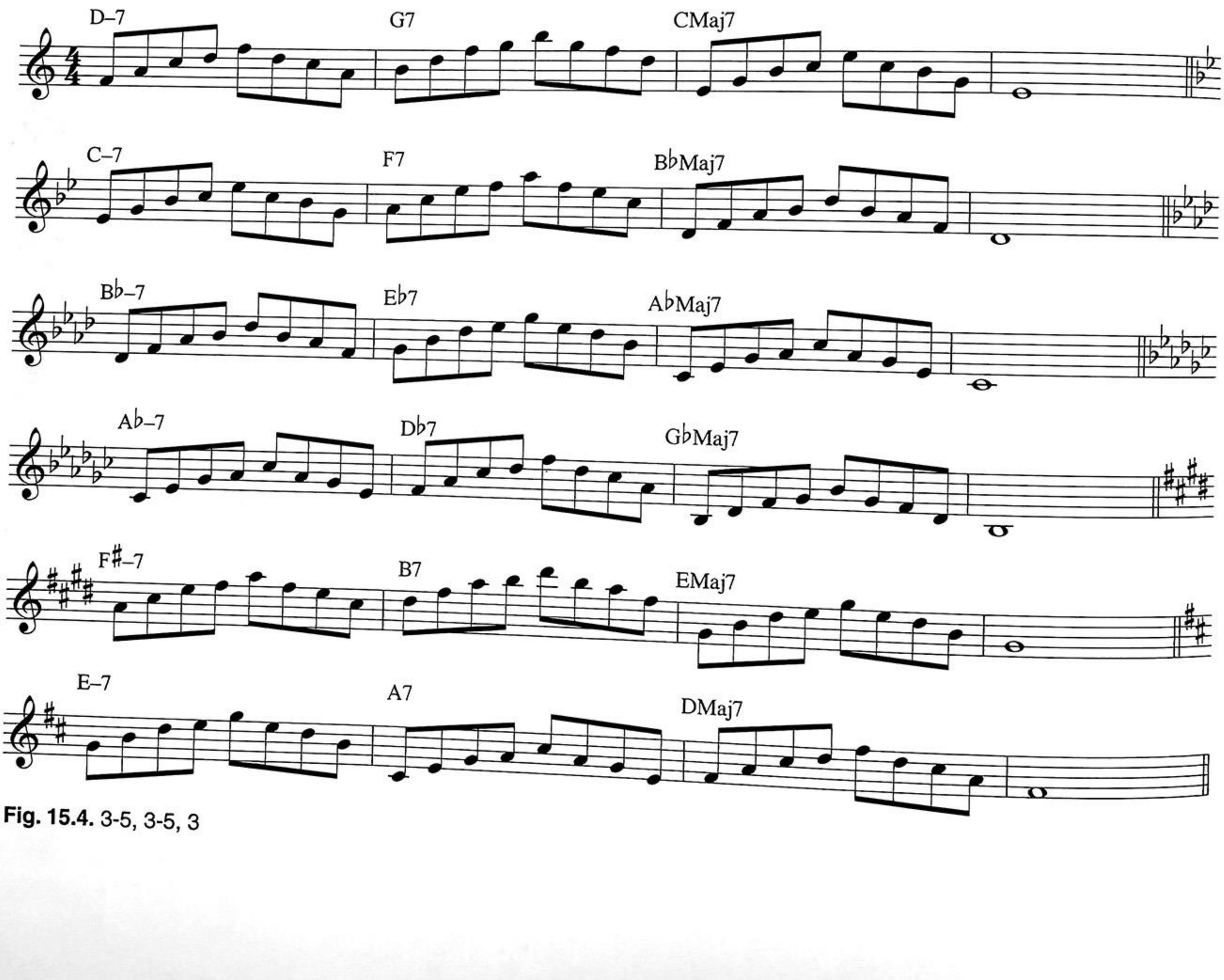


Fig. 15.4. 3-5, 3-5, 3

If you begin on the 5th: 5-7, 5-7, 5.

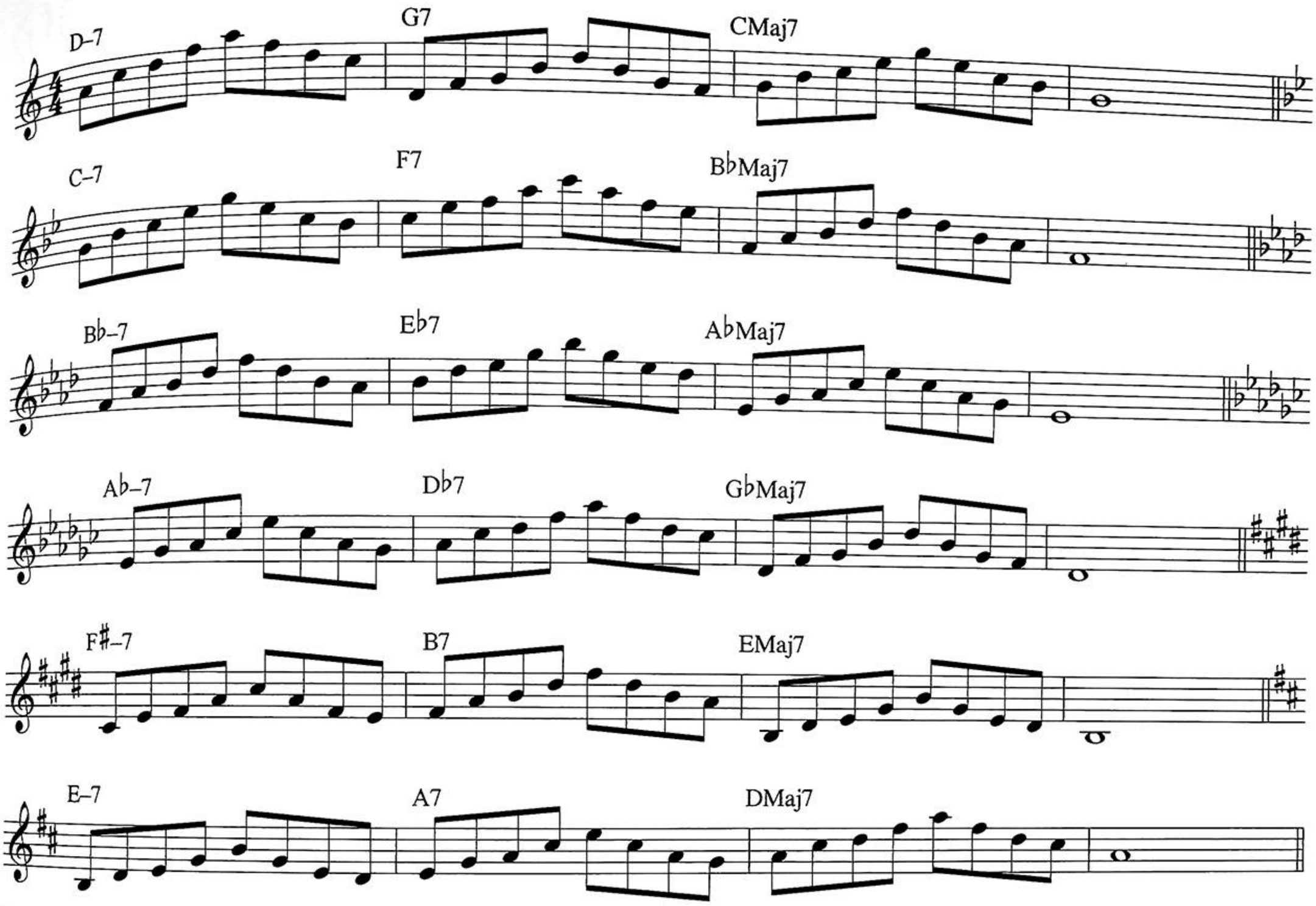


Fig. 15.5. 5-7, 5-7, 5

Let's take a look at some other voice-leading options to aid us in creating II V I melodies.

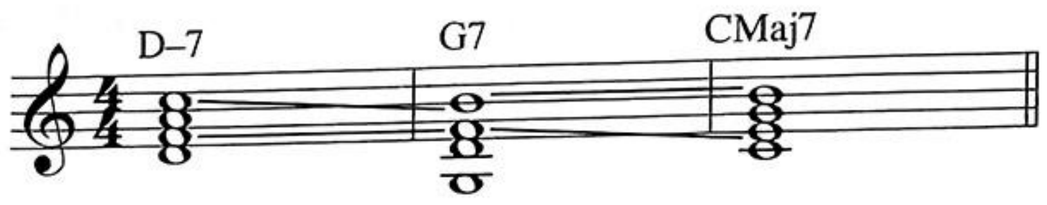


Fig. 15.6. Voice Leading: D–7 G7 CMaj7

Looking at the guide tones—3rds and 7ths—we discover that 3rds become 7ths and 7ths resolve downward to 3rds. Here are some cadential phrases that reflect this voice leading—a few examples to spur your imagination as you create your own.

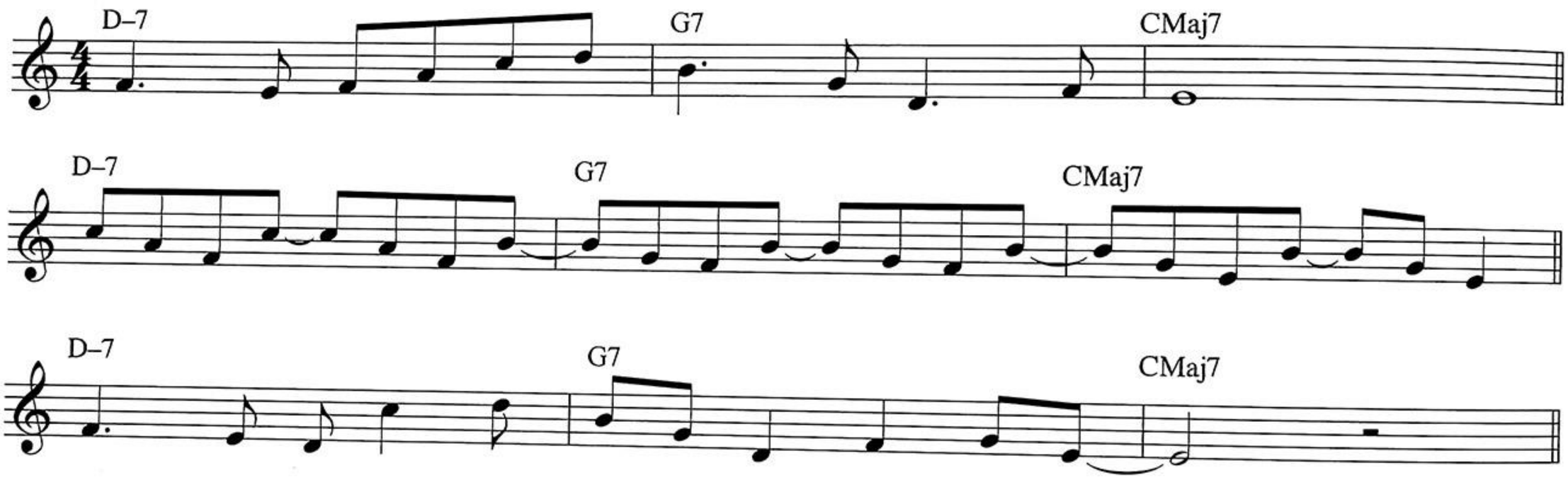


Fig. 15.7. II V I Voice-Leading Melodies in C

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Create five or ten of these that feel good on your instrument, and play in all twelve keys using the play-along.

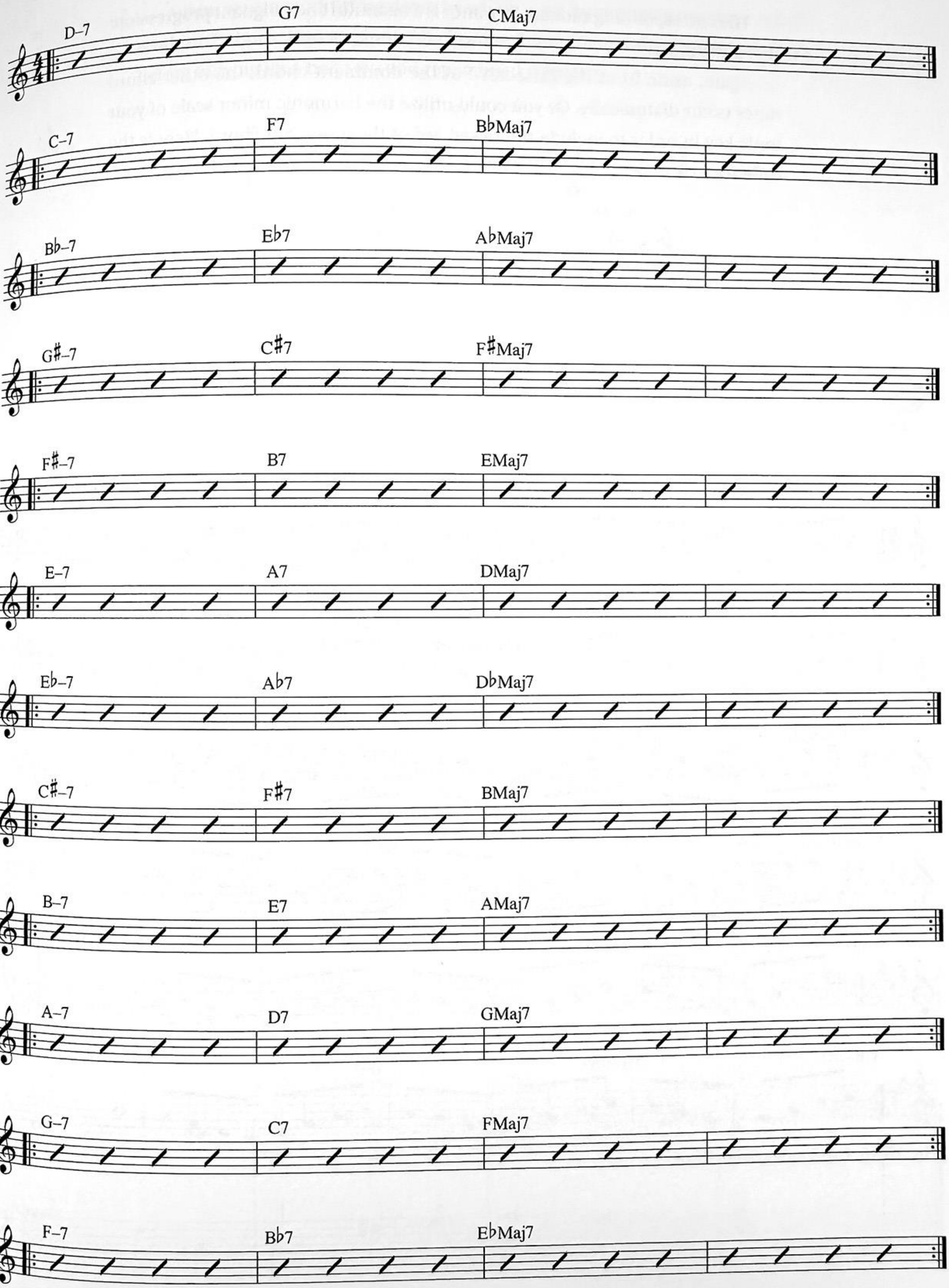

Fig. 15.8. II V I in Major, Twelve Keys

The corresponding cadence in minor is a beautiful and poignant progression: II–7♭5 V7(♭9) I-7.

Again, aside from the raised 3rd of the dominant chord, the other chord tones occur diatonically. Or you could utilize the harmonic minor scale of your tonic key in order to include the raised 3rd of the dominant chord. Here is the cadence in A minor.

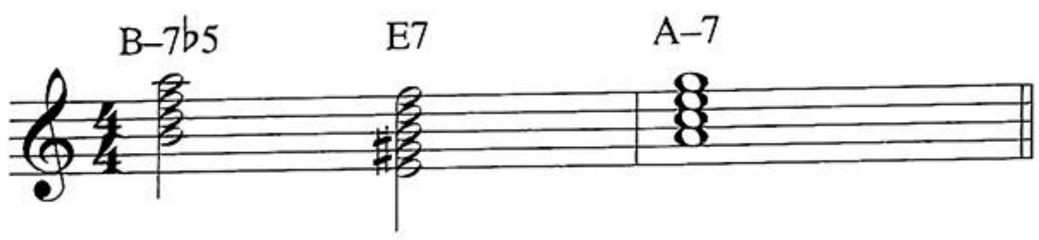

Fig. 15.9. B–7♭5 E7(♭9) A–7

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There are many ways to arpeggiate this. Please feel free to invent your own. Here's one, for example, that uses the harmonic minor sound with the dominant chord. Try it with the CD.

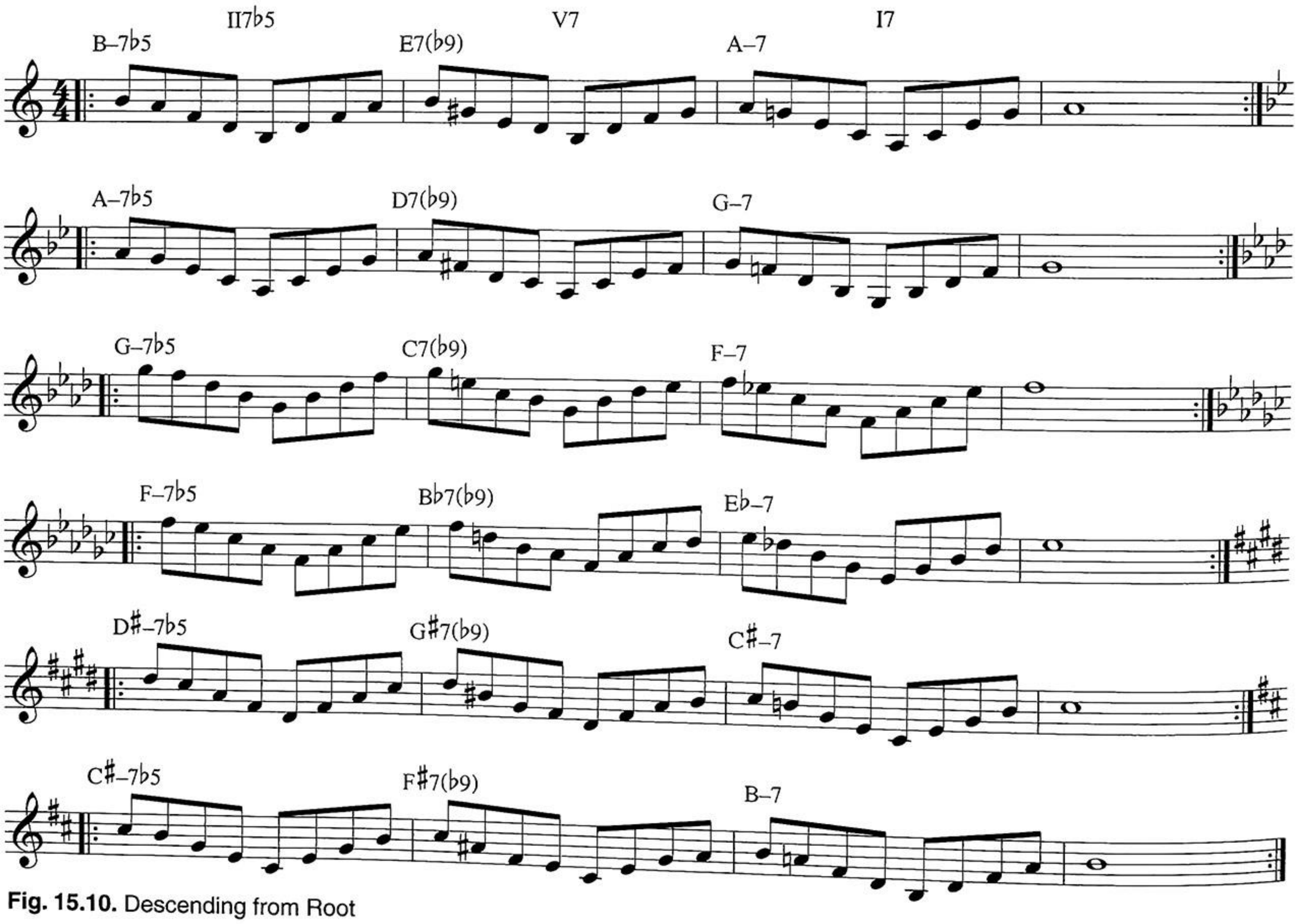


Fig. 15.10. Descending from Root

Again, we are modulating down by whole step. By changing our tonic chord, a minor 7 chord, into a minor 7♭5 chord, we modulate down through six keys before moving up a half step and repeating the pattern.

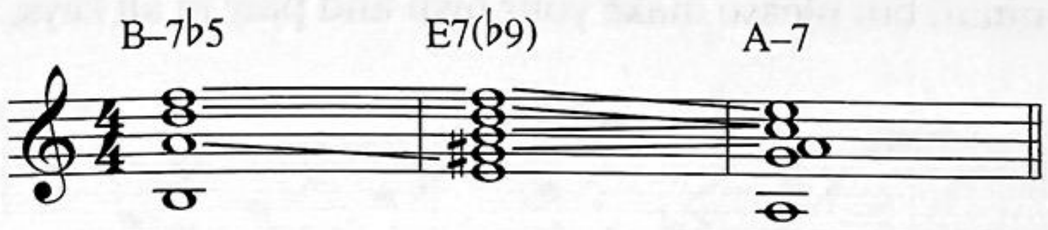


Fig. 15.11. Voice Leading II V I in A Minor

Because this progression is largely diatonic, you can create melodies by using the key signature of the tonic key. Even if you play diatonically through the dominant chord, playing G natural against the G♯ of the E7(♭9) chord as above, for example, it can be heard as a kind of bluesy approach. Obviously, it's important to strive to reflect each chord accurately in your melodies, but for now, it's more important to stress the value of identifying the key and scale of the progression.

In chapter 8, we touched briefly on the use of dominant chords to shift the tonality of a piece or a passage. The appearance of a dominant chord outside of its tonic key can be the signal for a key change. Likewise, the appearance of a minor 7♭5 chord (aka half-diminished) is an excellent clue as to an imminent modulation.

The half-diminished chord, minor 7♭5, is a diatonically occurring seventh chord on the second scale degree of a minor key. For example, if you see a D–7♭5, you're already in C minor, and the C Aeolian scale will guide you through. This approach yields a ♭9 over the dominant chord of the cadence, G7(♭9) in this case, so add the 3rd of that chord, B, when you like, or play C harmonic minor over the dominant chord. When you see an A–7♭5, think G minor; C–7♭5, think B♭ minor; and so on.

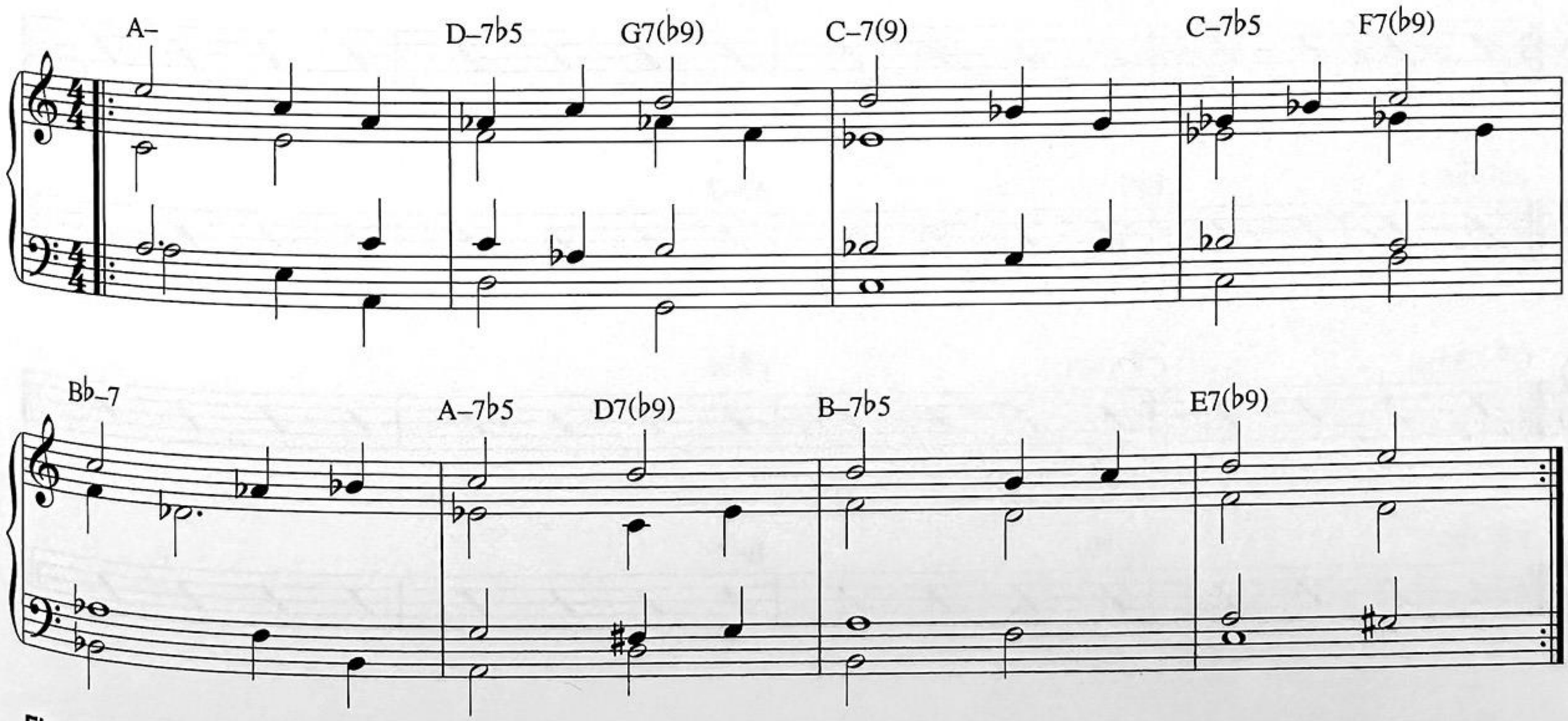


Fig. 15.12. Modulating in Minor

As in the major version, to more accurately reflect the quality of the progression melodically, let's invent some melodies. Here are two examples using the motion of the guide tones, including the flat 9 that gives the sound of harmonic minor, but please make your own and play in all keys.

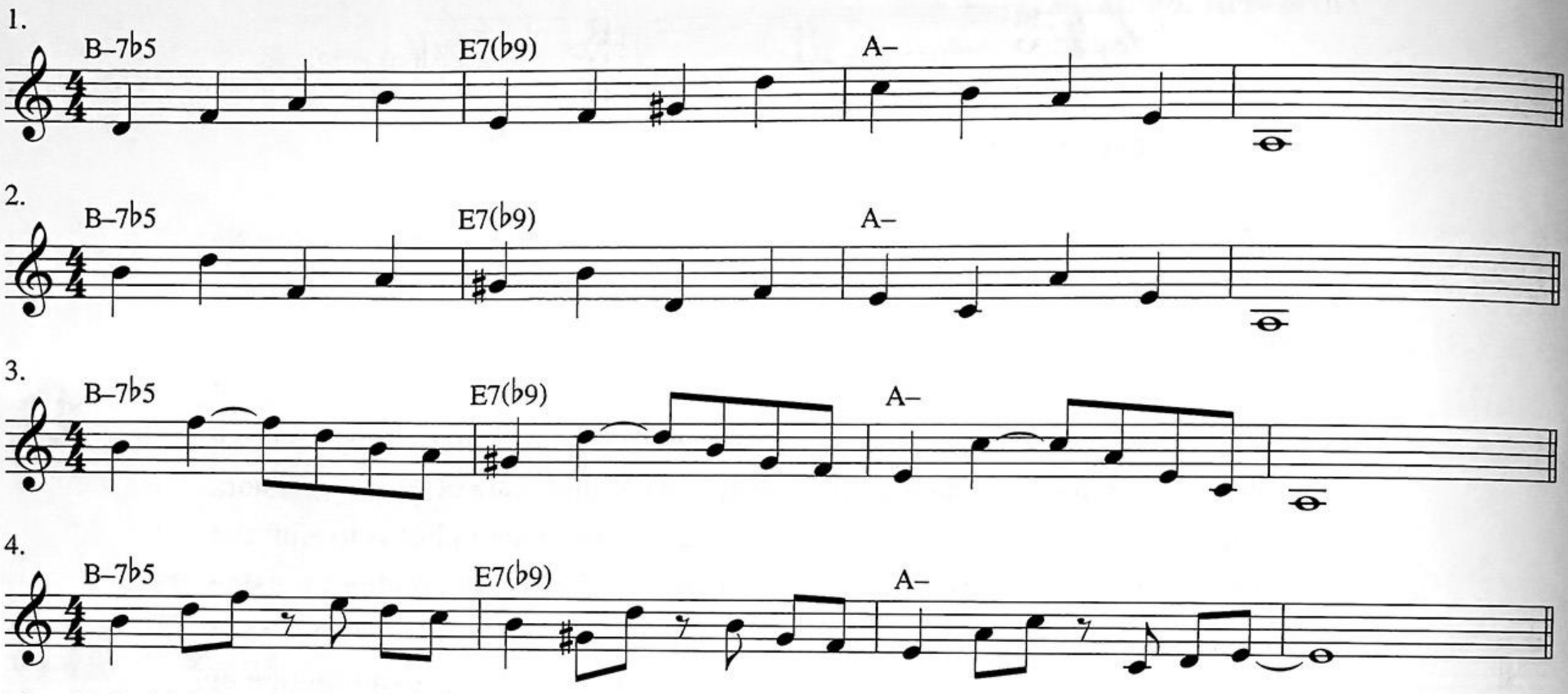
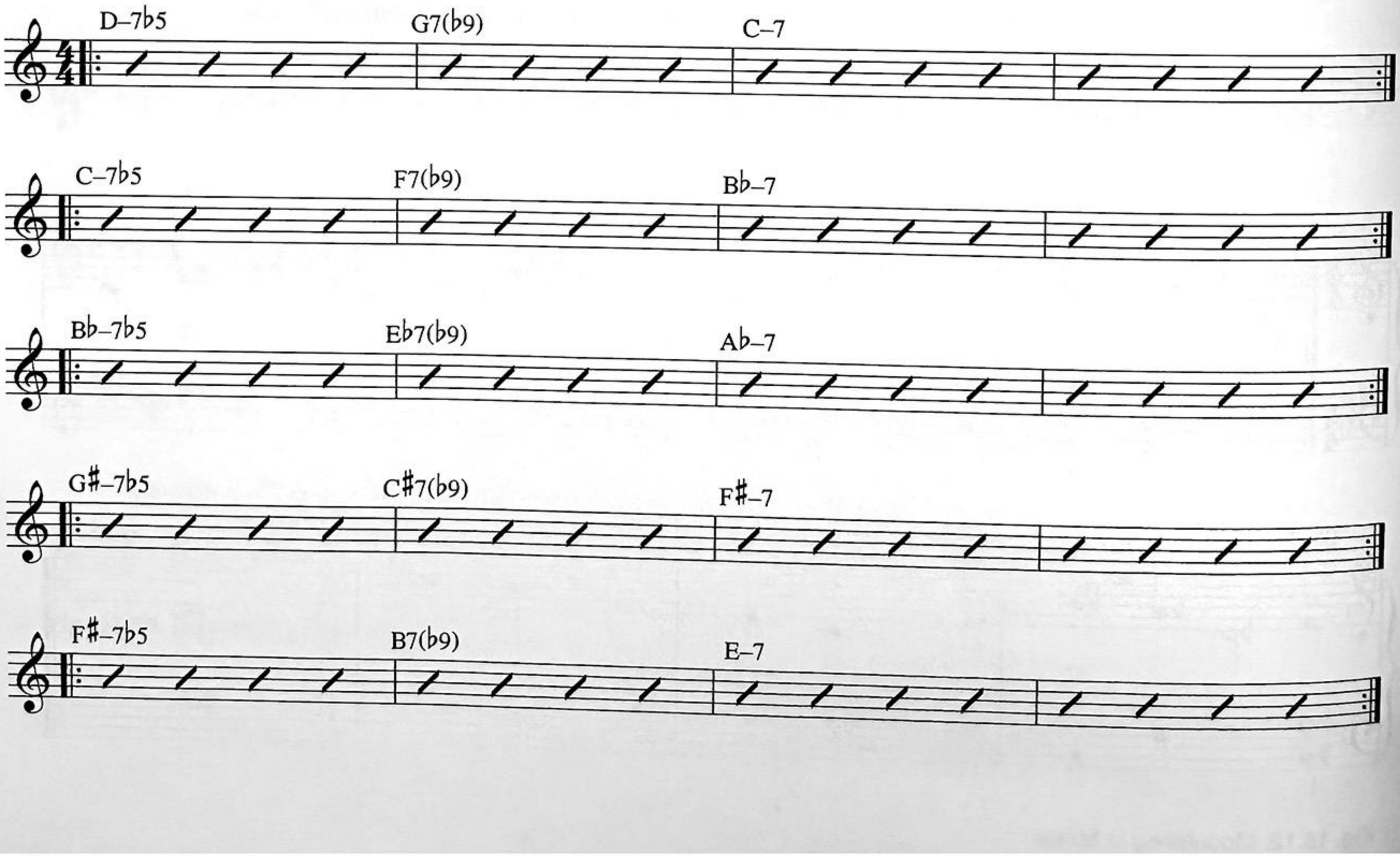


Fig. 15.13. Melodic II V I's in Minor

TRACK 49

You can practice these and your own melodic cadences in minor with the recording.



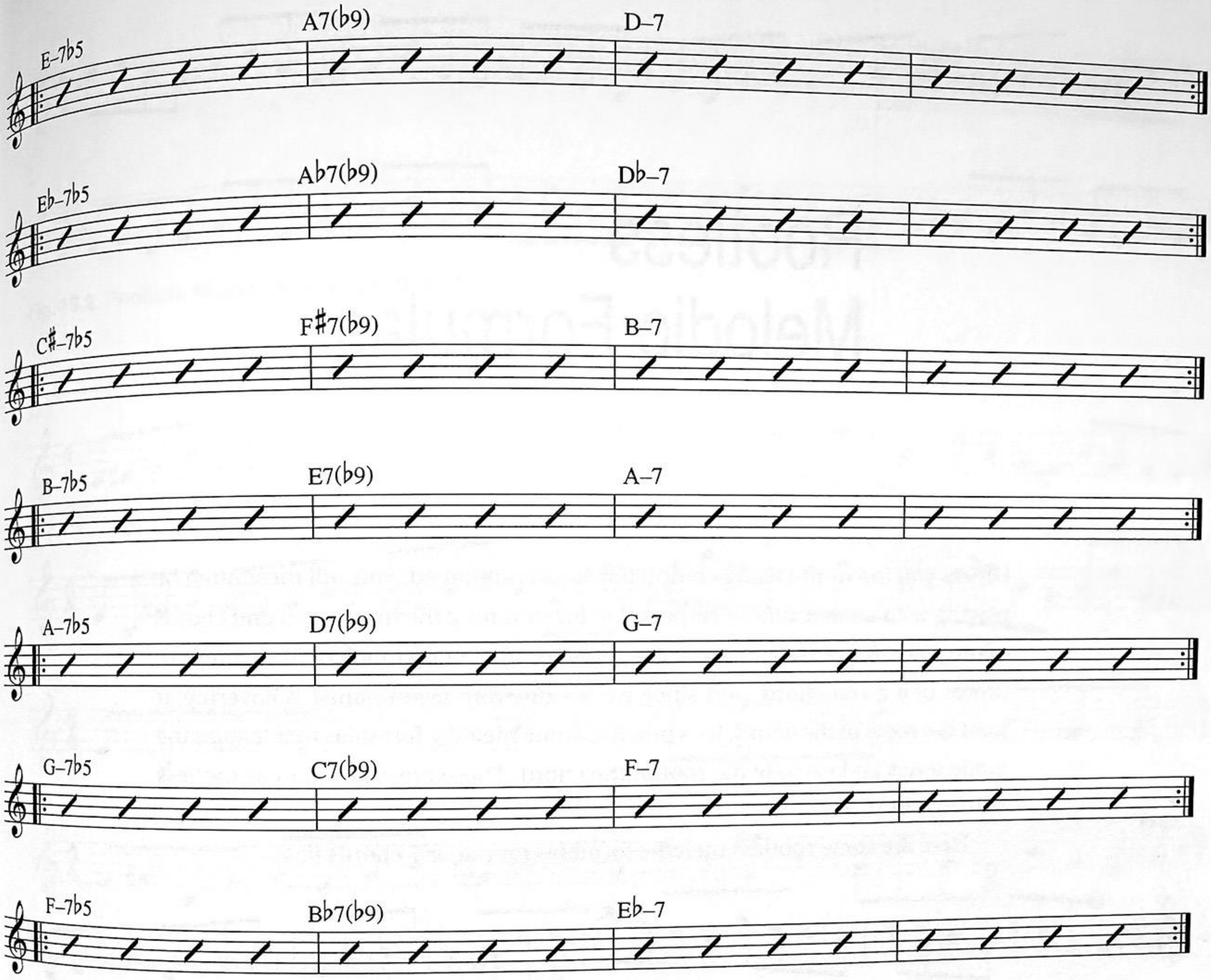


Fig. 15.14. II V I in Minor, Twelve Keys

CHAPTER 16

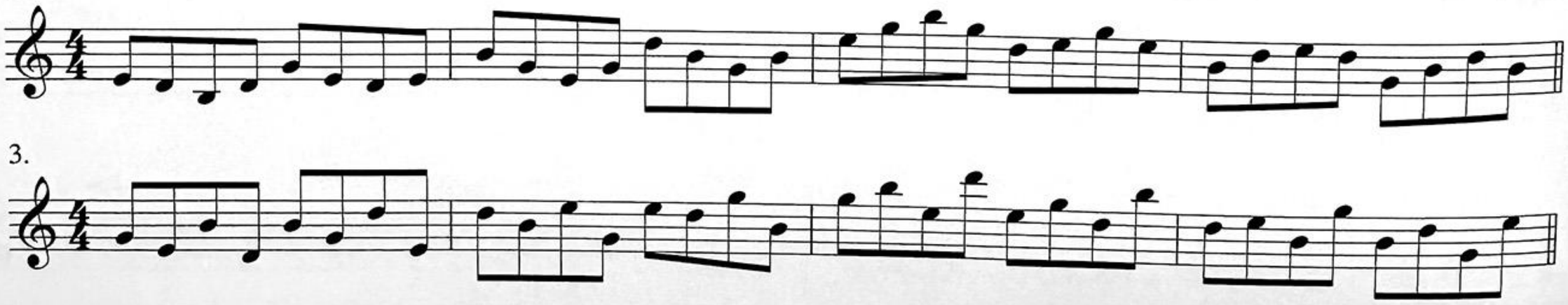
Rootless Melodic Formulas

Unless you are improvising completely unaccompanied, you will most often be playing with an instrument responsible for outlining the harmonies and chords of the piece. Since we know that the guide tones contain much of the expressive power of a given chord, and since we assume our accompanist is covering at least the roots of the chord, let's practice some melodic formulas that feature the guide tones and exclude the root of the chord. These are referred to as rootless voicings, or triads.

Here are some rootless melodic formulas for major 7 chords in C.

1.

2.



3.

Fig. 16.1. Rootless Melodic Formula 3, 5, 7, 9

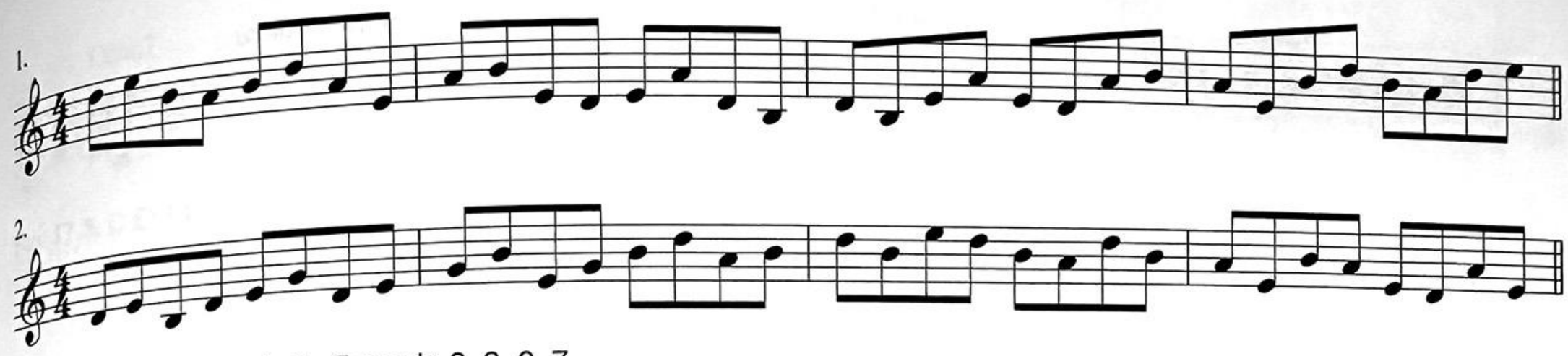


Fig. 16.2. Rootless Melodic Formula 2, 3, 6, 7

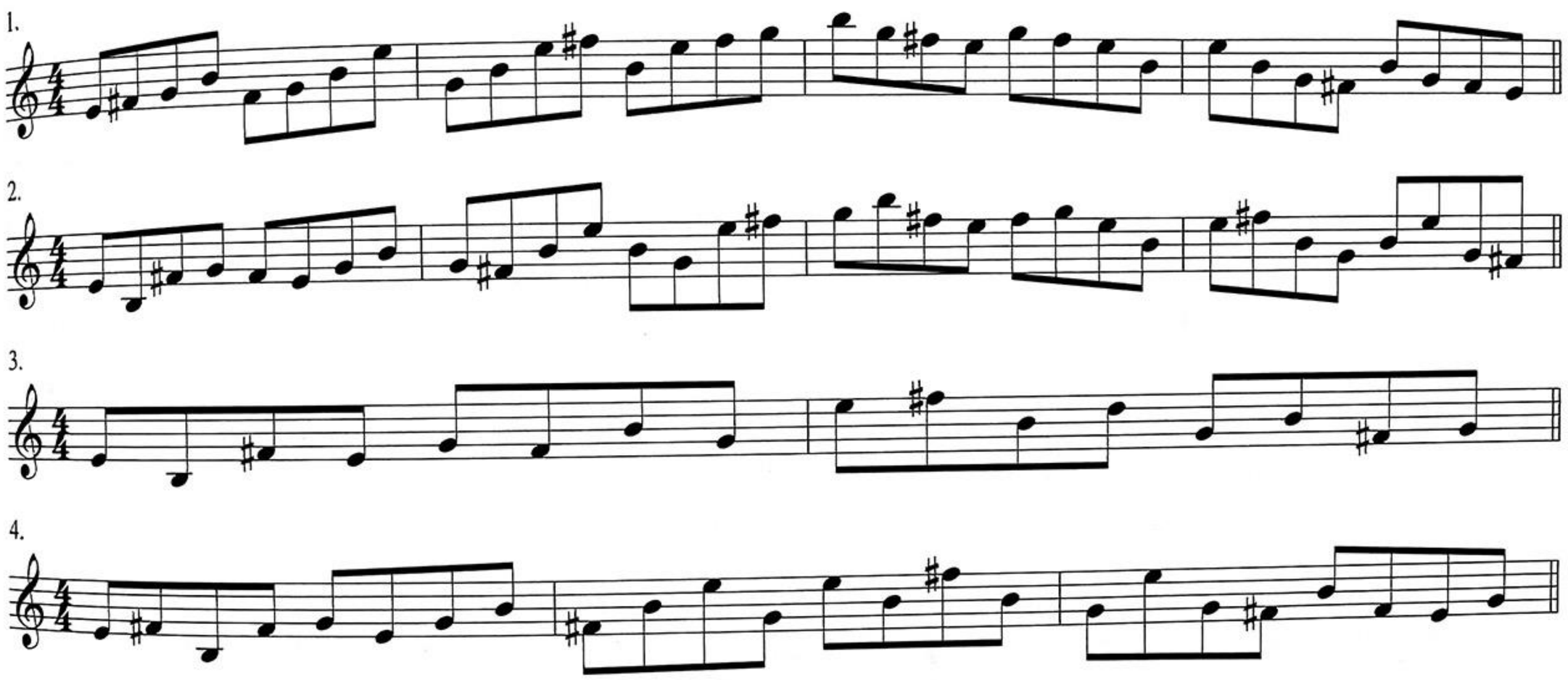


Fig. 16.13. Rootless Melodic Formula 3, 5, 7, ♯11

CHAPTER 17

Diminished Chords and Scales

There's a tremendous bank of expressive potential in diminished scales and harmonies. These sounds date back to the 17th century, but are also used by modern composers as diverse as Olivier Messiaen and Antonio Carlos Jobim, as well as legions of jazz players and composers.

The diminished triad resides diatonically as a VII chord in a major key, or a II chord in a minor key. The diminished 7 chord resides diatonically as a VII chord in harmonic minor:

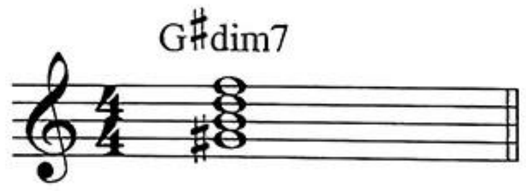


Fig. 17.1. VII Chord in A Harmonic Minor

This chord serves as a kind of dominant chord, since it often resolves upward to the tonic. In fact, if you add the 5th scale degree of the tonic, the note E to the diminished 7 pictured above, you have the more common dominant chord in minor, a dominant 7(♭9) (V7[♭9]) chord.

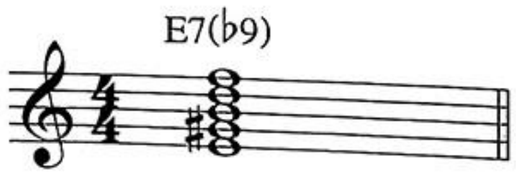


Fig. 17.2. E7♭9

But the diminished 7th chord is much more often used as a chromatic chord; that is, accidentals of different sorts will be used to notate it and to notate the scales necessary to convey the sound of it.

The diminished 7 chord is a totally symmetrical chord built of four minor thirds stacked up. Because of this, any note of the chord can serve as a functional root, since the internal intervals are equal. For example, the notes of the C diminished 7 are the same notes as in E♭°7, F♯°7, and A°7.

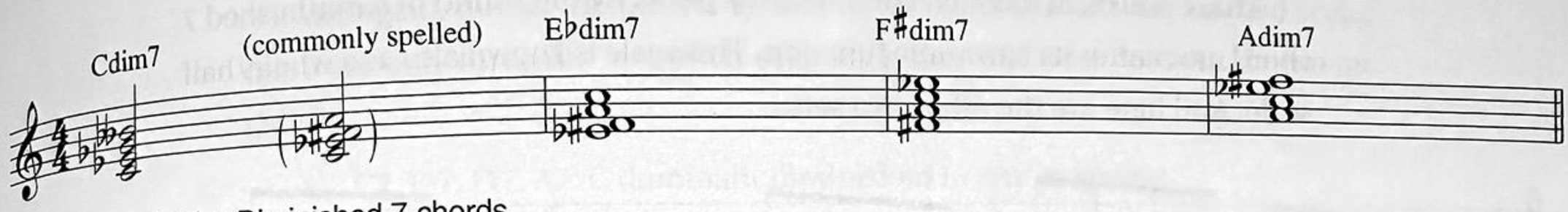


Fig. 17.3. C E♭ F♯ A Diminished 7 chords

Consequently, there are only three distinctly different diminished 7 chords:

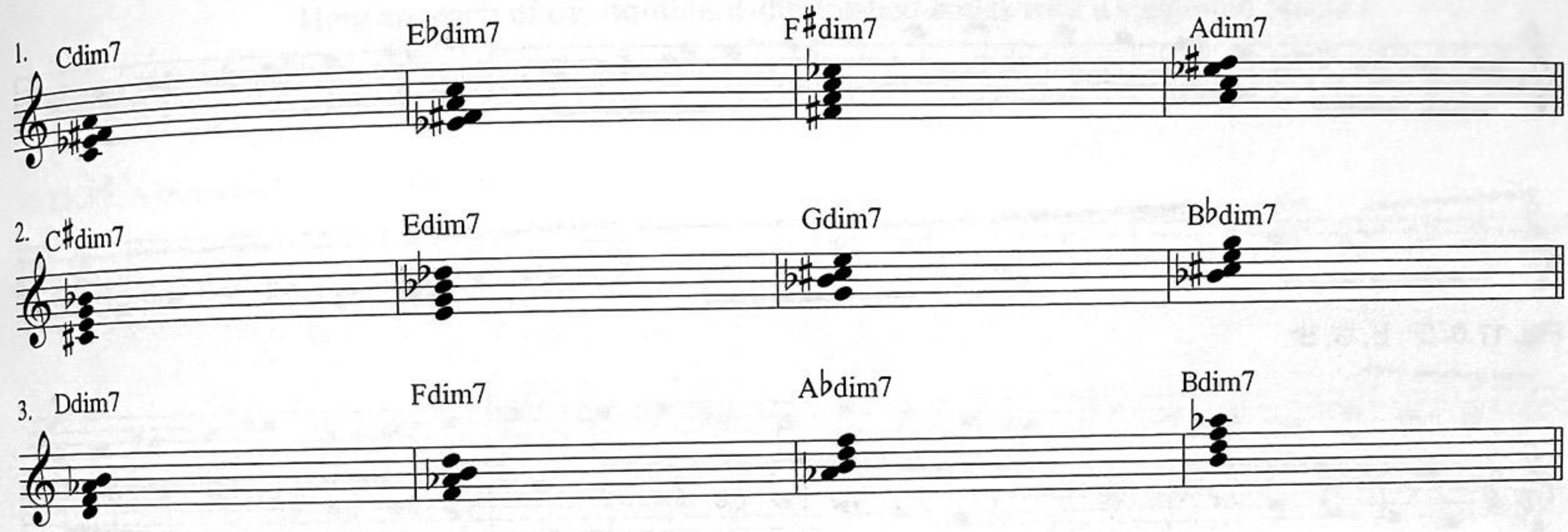


Fig. 17.4. Three Groups of Four Diminished 7 Chords

For string players, the diminished 7 arpeggio has an unusual feel under the hands. There are no perfect fifths, so playing these across the fingerboard feels kind of spidery. The good news is that each inversion is actually a separate diminished 7 arpeggio, so learn three in multiple octaves and you've got twelve under your fingers.

It's the same with the diminished scale which, likewise, is created from perfectly symmetrical steps: whole/half, whole/half, etc. Just like the chords, the C diminished scale has the same notes as the E♭, F♯, and A diminished scales.

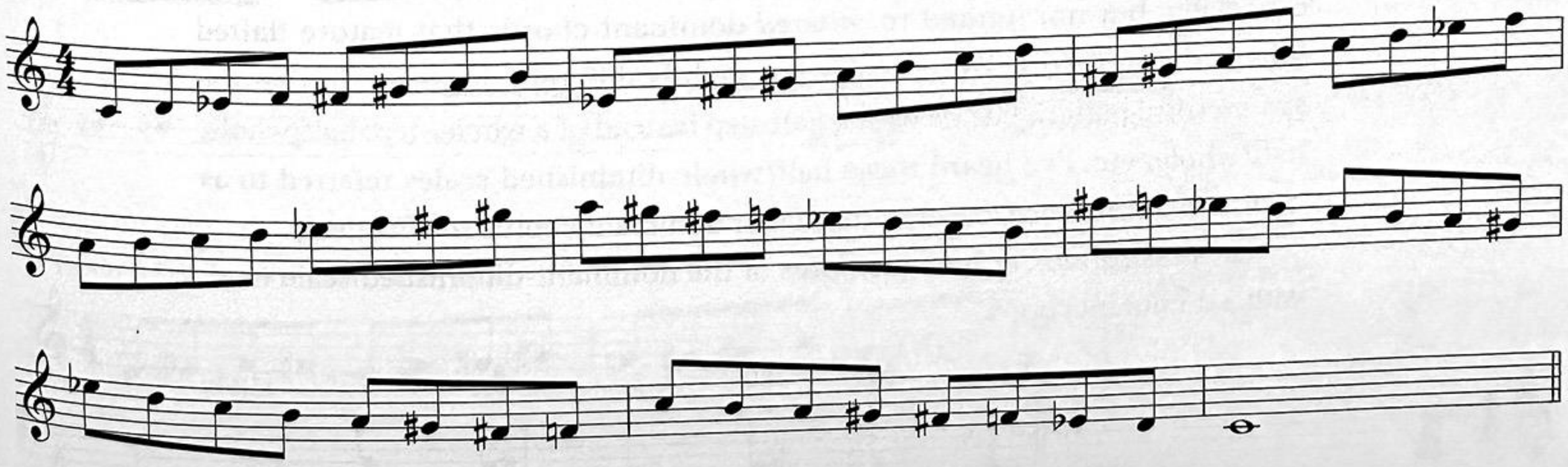


Fig. 17.5. C, E♭, F♯, A Diminished Scales

These scales, in any inversion, convey perfectly the sound of a diminished 7 chord, no matter its harmonic function. This scale is known also as a whole/half scale. And here are the other two sets:

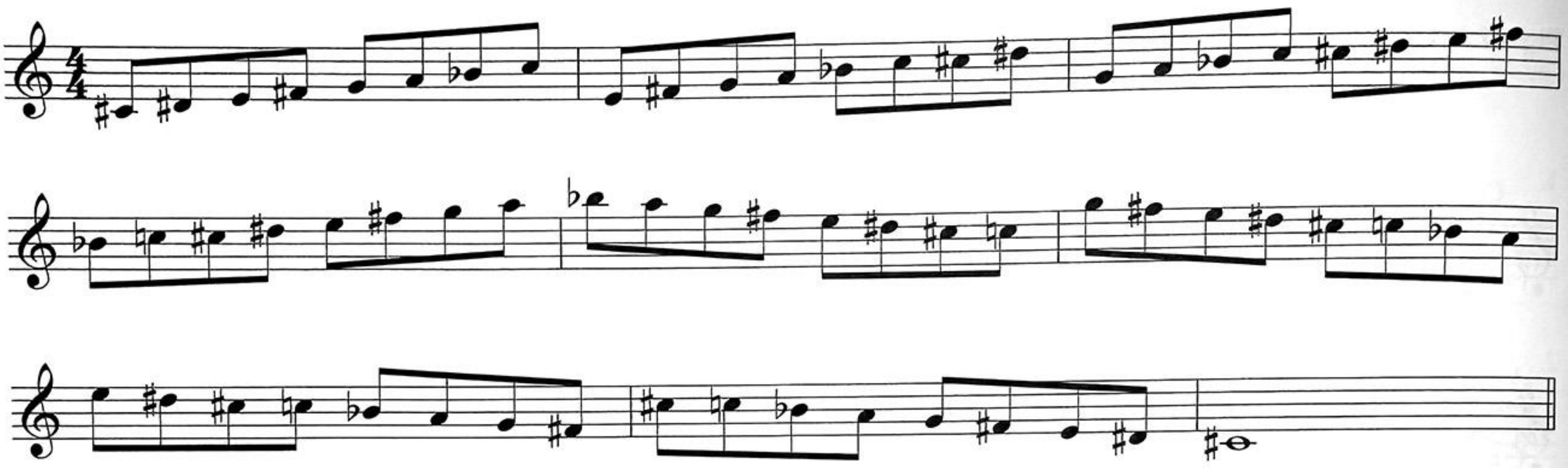


Fig. 17.6. D♭, E, G, B♭

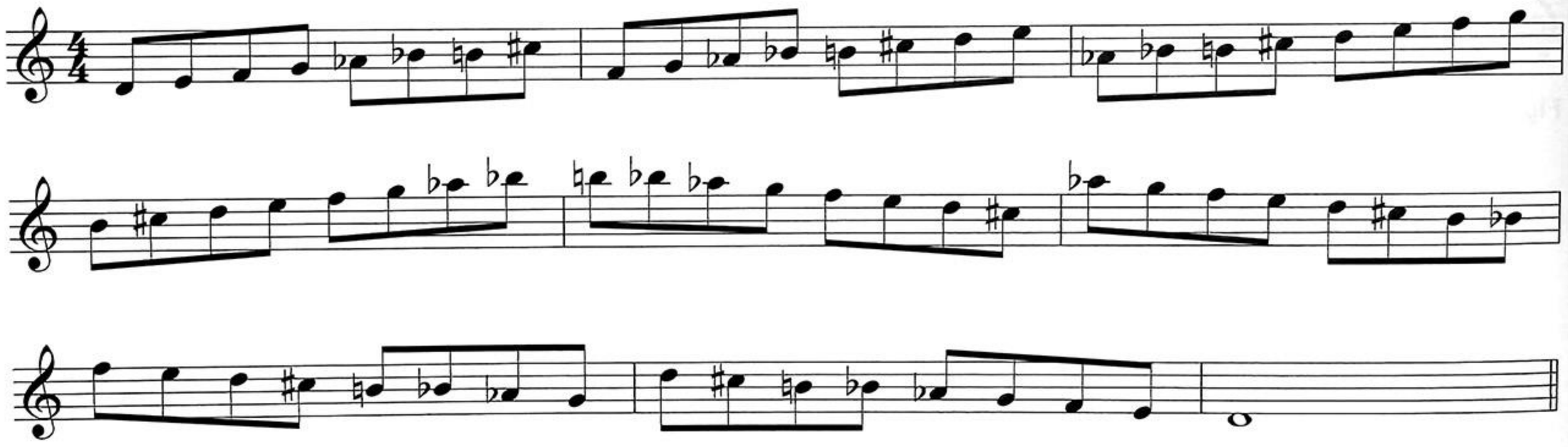


Fig. 17.7. D, F, G♯, B

Diminished scales also are very effective for use over dominant chords—especially, but not limited to, *altered* dominant chords that feature flatted 9ths and raised 9ths. These scales are slightly different, however, in that the symmetrical pattern begins with a half step instead of a whole step: half/whole, half/whole, etc. I've heard these half/whole diminished scales referred to as *dominant diminished*, because they color dominant chords so effectively.

Let's take a look at how the notes of the dominant-diminished scale work with a dominant chord.

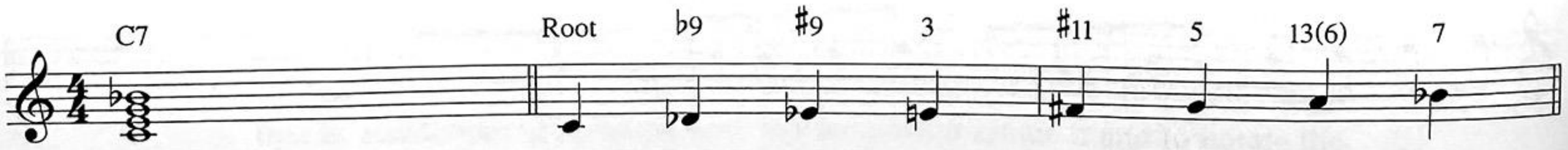


Fig. 17.8. C7 Chord and C Dominant-Diminished Scale

The dominant-diminished scale adds a ♭9, ♯9, ♯11, and ♯13 to a dominant chord—some exquisite and exotic colors, when applied correctly.

And again, due to the perfect symmetry of the dominant-diminished scale, there are only three distinct pitch sets. Each one will work for four dominant chords:

1. C7, E♭7, F♯7, A7: C dominant diminished in any inversion
2. D♭7, E7, G7, B♭7: D♭ dominant diminished in any inversion
3. D7, F7, A♭7, B7: D dominant diminished in any inversion

Here are each of the dominant-diminished scales with a suggested practice pattern:

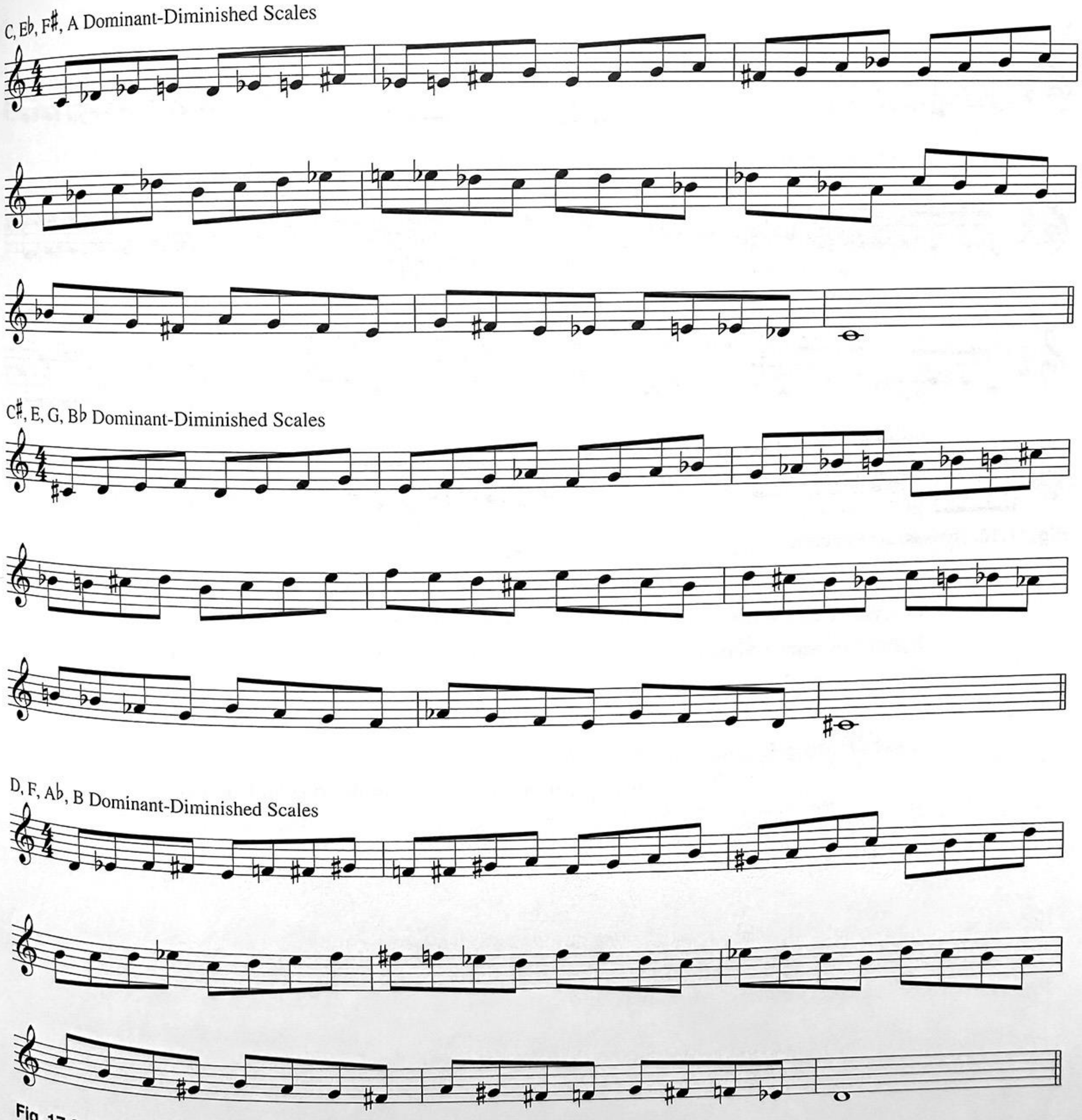


Fig. 17.9. Practicing the Three Dominant-Diminished Scales

Here are a few patterns to use in creating melodies over dominant and diminished chords. Each pattern fits four diminished seventh chords and four dominant chords. By transposing these up a half step, then another half step, you will be practicing patterns for all dominant and diminished seventh chords. As you explore these, you will find others that fit your instrument and your preferences.

(C7, E♭7, F♯7, A7, C♯dim7, Edim7, Gdim7, B♭dim7)

1.

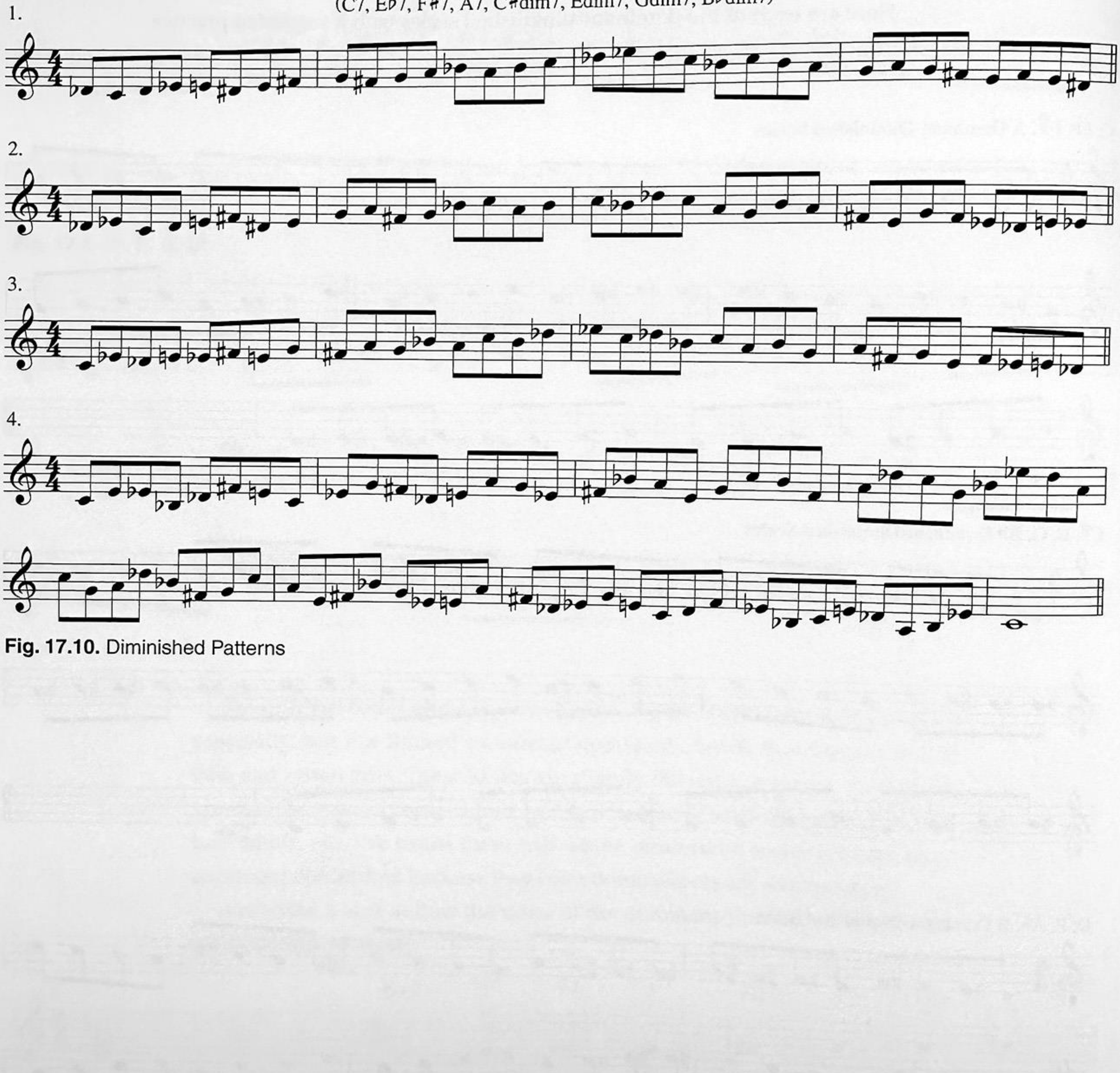


Fig. 17.10. Diminished Patterns

Afterword

The world of music is never-ending: never-ending possible combinations of notes, chords, textures, colors, meters, and rhythms. Every culture on earth has musical sounds it uses to celebrate, grieve, inspire, soothe, dance, and worship. Music is an essential aspect of our lives on this planet, and the role of the musician will always be an important one.

The sparkle of personality from a performer is what makes a performance come to life. And a musician who uses the building blocks of music in a way that seems to capture the spirit of our time is a gift to us all.

What makes musicians unique from each other? It is part nature and part nurture, of course. In this book, we have encouraged both aspects, searching for sounds that express who we are, and finding a creative practice that gives our uniqueness the musical tools it needs for precise communication.

But we see all musicians as modeling to the world how disciplined and loving curiosity can create beauty and connection. As we serve our audiences and students, we espouse and embody new possibilities, greater ease, expanded awareness, and increased pleasure in the playful application of all we've learned and absorbed.

The book you are holding can be one you return to again and again. We hope you may find something new in it each time you do.

About the Authors

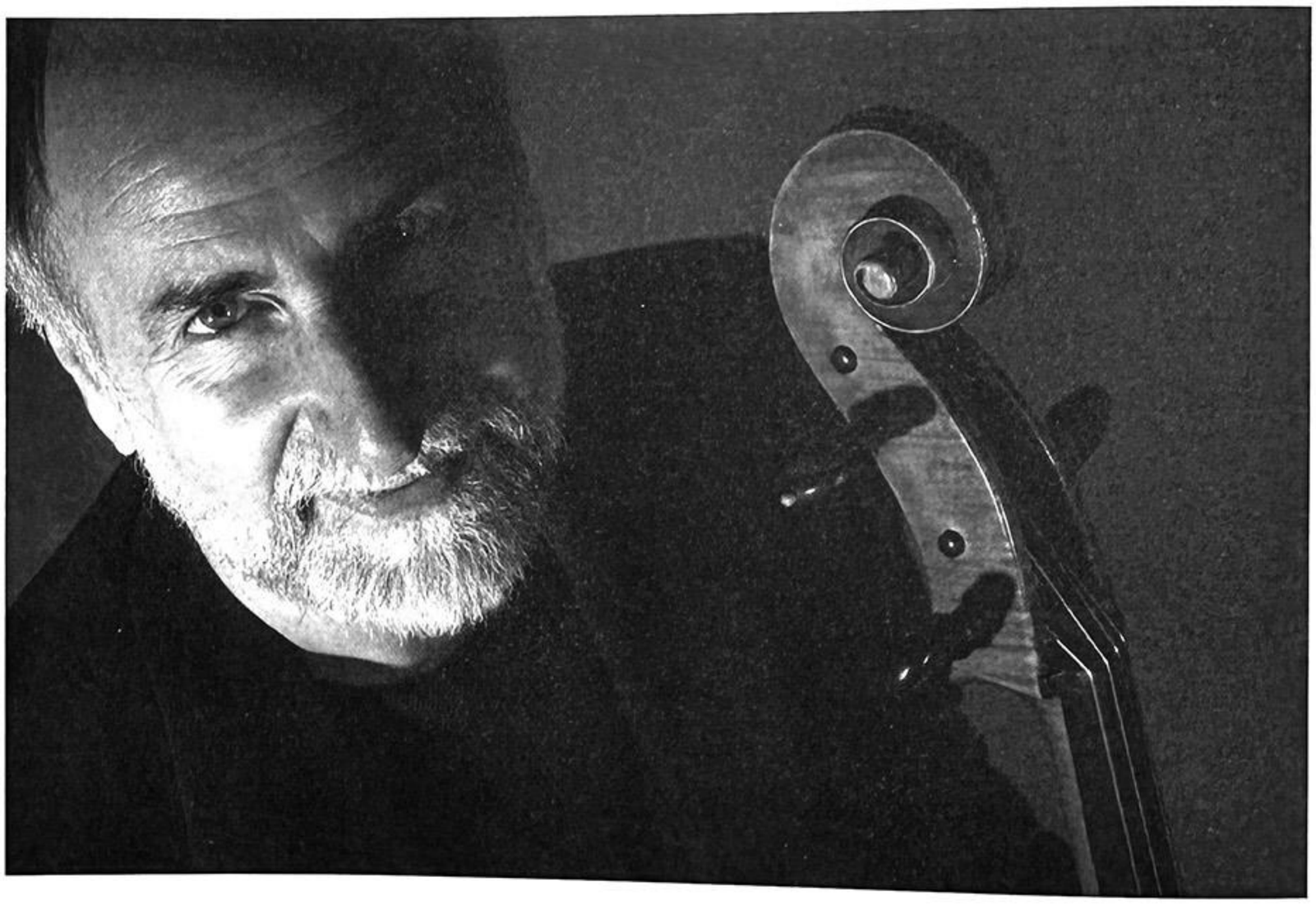


Photo by Steven Parke

Eugene Friesen is active internationally as a cellist, composer, teacher, and recording artist. A graduate of the Yale School of Music, he has performed widely with the Delos String Quartet, the multiple Grammy-winning Paul Winter Consort, Trio Globo (Friesen, Howard Levy, and Glen Velez), and as a soloist and clinician. He is an artist-in-residence at the Cathedral of St. John the Divine in New York City and is a professor at Berklee College of Music in Boston. He lives with his wife, Wendy, and family in Vermont. More information on Eugene can be found online at: www.eugenefriesenmusic.com.

Wendy M. Friesen is a writer and editor whose work has appeared in *The Times* of London, the London *Observer*, the *International Herald Tribune*, *Business Week*, *Harper's Bazaar*, the *Washington Post*, and many other publications.

MUSIC: IMPROVISATION

Learn the creative mindset and aquire the technical tools necessary for improvisation. These concepts and exercises will help you to discover a deeper source of music making, a greater quality of authenticity, and a discernable change in sound and phrasing that will enhance your performances of written music. You will learn to play by ear, apply musical theory to your instrument, and engage creatively with the elements of music, giving you a long menu of musical options. The accompanying recording includes demonstration and play-along tracks.

You will learn:

- to connect melodic imagination to your instrument, with an enhanced sense of physicality
- how to use scales, chords, modes, progressions, and other structures in your improvisation
- a broad rhythm vocabulary
- improvisation techniques for standard progressions, such as blues and II V's
- to create richer lines by using approach notes, neighbor tones, and embellishments into an improvised melodic line

Eugene Friesen is active internationally as a cellist, composer, teacher, and recording artist. A graduate of the Yale School of Music, he has performed widely with the Delos String Quartet, the multiple Grammy-winning Paul Winter Consort, Trio Globo (Friesen, Howard Levy, and Glen Velez), and as a soloist and clinician. He is a professor at Berklee College of Music in Boston.

"So many of us classically trained musicians are intimidated—even terrified—at the idea of making music without a score. Eugene Friesen, master cellist, improviser, and pedagogue, demystifies the tools in a well-structured, empathetic guide that not only opens the doors to greater personal creativity and collaboration, making music in the moment, but also opens the ears to a deeper insight into the interpretation of a centuries-old tradition. Without losing the sense of wonder and transcendence that music can achieve, Eugene Friesen breaks down and simplifies the basic components of improvisation. This invaluable resource is an important contribution to the evolving curriculum of classical music education in the 21st century."

—Matt Haimovitz, Grammy-nominated cellist, professor of cello at the Schulich School of Music at McGill University

"One of the great joys of being an improvising violinist, beyond the obvious immediate gratification garnered onstage, is the chance to share your craft with the many string players who play so beautifully in the European classical tradition yet relish the chance to get off the page. Given how hard it is to put into words, much less the printed page, it is natural to yearn for materials that can be of use. In this regard, I feel this book is destined to be a classic in the field, because it so elegantly pinpoints the essential elements necessary for undertaking such a challenging journey without being trapped in any one stylistic framework."

—David Balakrishnan, founding violinist with the Grammy-award winning Turtle Island String Quartet

"Gene brings all the traits that make him a great musician, composer, and teacher to this method of teaching the art of improvisation. It is precise, humane/humorous, organized, and diverse, opening the mind and laying out techniques for improvising in whatever style the player chooses to explore. I think this is an invaluable and timeless work that will inspire classical musicians for generations to come."

—Howard Levy, multiple Grammy-award winning composer, pianist, and harmonica player; member of the Flecktones and Trio Globo

"Many accomplished musicians can play effortlessly and beautifully, but few can articulate the thoughts and processes that bring their fine playing to life. Eugene Friesen has both the musical instincts and the affection for the musical process, combined with the ability to articulate it in a straightforward and compassionate manner. He writes in a way that brings him right into the room with me, offering encouragement, support, critical fundamentals, and practical exercises and playing tools. This book is a great resource and guide for aspiring improvisers of all ages. I highly recommend it to my fellow musicians, and I know I will revisit it many times myself."

—Jeremy Cohen, multiple Grammy-nominated violinist, composer, arranger (Quartet San Francisco and Violinjazz)

Berklee Press, a publishing activity of Berklee College of Music, is a not-for-profit educational publisher. Available proceeds from the sales of our products are contributed to the scholarship funds of the college.

Cover by Kathy Kikkert

Berklee Press
1140 Boylston Street
Boston, MA 02215 USA
617-747-2146
www.berkleepress.com

berklee press

U.S. $24.99

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ISBN 978-0-87639-129-7

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