Berklee Online

Piano

Digital Handbook

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Welcome!

Whether you're just beginning your musical journey, advancing your career, or simply seeking a community that shares your passion, you belong at Berklee Online. I encourage you to explore this handbook, and learn how we can help you confidently develop your craft and build your musical future.

All the best,

Jonathan Mahoney
Dean of Pre-College, Online, and Professional Programs

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With Berklee Online, you can study the renowned curriculum of Berklee College of Music from anywhere in the world, and in your own rhythm. Since 2002, more than 75,000 students from 144 countries have enhanced their creative output and marketability with Berklee Online's award-winning master's degree programs, bachelor's degree majors, certificate programs, and 300+ music courses. Through Berklee Online, you'll receive unparalleled instruction from music industry professionals and the same faculty members who teach at Berklee's Boston campus.

How to Achieve Hand Preparation and Independence

By Paul Schmeling

From the Online Course
Berklee Keyboard Method

A big part of learning piano is understanding and internalizing the proper technique. A lot of this is in the wrist.

For example, think of the speedy runs that experienced pianists can make up and down the keyboard. When pianists are in this position and need to reach beyond the five notes that their fingers naturally fall on, they have to use the “thumb-under” motion.

A little lateral motion in the wrist creates a pivot, allowing the thumb to reach keys on the right side of your middle finger. A good way of practicing thumb-under technique would be to press down gently with your 3rd finger and twist your wrist so you can play the note above and the note below with your thumb. This will keep your hands and wrist loose and limber. This is an exercise that you can—and should—do with both hands.

Speaking of which, let’s address playing with both hands—simultaneously and independently of one another.

Let’s practice that independence. Take a look at the study on the following page. Practicing this prototypical selection—with the perfect 4ths and 5ths in the treble clef and the bass line for the left

hand—will aid your ability in playing two or more notes in the right hand and single notes in the left. Remember, start slow and work your way up to tempo.

Having trouble, even at a slow pace?

Take a deep breath and try it again. Now, observe and familiarize yourself with all the notes on the staff line. What are the hand positions that you're going to use when playing these notes? If you can't do both hands starting out, practice separately with each hand. Then, at a slow tempo, begin to put the parts for each hand together. Once comfortable, you can gradually increase the tempo.

Now let's look at mastering chord playing with the left hand while the right performs an independent melody. Use this section to help increase your ability to read and play two or more notes simultaneously.

By the way, when it comes to practicing chords and melodies together—or anything on piano, really—a daily half an hour of focused effort is worth more than one four-hour session of noodling. It's like studying for an exam: You'll do better if you absorb the material consistently, rather than "cramming" the night before. That said, extended noodling can have its place—it's great for discovering new sounds—but just do it in conjunction with focused practice.

Okay, now use the staff line below to practice playing different notes with both hands simultaneously. Familiarize yourself with the notes and hand positions used by both hands. Start slowly, and practice with each hand separately. Then, while maintaining the slow tempo, try putting the parts for each hand together.

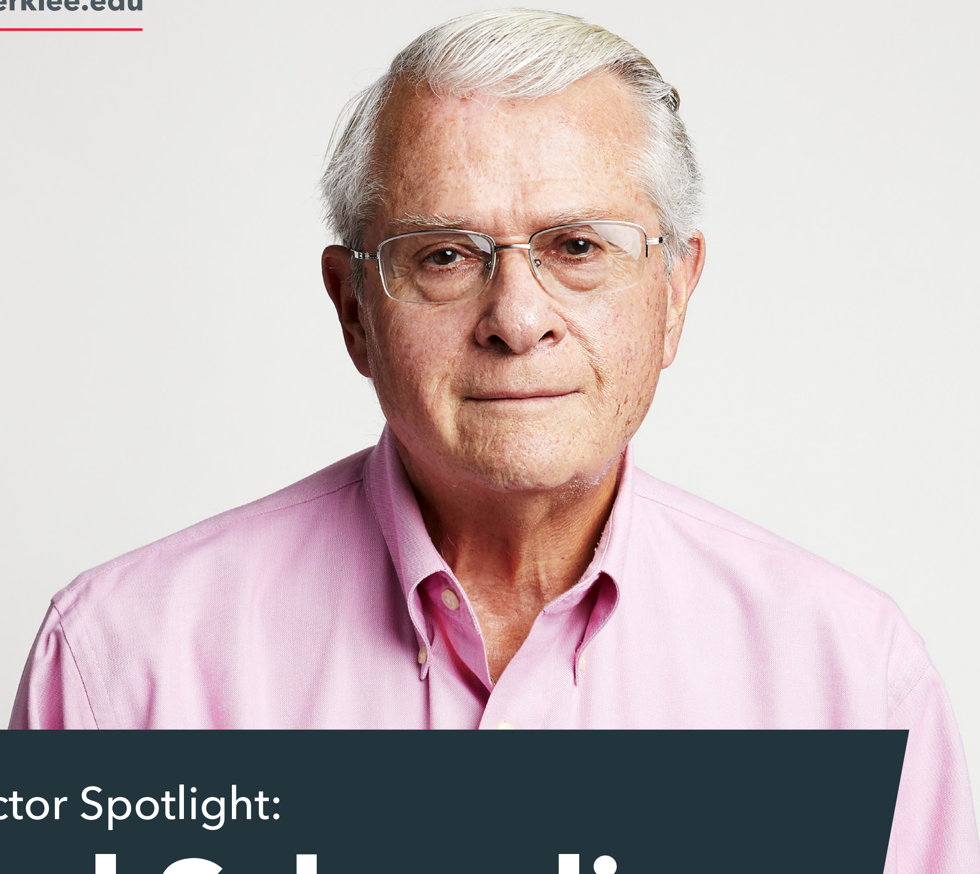
Hand independence, fingering positions, thumb exercises—mastering these routines, and making them a part of your practice repertoire, is essential to learning and mastering the piano.

Remember, slow and steady is the key. You need to internalize what we've gone over here. Now you may be inclined to jump ahead in your instruction or you may not be comfortable playing at such a slow pace. Don't do that. Sloppy practice amounts to self-sabotage.

Bear this in mind when applying all of the techniques that I've mentioned here: focus and practice pays in dividends. These are the foundational skills that you are going to build on as a player for the rest of your piano-playing life.

Paul Schmeling is the author of the Berklee Online course from which this lesson comes. Check out his bio on the following pages, or learn more about the other lessons in this course by clicking the link below.

Want to explore this course even further? **Learn More**



Instructor Spotlight:

Paul Schmeling

Paul Schmeling was a master pianist, interpreter, improviser, and arranger who taught countless students during his time at Berklee College of Music, which began in 1961. He performed or recorded with jazz greats such as Clark Terry, Rebecca Parris, George Coleman, Carol Sloane, Frank Foster, Herb Pomeroy, and more.

At Berklee Online, Paul authored the college's first online course with *Music Theory 101*. He also authored *Berklee Keyboard Method* and *Music Theory 301: Advanced Melody, Harmony, Rhythm*.

When did you first start playing piano?

I first studied the piano at age seven or eight with the traditional approach of classical lessons. I always loved it. It was never a chore!

Which pianists inspired you the most?

I fell in love with jazz piano with pianists like Art Tatum and Oscar Peterson, and later on a very different approach with Bill Evans.

What does your current piano practice/upkeep routine look like?

My current practice routine is a kind of a "maintenance" program, trying to keep the fingers moving. Not looking to advance my career at 83 years of age!

How do you go from being a good technical pianist to becoming an artist?

Trying to not be obsessed with piano technique and rather the making of music involves really hearing what sounds you are making at the keyboard.

Instructor Interview

'What the Music Wants You to Play'

By Jonathan Feist

Suzanna Sifter is not just the author of the Berklee Online course *Piano Scales 101* (see lesson on page 19), but she is also the author of *Berklee Jazz Keyboard Harmony: Using Upper-Structure Triads*, an extraordinary book that helps pianists organize and understand

tensions in an intuitive and practically applicable way. In this interview, Suzanna gives some insight into how to make these relatively advanced ideas more understandable and useful.

What are some of the ways that a "good" jazz improvisation is different from a "bad" jazz improvisation?

It is clear when a player uses their ear when improvising, and not simply playing by intellect or rote. Improvisation must be spontaneous and totally created in service to what the ear hears. This is honest improvisation. It all begins with ear training.

What common mistakes do you see pianists make when they begin improvising?

Young pianists often run many scales without using their ear. The piano can be played through intellect and bypass the ear, because if the mind knows the scale, it can be played mechanically. It is extremely important to develop the ear. You must listen to what the music wants you to play!

Do you have any advice that you give to your students that often seems to lead them to exponential improvement?

Well, for comping, the "Roman Numeral Method" from my book can revolutionize a pianists' harmonic palette in just a few months! The tension combinations of an upper-structure triad give that jazz sound that pianists look for. These triads can also be used for reharmonization, improvisation, and composition.

Improvisation must be spontaneous and totally created in service to what the ear hears.

- Suzanna Sifter

What are upper-structure triads?

Any major, minor, augmented, or diminished triad that contains at least one tension of the 7th chord it is played over. For example, an A♭ triad over C7(alt) gives a ♯9 and ♭13. The left hand plays the guide

tones, 3, and ♭7. Using upper-structure triads is a way of organizing tensions specific to a 7th chord and its chord scale. Every 7th chord quality has upper-structure triads. For instance, the dominant 7 has the widest array of tension combinations, coming from scales such as Mixolydian, Lydian ♭7, symmetrical dominant, and altered.

How is using upper-structure triads different from simply using a lot of tensions?

When using USTs, the tensions are organized in groups of three. These triads can be easily memorized in colorful combinations. The tensions are connected to specific chord scales theoretically, rather than random sounds. This way you are true to the key, chord progression, chord scale, and chord.

Is there an easy way to remember the rules for tension substitution?

Yes: 9 for 1, and 13 for 5. The 11 usually replaces the 5, but sometimes the 3, as in a sus4 chord.

Should you always actually avoid the "avoid notes"?

"Avoid note" is a teaching term used to train the ear to recognize melodic notes in agreement with a given chord and chord scale.

The beginning jazz pianist needs to be able to hear and recognize the differences between 7th chord qualities and their corresponding tensions. Once this work has been accomplished, first begin to experiment with modes of the harmonic minor, harmonic major, and symmetrical scales. These parent scales will introduce newer sounds such as ♯11 on a minor chord and 9, 11, 13 on a minor 7♭5 (harmonic minor). Eventually, the ear can learn to hear any note as "available."

How has the practice of using tensions evolved during the history of jazz?

In the early and mid 1940s, jazz became more of a listening art form rather than dance music. Musicians such as Charlie Parker, Miles Davis, Hank Jones, and Bud Powell developed the faster paced, harmonically rich vocabulary of bebop. The quintessential recording of upper structure triads is played by Bill Evans in "Blue in Green" from the Miles Davis album, *Kind of Blue* (1958).

How does the ensemble instrumentation affect your note choices?

It's not so much the instrumentation of the ensemble that matters, but the tune and the style you are playing it in. For instance, if you are playing a tune in the style of Louis Armstrong, your note choices

would be closer to the chord tones, with some 9s. That same tune played in the bebop style would have a more active linear vocabulary and feature more tensions.

When did you first start playing piano?

I started piano lessons at the age of eight with the neighborhood piano teacher, Ms. Lower. I enjoyed my lessons! But Ms. Lower complained that I wouldn't learn to read well because my ears were so good! Little did we know how this would serve me later in life!

What is your current piano practice/upkeep routine?

I practice two hours a day on top of playing three to four hours in class when I teach. Sometimes I work in two one-hour segments. I begin with technical exercises such as various scales and modes in multiple keys, then progress to repertoire and improvisation.

Which pianists inspire you the most and why?

Two of my current favorites are Robert Glasper and Christian Sands. These younger pianists have imbibed the history of the jazz language that came before them, and now they are the great innovators of their generation.

Practice Techniques, Dynamics, and Sound

By Suzanna Sifter

From the Online Course
Piano Scales 101

As a developing musician, knowing how to practice is just as important as knowing what to practice. Efficient practice targets specific areas of study, yielding proficiency more quickly.

I remember when I first started seriously practicing piano, as a young person, and I kept a log of exactly what I practiced, for how long, at what tempo, and wrote down any questions I had for my teacher for our next lesson. This may seem tedious for some; but an organized method of isolating and practicing tunes, pieces, or scales and logging my work kept my studies on track. At the end of each week it was rewarding to see all the work I had accomplished!

So let's discuss methods for making the most of piano practice time, including a proper warm-up, practicing at a good time of day, and having concise daily practice goals. We will discuss how to quickly develop muscle memory by drilling scales accurately. We will also explore practice log journaling.

Warm-Ups

Similar to an athlete, warm-ups are a valuable part of a pianist's practice routine. This should involve not only your hands, but

forearms, shoulders, neck, and back. In fact, it's helpful to prepare your whole body and your mind for piano practice. Stretching is a great way to wake up your muscles, and self-massage of your hands and arms create blood flow. This will warm up the temperature of your hands in preparation of playing.

Be sure to practice at a time of day you feel alert and energetic. Focus is clearly very important in building new skills efficiently. Some people feel alert after exercise, others after a morning coffee. Plan a time that works for you.

Some pianists like to warm up by playing finger exercises. Charles-Louis Hanon (1819-1900) was a French piano pedagogue and composer who is best known for his work *The Virtuoso Pianist in 60 Exercises*, which is still used today in modern piano teaching. While his methods have faced some criticism, the exercises can be a good way to warm up your fingers before you practice your scales. I suggest finding this book and starting with Exercise No. 1. Begin the exercise at 60 BPM, and raise the tempo as you can play with clarity and ease.

Keeping a Practice Log/ Managing Practice Time

Most of us have busy schedules these days. This is why daily practice time needs to be scheduled into your weekly activities. Notice that I wrote *daily practice*. Even if you only have 15 minutes on a super busy day, it is really important to connect with your instrument. Smaller segments of daily work are considerably more useful than two hours once a week.

Look at your daily planner and mark off at least half an hour to one hour per day to dedicate to piano. You can then start journaling in your practice log. You can split an hour of practice into two 30-minute, three 20-minute, or four 15-minute segments. It can be different on different days, but be sure to *write it down* in your practice journal. This keeps you accountable and you will be able to see why you are (or are not!) making progress. Write down any questions you may have in your journal so you'll remember to ask your teacher.

Here is an example practice journal entry:

Wednesday 9/15

10 min Warm up with Hanon no. 1, 80 BPM
Felt good.

15 min Crossovers and crossunders for F, B♭, and E♭
I'm having trouble crossing under my 4th finger with my right hand in the key of F. Any ideas?

15 min F, B♭, and E♭ two octaves
I'm having trouble with remembering the fingering descending in the key of E♭ with my left hand. F and B♭ are going well!

20 min "My Romance"
The melody is going well. Still need to work on the left hand shells a bit more.

You don't have to keep the same length of time every day, but keep the topics the same until you have mastered them. Remember to plan your practice time at a time of day you feel alert and energetic.

(Ideal productivity times can vary greatly from person to person.) This will keep you more focused and motivated for your studies.

Practice Tip:

Practice journal apps can be very helpful tools. There are many great options out there, both for iPhone and Android.

The best way to achieve lasting success is to determine what needs to be practiced, then single-mindedly work towards that goal until you have achieved it. Sounds simple, right? The important part of that sentence is to *determine what needs to be practiced*. Do not practice what you already know! Isolate and practice the parts which are giving you trouble. For example, this may be a crossover in your left hand, or the second octave turn around in your right hand. Rather than practice the entire scale from the beginning, *isolate* that crossover or turnaround.

Standard/Non-Standard Fingerings and Muscle Memory

There are 12 different major scales, five with the same fingerings, and seven with varied fingerings. As you will learn, not all scales begin with the thumb or 5th finger. Let's discuss the standard and non-standard fingerings for the major scale. We will discuss the 4th finger rule. You will study four new keys: E, B, G♭, and D♭ Major. We will also discuss muscle memory.

Standard fingering for the RH begins with 1 on the root, and continues (1)23 1234. For the LH, the standard fingering is 54321 321. Any other fingering is considered non-standard. The major scale fingerings for C, G, D, E, and A all are standard. In F, the LH is also standard, while the RH breaks from the pattern due to the fact the 4th degree is a black key. So the fingering for F with the RH is 1234 1234. The key of E has standard fingering, while the key of B is standard in the RH, but the LH begins with finger 4. See the examples at the top of the next page.

Standard Fingering, Both Hands

RH Standard Fingering

LH Non-Standard Fingering

As we have studied, scales that start on black keys use amended standard fingerings, often keeping the 123 1234 (RH) but starting on a note *other than the tonic*. In the key of D♭, D♭ is the tonic, and the RH starts the pattern 123 on scale degree 7, and continues with the thumb again on scale degree 3. The LH pattern 321 starts with 3 on the tonic and continues with finger 4 on G♭. See the example on the next page.

D♭:

Root

Root

Non-Standard Fingering:
Roots Not Played With ① or 5

When working with flat keys, look for the white keys and determine where the thumb plays. Then you can see how the pattern plays out.

Remember the 4th finger rule: The 4th finger should only be played once within the octave. (This will become more apparent in modes.)

Muscle Memory

What does muscle memory mean? Just as with many skills, the more you play scales, the easier it gets. Through practice, repetitive physical motions "memorize" notes, fingerings, hand positions, dynamics, and other such details of playing a piece, eventually without the need to involve conscious thought. *You just listen to it play.* Once this level of knowing is established, it stays with you for a long time, seemingly without effort! This is why it is so important to play the scale *correctly* while creating this muscle

memory. Otherwise, you will memorize mistakes, creating the need to repeat the correct fingering many more times. When practicing, it is important to be patient. It is better to be on the road to muscle memory with two scales, rather than four scales with many mistakes. Isolate your practice goals, then work, work, work! You will be delighted by the feel of muscle memory.

Working with Dynamics

The use of dynamics is like the coloring and shading in a great work of art. In music it's not just about the right notes and fingerings; the expression of emotion is beautifully conveyed through the vivid use of dynamics. We will begin this study by playing with **piano**, **mezzo forte**, and **forte** dynamics. We will also explore keyboard touch sensitivity. We will work on playing the RH louder than the LH, and vice versa. We will learn to play with **crescendos** and **decrescendos**. We will apply these exercises to the F, B♭, and E♭ major scales for four octaves.

The touch sensitivity on your piano or keyboard greatly affects the extent to which a note you play will be louder or softer, as well as how long it takes a note to fade away. Some touch-sensitive

keyboards are more sensitive than others. Get to know your instrument to get the most expression possible.

Using dynamics is a huge part of bringing the music you play to life. Regardless of genre, dynamics take you to the peaks and valleys of your music. Depending on your instrument, your dynamics can be extreme or less dramatic. Grand pianos have a great dynamic range, while an electric keyboard, even with touch sensitivity, will likely have a narrower range of dynamics.

When playing on an acoustic piano, it's not how hard you "hit" the note that makes it louder; it's *how fast you strike the key*. A good way to practice this is by just striking one key at a time to get the feel of playing **forte** (loud or strong). Then strike the key a bit slower for a **mezzo-forte** (moderately loud) sound. Finally, strike the key even slower for a **piano** (quiet) sound. It can be useful to play a simple five-note pattern to practice these three basic dynamic levels.

Next, let's practice playing the F major scale, hands together, for two octaves with three repeats. First play forte, then mezzo-forte, then piano. Repeat this exercise at a comfortable tempo until you can really hear the difference between the dynamics.

As with everything you're learning with the piano, there are three rules: Drill, drill, drill!

Play the scale from the beginning. Then play it again. Don't stop playing just because you're technically "done" playing it. Play with the dynamics. Play until every scale is part of your muscle memory. Spend time learning different single-note melodies. Then play them in each key. One of the joys of the learning process is the time you can spend exploring variations of the concepts that you're working on. That way you're not just deepening your understanding, but you're also discovering how far you can take your music.

Suzanna Sifter is the author of the Berklee Online course from which this lesson comes. Check out her feature on page 13, or learn more about the other lessons in this course by clicking the link below.

Want to explore this course even further? **Learn More**

Instructor Spotlight:

Ross Ramsay

James Ross Ramsay is a faculty member in the Piano department at Berklee College of Music, and has been teaching piano for 25 years. He composes and produces music for local and nationally broadcast television, radio, cable, and video programs, and has been a featured soloist on piano and keyboards with various artists, touring throughout the US and Europe.

At Berklee Online, Ross authored and instructs *Intermediate Keyboard*, *Jazz Piano*, and *Keyboard for the Electronic Musician*.

Which pianist inspired you the most?

If I limit the choices to a relatively early stage of my study, I probably spent the most time listening to Chick Corea.

What does your current piano practice/upkeep routine look like?

I'm lucky to have the opportunity to play quite a bit in lessons and labs with students, but generally the answer is almost every free moment is somehow spent musically, learning a new piece, trying to improve an old one, developing new concepts, writing, arranging. When not on campus, I spend a number of hours at my piano each day.

How do you go from being a good technical pianist to becoming an artist?

Technique is a tool we use to clearly express a musical idea; it's nothing more than that. Even at an early stage, keyboardists with technical limits should be thinking about what it is they are trying to express, not just notes and rhythms, but also how does the piece of music make them feel, what's the story it's telling? How can they convey that feeling to an audience?

Photo: Sarah Wallor

Celebrity Interview

Bruce Hornsby on the Keys to Success

By Pat Healy

Bruce Hornsby is a musical chameleon. He has won Grammys in the Pop and Bluegrass categories, and even been nominated for one in the Country category. When you listen to his music online, many of the streaming services suggest "you may also like" about artists as

disparate as Aaron Copland, 2Pac, and the host of rockers he became a contemporary of when he first broke through in the 1980s with "The Way It Is." He has also been a keyboardist for the Grateful Dead and worked extensively with Justin Vernon of Bon Iver.

Do you remember the first time you sat at the keyboard and felt a connection?

Well, there are two answers to that. The first time I sat at the keyboard was at age seven or eight. Purportedly, I asked my mom if I could take piano lessons. I only did this for about a year, maybe a year plus, before I just didn't want to do it anymore. There was no real connection there. I took lessons in a funeral home, so you'd get to walk the long walk up to the third floor where the piano did reside. I would walk by caskets and embalming fluid. At age seven or eight, that was not something you really wanted to keep doing. So that was my first moment with the piano.

But it really struck me when I was 17. My older brother had gone away to prep school in New England. He was much less provincial than we were. We had the top 40 station and the soul station, and that's what we heard, and that was great. But he came home and turned us on to all these interesting, lesser-known bands than the

mainstream. I know it sounds crazy to think that Elton John was once that. But in this case, he was! The first song that really smacked me in the face in the best way was "Amoreena" from *Tumbleweed Connection*.

When you eventually sat at the keyboard again, did those lessons from years back still remain or was it a fresh start?

I did have a little prior knowledge. My older brother, Bobby Hornsby, who turned me on to this music, he was the real musician of the family. I was more of a jock at the time. I had little bands, playing guitar: I was a guitar player then and I wrote my little songs in sixth grade when I was 12, 13 years old. But I wasn't serious about it—I liked hoops more. But when I was in ninth grade he needed me to play keyboards on an old Farfisa organ in this soul band he was playing with down at Newport News, Virginia. So he taught me the basic chords, the basic triads. . . . I had a little bit of knowledge in that way and then just started picking it up by ear, and it always came fairly naturally and fairly easily to me.

Was that Bobby Hi-Test and the Octane Kids?

That's right! It was my indoctrination into Grateful Dead music. Yeah, a few years later he was at UVA and he was in a total freak

fraternity. They got thrown off campus for drug violations. They used to drop acid, paint their faces, and go play volleyball. They were lucky to hit one ball!

You first studied in Richmond, right? Were you as wild and experimental as your brother there?

No, not in that way. Even when I started playing 16 years later—imagine, I was Brucey Hornsby, playing Fender Rhodes and singing lead on Grateful Dead songs with the Octane Kids. Then fast-forward 16 years later and I start winging it with no rehearsal at Madison Square Garden with the Grateful Dead.

The guys who hung out in those old hippie days in Charlottesville, Virginia, they all came to the Garden. I get chills thinking about that because that was just obviously an amazing "paint yourself into the mural" moment, and it continued again for 20 months, about 100 shows. . . . But I told them, "If you guys dose me, I'm out." Maybe I should have been dosed, maybe that would have been good for me. . . . But no, I never really embraced the Beta Theta Pi aesthetic. Because once I got into music, frankly I was so deeply involved.

Then after Richmond, you came to Berklee, but that wasn't where you ended up . . .

Yeah, I was a bit of a school-hopper as you've seen: three different colleges. Freshman year, Richmond, then I got into the accelerated program at Berklee, so I did freshman and sophomore year in two semesters at Ber-zerk-lee.

Yes, I'm restless. I'm always looking to move to a new place.

- Bruce Hornsby

Then I took a semester off. Most of the people that you know of who left early to start their career, they were these sprung-from-Zeus figures like Keith Jarrett, for God's sake. . . . playing with orchestras in their single digits, at age nine or something. I was the opposite. It was eight more years after age nine that I started this. So I was at Berklee, just trying to figure out what to do, and just trying to get the basics together. I lived real close to the New England Conservatory, close to Symphony Hall, so I decided that was my next move.

Because I didn't know anything! I was just flying by the seat of my pants and just going over here: "oh, this looks interesting," or "how about this?" Because I was from Williamsburg, Virginia—not a musical Mecca—so I was just trying to figure it out on my own.

I made an audition tape to send to the New England Conservatory. I loved Chick Corea and I wrote him a letter, asking him about his music and he was so beautiful, he wrote me back—two times! I still have the letters. I'd asked him for some sheet music, so he sent me some. I tried to play some of his music, I tried to play this tune called "Straight Up and Down." I don't think I can really even play it well now. So I'm trying to play it then, after having been playing for two or three years, and so the tape was terrible. I sent it to the New England Conservatory: I had my little brother playing bass—he wasn't serious about bass, he could do it okay—and this drummer we knew.

Anyway, it was a complete shit sandwich audition tape. The guy called me up, Phil Wilson was his name, an old Berklee trombone teacher, who now was the head of the jazz department at the New England Conservatory. He called me and said "Look, I can tell there's something in there, so you've got something, but you're

not ready yet. You should try University of Miami." Again, I'm like, "okay, I'm just taking the next suggestion and running with it."

When did you get to the point in your career where you realized you could do whatever you wanted with your music? I remember reading an interview with you after Don Henley's "The End of the Innocence" came out and you said, "this is the end of my playing like this," or something to that effect, where you'd made a conscious stylistic choice there.

Well, yes, I'm restless. I'm always looking to move to a new place. I also felt that frankly, it's a fickle world out there. You're damned if you do it, damned if you don't. Because if you have great success, do you choose the path of, "okay, well, now I'm pegged stylistically as this one thing and do I just continue to mine that?" We know great artists who have done that. Basically the records have stylistically sounded the same from the first record to the twentieth record. There are a whole lot of their original true fans who are still with them because those fans don't want them to change. "Be the person that I like," and I get that. But that's not me. I thought I had done this piano and LinnDrum machine and a Juno or OBX synth, bass, one-man show stuff, enough.

The first few records of mine were with The Range, and then the next one is just [listed as] Bruce Hornsby and people would go, "Well, I really miss the old band sound." Sometimes I would reply, "Well, it's interesting you say that because what you're referring to as 'the old band sound' is me playing along with a LinnDrum machine and it's one-man show stuff." With maybe somebody—David Mansfield, George Marinelli—playing a guitar or mandolin over it.

The one that says "Bruce Hornsby" (*Harbor Lights*) is actually three guys in a room, playing. Now, it's a blurry picture. You can't paint it all with one color because the last Range record was truly a band record too. That was the one where I thought, "okay, enough of the LinnDrum. The band plays this music way better than the records." That's what we did. There is that one Range record where you really hear the band. But there's a really good German TV show called *Rockpalast*, and it's still available if you dig deep on the internet. It's a 1990 show, and Bruce Hornsby and the Range on *Rockpalast* played the gig with Living Colour, including my future dear friend Vernon Reid, who played on my last record, *Non-Secure Connection*, played on some stuff for Spike Lee and me.

I know you've been playing with a lot of younger artists recently, but have you always been up on new music?
I've always been interested. I've always tried to stay current, but I wasn't really as knowledgeable about the indie world as I became once I started being in that world. Because you're in this world and they're talking about this guy and I'm the clueless clown in the corner going, "well, who are they talking about?" Then I'd go check it out. But I think I got a little more interested a little earlier on in 2012-2013.

I have this Google Alerts app, it sends me an email every day or so when you're shouted out in something. . . . So I started getting rained on with all of these Google Alerts about this band Bon Iver, and Justin Vernon shouting me out as an influence on his music, when he was coming up. He transcribed Pat Metheny's solo on "Harbor Lights," for instance. He was a total music nerd in the most beautiful way. . . . So I started listening to this. I think the first thing I heard was "Holocene," and I just went, "wow, this is something really different and really moving and just great."

. . . So Justin called me to do a duet with him. He and his pals have always liked my version of the great Garcia/Hunter song, "Black

Muddy River" on our record, *Here Come the Noisemakers*, our first live record from 2000. So we did that [for the 2016 compilation, *Day of the Dead*]. I went to Eau Claire and we became friends and it just kept evolving, growing, evolving into a collaboration on the record *Absolute Zero* [from 2016].

What is it that gets you going with music and how after all these years are you still exploring new territory?

I think anyone can see that I'm deeply involved in what I do. I'm just always searching for the new, searching for something that gives me the chills or something that just gets me going in a different way. It's not always about chills. I like funny songs too. So that's a different way to try to move someone. So what keeps me going? Everything I'm saying, all the outside input I get from other musicians, the collaborative situation and the friendships that are made, that's as important as anything. It's been great fun and will continue to be, I think, and when it stops, fuck it, I'll stop.

Instructor Spotlight:

Zahili Gonzalez Zamora

Born in Manzanillo, Cuba, Zahili started playing piano at the age of six and graduated from the National School of Music with a performance degree. Her Afro-Cuban jazz trio, MIXCLA, has headlined numerous venues and festivals around the world.

At Berklee Online, Zahili authored the *Piano Techniques for Modern Music* Coursera course and co-authored *Piano Technique 101*.

When did you first start playing piano?

I started at six years old at a Conservatory in Manzanillo, Cuba. I always loved it.

Which pianists inspired you the most?

The harmonies of Bill Evans and Hank Jones, the lyricism and syncopation of Michel Petrucciani, the displacement and clave of Chucho Valdés. They all have traits I emulate as a professional.

What is your current piano practice/upkeep routine?

Practice is always related to the projects I am working on at the current time; learning my tunes, exploring harmonic ideas to contribute, continuous improvisation work, and a classical tune here and there to stay technically in shape.

What is one piano piece that everyone should drop what they're doing and listen to now?

Gosh! I can't answer that question. There is so much wonderful music out there. Here are three though:

- "In a Sentimental Mood" by Hank Jones
- "La Comparsa" by Ernesto Lecuona
- "I Loves You Porgy" by Keith Jarrett

Pop Gets Wild with Major, Minor, Dom7, and Sus Chords

By Dave Limina

From the Online Course
Pop/Rock Keyboard

Pop and rock music sometimes get an undeservedly bad rap with academic types. Some of my students enrolled in past terms have entered into the course with the mistaken impression that pop and rock piano is easier to learn and master than some other, more vaunted styles.

Pop/rock playing has its own rigors, and the genre employs different groves and harmonic material. But just like jazz, blues, or any other genres/styles of performance, pop and rock keyboard players need to employ a strong sense of chords and a good sense of rhythm.

Pop/rock songs often employ the same chords and progressions time and time again. We're not going to go over the progressions in this handbook (though we do in the full course!). But right now, let's get to know those chords and how they're employed in pop/rock songs.

Pop/rock music makes constant use of the dominant 7th chord, major 7th, minor 7th, and the suspended chords. These chords are the building blocks to harmonically rich pop/rock tunes, from classics such as "What's Going On?" by Marvin Gaye to "Moves Like Jagger" by Maroon 5.

Dominant 7th Chords

The dominant 7th or dom7 chord is a holdover from the blues. It is called dominant because of its major key diatonic harmony. The chord is constructed of a major triad—the root, a major 3 and 5 degree—and a flattened 7 degree. There's a lot of tension inherent in the dominant 7th chord. It wants badly to resolve down to the tonic chord of the key. On the next page are the naturally occurring 7th chords in the C Major scale.

I'll highlight the V I cadence here. The chord on scale degree 5, in this case, G7, has a very strong tendency to resolve to the I chord, or C in this case.

C Dm Em F G Am Bdim

1 2 3 4 5 6 7

Note the inversions of the dom7 chord (below) as well.

G7 Dominant 7th cadence in key of C C

5 1

The common "triadic" (three-note) voicing below is a very common way to play dom7 chords in contemporary styles. Here we use only 3, 5, and 7th degrees of the chord.

Inversions

G7

5
3
7

root 1st 2nd 3rd

As we go through this lesson, play the chords in these notation examples. Doing so will enable you to characterize the quality of what you hear. What will also be of great assistance is learning the labels for the types of chords here—knowing them will help immeasurably with your lead sheet reading.

Major 7th and Minor 7th Chords

On the staff line below we can see the major 7th, or maj7, and minor 7th, or min7, chords.

Conventionally, dom7 is notated as G7 (not Gdom7). Maj7 chords are constructed in the same way as a dominant 7th chord except the 7 degree isn't flattened.

They can be implemented in much the same way as dominant 7th chords—as whole notes, arpeggios, or rhythmically.

Cmaj7 Dm7 Em7 Fmaj7 G7 Am7 Bm7(♭5)

1 2 3 4 5 6 7

Take a look at chords built on the 2nd, 3rd, 6th, and 7th scale degrees. These are our min7 chords. These min7 chords consist of

a minor triad and a flatted 7th scale degree of the major scale. These are chords used rhythmically in R&B, funk, and dance and are often featured in pop ballads when a darker emotional quality is called for. In the key of C above, we have Dmin7, the II chord; Emin7, the III chord; and Amin7, the VI chord.

Inversions of the maj7 chord built on scale degree 1:

Cmaj7
7
5
3
1
root position
1st inversion
2nd inversion
3rd inversion

Inversions of the min7 chord built on scale degree 1:

Cm7
♭7
5
♭3
1
root position
1st inversion
2nd inversion
3rd inversion

Sus Chords

Suspend, or sus4 and sus2, chords are easy to visualize yet somewhat difficult to implement in sound ways. A bit contradictory in nature, these triads are restful yet tense. The 4th scale degree wants to resolve down to 3, while scale degree 3 wants to resolve down to 2. Not as unstable as dom7, sus4, and sus2 chords are often followed by a major triad with the same root, like a Csus4 to C. The sus chords can make for great transitions or for adding a sense of ambiguity to your harmony.

Csus2

5
2
1
root position
1st inversion
2nd inversion

Csus4

5
4
1
root position
1st inversion
2nd inversion

continued on next page

Resolutions

Csus4 C Csus2 C

4 down to 3

2 up to 3

Dominant 7th Sus4 Chords

We finish up our look into the chords with the dominant 7th sus4, or dom7sus4. These chords are lush, more so than their sus4 brethren. To get a better sense of the function of sus4 and sus2 chords, take the chords provided below and try arpeggiating them and playing them in different ranges across the keyboard. Experiment for as much time as you need! It will only improve your playing!

C7sus4 C7sus4(9) B♭/C

♭7 5 4 1

9

9 ♭7 4

The voicing of the dom7sus4 chord adds a new note to the chord—degree 9, tension 9. I won't take too deep a dive into the theory behind this but here's what you need to know. Understand that degree 9 is the same as degree 2. Think of the seven-note scale as degrees 1 through 7. For example, if we're working in the key of C, degree 9 will be D. In this line of thinking, C is degree 1 and degree 8. We can continue up the octave in this fashion — E is degrees 3 and 10, F is degrees 4 and 11, etc. These are called compound intervals, and we use them to describe tensions built on 7th chords. We also have a new chord symbol presented here as well B♭/C. This is shorthand for a B♭ chord (B♭, D, F) "over" a C bass note.

Now we're going to take a look at the lead sheet on the next page. Using the chords that are presented there, you should be able to play through any of these eight-bar progressions. As I said earlier, knowing the labels for the types of chords will help immeasurably with your lead sheet reading. After you've given the material a shot, evaluate yourself. Have you learned the labels sufficiently enough? Do you need to go over anything again before moving on? If so, just return to the previous pages. All the info you need should be there for you.

Swagger Groove

Dm7 Gm7

clicks

B♭maj7 Asus4 A7 **4X's**

Amaj7 Bm7 C♯m7 D7

clicks

D/E F/G D/E F/G **4X's**

Ballad Feel Am7 D7 Am7 D7

clicks

Gmaj7 Cmaj7 Gmaj7 E7 **4X's**

Back up!! B♭m7 E♭m7

clicks

G♭maj7 E♭/F Fsus F7 **4X's**

The chords we just ran through have been and will be the bricks with which you build your songs, as the example illustrated on the previous page. Just because you have a sense of how these chords function doesn't mean you are near ready to write and play pop/rock music. But you're on the right path. Take the material you've learned here and build upon it, transform it, and play around with it. Pop/rock music is built upon the innovation of older styles. Where are you going to take it? That's up to you!

Dave Limina is the author of the Berklee Online course from which this lesson comes. Check out his interview on the following pages, or learn more about the other lessons in this course by clicking the link below.

Want to explore this course even further? **Learn More**

Instructor Interview

Dear Pianists: 'Say Yes to Everything'

By Talia Smith-Muller

Dave Limina is the chair of the Piano department at Berklee College of Music, and has been teaching at Berklee for more than 35 years. As program director of the new Bachelor of Arts in Piano Performance at Berklee Online, Limina shares what students can

expect from the program, as well as how he got his start in piano, his practice routines, career highlights and advice, and listening recommendations.

When did you first become interested in piano and when did you first start taking lessons?

Well, it was a typical "piano lessons at age five" kind of thing, my parents got that happening. I showed early promise in that kind of typical scenario. I was always attracted to the sonic textures of the instrument when I was a little kid. I mean, we were just playing with sounds and things like that, and then as another typical trajectory . . . I never wanted to practice. Then in middle school, I wanted to be in the jazz band. They needed a piano player, so I started listening to jazz and just became completely hooked. Total hook, line, and sinker, and here we are 40 years later.

What does your practice upkeep routine look like now? How has it evolved over time, especially when you've been teaching and performing as long as you have?

Well, I'd say three times a week I have like a half an hour scale technique routine that I do. I do all my major and harmonic minor scales in four octaves in all 12 keys, major and minor triad

arpeggios. And then I do Philipp's *Exercises for the Independence of Fingers*. I have a routine with those and I do some Hanon. That's my technique and I really enjoy that because not only is it good for the upkeep of your proficiency, but it's very meditative. And then I may work on a song like a jazz standard that I haven't worked on in a while. I might try it in a new key. I might try to write something,

You not only have to be a great musician, but you also have to be someone that people want to be hanging out with.

- Dave Limina

work on a tune that I've been working on. And then I'll play along with a real recording that is inspiring. And that's a nice little 45-minute upkeep kind of practice.

But how has it evolved? I'd say that nowadays I do more with my ears, like playing along with music in different styles and then more

of working on getting in the right mental head space to perform. So kind of the Kenny Werner thing, effortless mastery kind of things, so that's been something relatively new.

You've performed with greats like Chuck Berry, B.B. King, Gloria Estefan, Martha Reeves, and more. Did you learn any interesting life lessons from being around these artists or any others you've worked with?

Well, that's a great question. Yes, I'd say collectively, I got to play with a lot of the people that were the original rock 'n' roll artists. It really reaffirmed the level of dedication that you have to have to be a full-time performing artist. The sacrifices made in touring and being in that world can be pretty big and just realizing to really be a full-time performing musician is all consuming. It's not like other career choices where you're like: "oh, I think I'll be this." And then musicians are always being musicians. You know, even when we're not preparing for a gig, we're thinking about music. We're never short on it. Like if we have spare time, we're probably gonna be writing a song and working on things, you know?

But getting back to your original question about life lessons, this is a very common thing that you hear a lot, but it's true: I learned that

you not only have to be a great musician, but you also have to be someone that people want to be hanging out with too. Because you spend a lot of time together. So it's knowing how to hang, without being fake about it.

Was there anything that you had to learn the hard way as a pianist in the music industry?

Yes, a lot of things. I got out there earlier than I should have. I was good enough to be sought after, but I had an imbalance of skills, and the skills that I needed to improve on really started to stand out. Sometimes people would bring it to my attention in a kind manner and sometimes in a, well, not-so-kind manner. I used to play really on top of the beat, and for certain styles of music that was okay, but for other styles it wasn't. And then also my repertoire of standards needed drastic improvement, so I had to learn that the hard way . . .

Here's a story that I like to tell: I played in a rehearsal band every Sunday. It was for free, and it was a chance to play and read charts down. Then one Saturday [the bandleader] called me and said, "Hey, are you up with this Sunday?" And I was just really busy, so I said no. It turned out that on that Sunday, he was bringing these guys from

Dorchester to run some tunes. And the band that showed up that day turned out to be the first touring band for the New Kids on the Block.

And I guess the lesson is: continue to say yes to everything. Had I said yes, that perhaps would've been me! It's tough. Like I really could have done it. I was just kind of like, "nah, you know, I'm doing this every week." And they didn't know that it was going to turn into something huge. So yeah, especially in your formative years, you really do have to say yes most of the time. And then just sort it out later, you know?

Which pianists are you most inspired by and what is one song that you think everyone should drop what they're doing and listen to right now?

My all-time favorite pianist is Lyle Mays. He played with the Pat Metheny Group through most of the band's existence. So, Lyle Mays, Ray Charles, Stevie Wonder, Herbie Hancock. I'm trying to think of somebody that might be a little more obscure . . . a blues piano player named Otis Spann. And a track that you've got to listen to right now is "James" from the Pat Metheny Group. It features Lyle Mays and Pat, and it's just one of the greatest things ever.

World-Class Courses

With Berklee Online, you have more than 300 courses to choose from, including more than a dozen piano and keyboard courses. Here's a look at some selected offerings:

- **Berklee Keyboard Method**
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- **Jazz Piano**
- **Keyboards for Live Performance**
- **Latin Piano Styles**

Cuban Fusion: Pianists to Put in Heavy Rotation

By Nando Michelin

From the Online Course
Latin Piano Styles

As Cuban music rose to international popularity in the early twentieth century, and Cuban musicians started traveling to perform abroad, a natural mix of styles came about. This includes interaction with US jazz culture, which started in the mid-1920s and continues today.

Some Cuban musicians like Chucho Valdés started combining other music styles with traditional Cuban music. Chucho's band, Irakere, was indeed a trailblazer, especially by using Afro-Cuban folkloric elements and funk/rock elements. Also, some musicians who were not from Cuba like Papo Lucca and Eddie Palmieri (who both come from Puerto Rican ancestry) became renowned artists that incorporated Cuban and jazz elements. Others like Gonzalo Rubalcaba (Cuba) and Danilo Pérez (Panamá) borrowed elements from Cuban music to come up with their own personal style of playing contemporary jazz music.

The musicians we will examine here opened the doors to all sorts of fusions between styles, and musicians from different parts of the world followed their example. You can follow along with the listening examples provided in a Spotify playlist on the ***berkleeonline*** account called "**Cuban Fusion**." You will also

notice that some music terms are marked with an asterisk, and you can find a glossary for this article on our ***Take Note*** site.

The Beginnings of Cuban Jazz

In 1967, the Consejo Nacional de Cultura (Cuba's National Culture Council) decided to establish a band called Orquesta Cubana de Música Moderna, with the intention of creating an all-star orchestra with the best jazz musicians. After playing in this group for several years, some of the musicians—including Chucho Valdés—decided to break off in 1973 to make music that crossed the line between instrumental jazz and popular dance music. They called the group Irakere.

Chucho Valdés

In 1941, Chucho Valdés was born in Quivicán, Cuba, to the great pianist Bebo Valdés. At age nine, Chucho entered the Conservatorio Municipal de la Habana, which he graduated from at age 14. Soon after, he joined his father on the bandstand, many times substituting for him and eventually taking over musical direction duties when his father left Cuba in 1960. In 1963, he joined the Orquesta del Teatro

Musical in Havana (OTM), together with Carlos Emilio Morales, co-founder of the band Irakere, and sax legend Paquito D'Rivera. With Orquesta Cubana de Música Moderna in the late 1960s, he played jazz as well as Latin jazz, jazz-rock, and sometimes third-stream/symphonic jazz.

Listen to "Mambo Influenciado," a 12-bar D minor blues with added bebop-style chord changes (known as "Swedish blues" by bebop musicians), that uses several bebop melodic elements as well: arpeggios using chord tones, and chromatic approaches. Note how the intro fits perfectly the 2:3 clave* of the guaracha subgenre of Cuban music. Also very interesting is the use of the hemiola* on the first phrase of the melody (the phrase is made of two rhythmic phrases in 3/4, adding two beats at the end to fill the first two bars). This effect was used constantly by jazz greats Duke Ellington, Thelonious Monk, and Sonny Rollins.

Irakere

Irakere's sound brings together rock, funk, Afro-Cuban sacred and secular rhythms, Afro-Cuban sacred chants, European classical music, jazz, and several other rhythmic sources. The unique hybrid sound of the band, plus the high-level virtuosity of its

instrumentalists, led to national and international acclaim. lrakere's repertoire was divided into two styles: one jazz-oriented, with written arrangements and space for soloists, and another one of mostly danceable and sometimes highly commercial music.

Along with Chucho Valdés on piano, the group at that time had Jorge Varona and Arturo Sandoval (trumpets), Paquito (alto sax) and Carlos Averhoff (tenor sax), Carlos Emilio Morales (guitar), Carlos del Puerto (electric bass), Enrique Pla (drums), and Oscar Valdés II, Armando Cuervo, and Jorge “El Niño” Alfonso (Cuban percussion). Paquito and Arturo Sandoval went on to become two of the most influential musicians in Latin jazz.

Listen to “Bacalao Con Pan” and “Aguanile Bonko” for the junction of funk-style bass lines, guitar rhythm, and electronic sounds with the Cuban percussion and coro (vocal).

Cuban Sounds (from Outside of Cuba)

Despite not being Cuban, Papo Lucca from the neighboring island of Puerto Rico and Eddie Palmieri from New York, greatly expanded

the role of the piano as members of iconic salsa bands. Their beautiful arrangements included sections open for piano solos, bringing their virtuosic playing into the dance band format. While their solos have a constant reference to montunos* and strong rhythmic phrases that sound traditionally Cuban, they are often mixed with a very strong reference to bebop and other modern jazz elements, including voicings in 4ths and hemiolas*.

Papo Lucca

Papo Lucca, (born in Ponce, Puerto Rico, in 1946) became widely known as a pianist, arranger, and the founder of La Sonora Ponceña, in which he started playing at age eight with his father. He also became known for performing with salsa icons such as Fania All-Stars, Willie Colón, Celia Cruz, Rubén Blades, and many more. **Listen to "Franqueza Cruel."** On the violin-piano trade, note the alternation of montuno and solo, and the use of two-handed lines, triplet lines, and contrary motion between both hands.

Eddie Palmieri

Known as one of the finest Latin jazz pianists of the past 50 years, Eddie Palmieri is also known as a bandleader of both salsa and

Latin jazz orchestras. His playing combines the rhythm of his Puerto Rican heritage with the melody and complexity of his jazz influences: those of his older brother Charlie Palmieri, Thelonious Monk, Herbie Hancock, and McCoy Tyner.

Palmieri's parents emigrated from Ponce, Puerto Rico to New York City in 1926, and he grew up in Spanish Harlem, which was then known as "El Barrio," due to its large Latino community. Palmieri learned to play the piano early on, and at the age of 13 he joined his uncle's orchestra, initially playing timbales.

Palmieri's professional career as a sideman pianist took off in the early 1950s, and in 1961 Palmieri formed his own band, La Perfecta, which featured a front line of trombones rather than the three or four trumpets customary in the Cuban conjuntos of the son montuno* era. His innovative sound also more prominently mixed aspects of post-bop American jazz into Latin performances.

Palmieri perfected his arranging skills in the 1970s, releasing several impressive recordings that reflected his unique approach to music, such as the groundbreaking 1970 release *Harlem River Drive*, which merged musical categories into a style that mixed elements of salsa,

funk, soul, and jazz. In 1975, Palmieri won the first-ever Grammy for "Best Latin Recording" for his album *The Sun of Latin Music*.

Listen to "Azucar": During the piano solo, pay close attention to how his left-hand ostinato* uses a characteristic montuno* phrase, over which he then continues to build his solo again using hemiolas* as well as blues elements, whole-tone scale phrases, and percussion-like effects.

A New Generation

Gonzalo Rubalcaba and Danilo Pérez are two highly influential pianists on the international jazz scene today. Their importance is independent of styles, both having achieved a very personal music expression that defies stylistic definition. Their creative processes were based on bringing their Latin background to mainstream jazz rather than bringing the influence of jazz to Latin music.

Gonzalo Rubalcaba

Gonzalo Rubalcaba was born on May 27, 1963, to a musical family in Havana. His father was the pianist, composer, and bandleader

Guillermo Rubalcaba. Gonzalo was a child prodigy who by the age of six was playing drums in his father's orchestra. Gonzalo started his formal training two years later, with piano as his main instrument. Upon graduation from the Institute of Fine Arts in Havana with a degree in composition, he was already working as both a drummer and pianist in local hotels, concert halls, and jazz clubs.

He toured Cuba, Europe, Africa, and Asia with the charanga (Cuban ensemble) Orquesta Aragón, while also performing as a sideman in jazz groups. Beginning in 1984 he led his own Afro-Cuban jazz-rock fusion band, Grupo Proyecto. He met Dizzy Gillespie and Charlie Haden as well as Blue Note Records president Bruce Lundvall, who introduced him to US audiences around 1986.

Listen to "Prologo Comienzo" to hear his stunning piano solo mixing traditional Cuban elements with jazz, blues, and funk with an impressive level of virtuosity.

Danilo Pérez

Danilo Pérez was born in Panamá on December 29, 1965. The son of a well-known singer and educator, Danilo started his formal music

studies early in life, while at the same time was always participating in music gatherings in his house, playing percussion instruments. His father, having written a university thesis advocating for teaching all different subjects through music, applied this to Danilo's education. His education continued in the US, where he attended none other than Berklee College of Music. In 1989 he joined Dizzy Gillespie's United Nation Orchestra. Dizzy had a big influence on Danilo, encouraging him to express his uniqueness through music.

All of these experiences impacted and shaped Danilo's understanding of music as an effective diplomatic tool. He implemented his vision with the Berklee Global Jazz Institute, which he founded and where he serves as artistic director.

Listen to "Friday Morning" and take note of the "rhythm changes" form and strong Cuban rhythmic style used by American drummer Jack DeJohnette (definitely look him up if you're not familiar!).

As you can see with all of the artists we discussed, Cuban music had a huge impact on musicians who were both from Cuba, and on musicians from neighboring countries. We're dealing with what

could be understood as the generation of pianists that developed their art based on earlier pianists and recordings, continuing the evolution of the music that was based on folkloric elements and instruments.

With Cuban musicians touring abroad, and with jazz on the radio, we saw a fusion of styles that remained grounded in Latin rhythm to create entirely new sounds and subgenres. Continue to explore the music of these artists, because the more you listen, the better you will be at incorporating these sounds and styles into your own piano playing.

Nando Michelin is the author of the Berklee Online course from which this lesson comes. Check out his bio on the following pages or learn more about the other lessons in this course by clicking the link below.

Want to explore this course even further? **Learn More**

Instructor Spotlight:

Nando Michelin

Nando Michelin is an associate professor in the Piano department at Berklee College of Music. His discography as a bandleader includes more than 15 albums featuring artists such as Esperanza Spalding, George Garzone, Jerry Bergonzi, Chico Pinheiro, Ebinho Cardoso, Renato Braz, Sergio Santos, Jeff Ballard, and more.

At Berklee Online, Nando authored and instructs the *Latin Piano Styles* course.

When did you first start playing piano?

I started with my grandmother at age five, and then had a really bad teacher, so I quit at age 11, and restarted at 17. That was when I really enjoyed it and became gradually more dedicated, until I decided to work towards being a professional musician.

Which pianists inspire you the most?

Chick Corea, Herbie Hancock, Danilo Perez, Fred Hersch, and Brad Mehldau come to mind.

What does your current piano practice/upkeep routine look like?

I try to do a warm-up technical exercise every time I sit at the piano (usually every day) and then some Bach and other classical music to improve my technique and touch. After that there's lots of learning new music for gigs, or just for fun. Free improvisation, incorporating new voicings and phrases to my arrangements and improvisations over tunes. I try to always save 30 minutes at least to just play as if I'm at a concert, especially piano solo!

Your Career Path

Ever wonder what kinds of careers exist for a piano or keyboard player? You may be surprised to learn that there's more to it than being a concert pianist. Opportunities include:

Session Musician • Music Director • Topline Songwriter
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Success Strategies

Practicing Piano Voicing Techniques

By Randy Felts

Understanding the basics of piano voicing and the use of common tensions is a first step in creating effective orchestrations of reharmonized melodies. On the following pages we'll explore some helpful tips for piano voicing.

Chord Tones

To create effective piano voicing for various chord qualities, be sure to include the root of the chord in the voicing (assuming solo piano with no bass player) and include the basic chord sound.

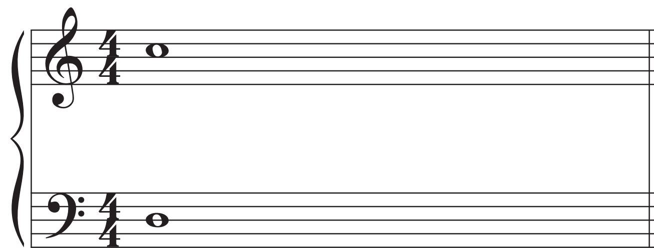
Chord Type	Basic Chord Sound (Chord Tones)
Triads	3, 5
6th chords	3, 6
7th chords	3, 7
Dominant 7sus4	4, 7
Minor 7(♭5)	♭3, ♭5, ♭7
Augmented 7th	3, ♯5, ♭7
Diminished 7th	♭3, ♭5, °7

For 7th chords, the basic chord sound consists of chord tones 1, 3, and 7. For 6th chords, the basic chord sound consists of chord tones

1, 3, and 6. The 3rd determines whether the chord is of major or minor quality and the 7th (or 6th) determines the chord function. The flat 7th gives the chord a dominant function, while a major 7th yields a tonic or subdominant function. Chord tone 5 is not considered part of the basic chord sound unless it has been raised or lowered (altered), or is part of a triad. Altered 5ths are always considered part of the basic chord sound.

For best results, the basic chord sound (3 and 7) should be placed, or voiced, within the following range:

Recommended Range for Voicing Chord Tones 3 and 7



The voicings depicted at the top of the next page illustrate the correct placement of basic chord sound for common chord types. Turn the page and take a look.

Recommended Chord Voicings for Various Chord Types

F Fm Fm6 F6 Fmaj7

Fm7 F7 Fdim7 Fm7(♭5) Faug

Voice Leading

Following voice leading principles will improve the sound of a progression. Voice leading connects notes smoothly from chord to chord with a blended, textural sound. It also makes the voicings easier to play. Traditional voice leading focuses on the resolution of tendency tones and avoidance of such intervals as parallel 5ths, octaves, and certain doublings of pitches within chords. Following these rules will lend a recognizable stylistic sound and chord texture.

Current jazz and pop composers are less concerned with traditional voice leading rules, but still strive for balanced note spacing and reasonably smooth connection from one chord to the next. The following guidelines will help you create voice leading that is consistent with jazz/pop voicing practices.

1. Determine the basic chord sound for each chord.

2. If the root motion moves by perfect 4th or perfect 5th, resolve chord tone 3 in the first chord to chord tone 7 of the second, and chord tone 7 in the first chord to 3 in the second, as shown in the following examples. These resolutions produce a clear harmonic texture and minimize finger movement from chord to chord.

Correct Resolutions for Chord Tones 3 and 7

Cmaj7 F♯m7 B7 Em7 A7 Dm7 G7 Cmaj7

(3) (♭7) (3)

(7) (♭3) (♭7)

3. If root motion moves by unison or second, move the voices in parallel motion. Parallel motion means that all voices move up or down by a similar amount. In the example below, D–7 to E–7 finds all voices moving up in diatonic 2nds. (Roll over Beethoven!)

Optional: Change the octave position of the root while other parts move in parallel motion. For example, see the movement of E–7 to FMaj7 between the second and third measures below.

Correct Resolutions When Voices Move in Diatonic 2nds

Cmaj7 C♯dim7 Dm7 Em7 Fmaj7 Am7 Dm7 D♭maj7 Cmaj7

4. If roots move by 3rd or 6th, use either parallel or contrary motion between the roots and the upper voices. Contrary motion means that voices move in opposite directions: the bass note moves down, while all other voices move up. See the example on the next page.

Correct Resolutions When Roots Move by 3rd or 6th

Fmaj7 Dm7 B♭maj7 Gm7 Fmaj7 Fmaj7 Dm7 B♭maj7 Gm7 Fmaj7

Contrary motion between roots and upper voices

Parallel motion between roots and upper voices

5. If the basic chord sound appears to be heading out of range as the progression is voice-led, change the inversion of chord tones within the duration of a single chord and then continue voice leading normally into the next chord. Note that the roots of the chords are not included in the inversion shifts.

Inversions Help Keep a Progression Within Range

Cm7 F7 B♭m7 Cm7 F7 B♭m7

Voice Leading with Tensions

It is common for jazz-style piano voicings to contain additional tensions along with the basic chord tones. The following example shows available tensions placed above the basic chord sound.

G♯ on F♯–7(9) and G♯ on B7(13) are available as tensions on these individual chords, though they are not diatonic to the key, C major. Be sure to include non-diatonic tensions in the chord symbol. Labeling for available tensions that are diatonic to the key is not necessary. In the following examples, only non-diatonic tensions are indicated in the chord symbols, even though diatonic tensions are also being used.

Nondiatonic Tensions Added to Chord Voicing Symbols Above the Top Note of the Three-Part Voicing

Cmaj7 F♯m7(9) B7(13) Em7 A7 Dm7 G7 Cmaj7

Tensions Added Between Notes of the Basic Chord Sound

Cmaj7 F♯m7(9) B7(9,13) Em7 A7 Dm7 G7 Cmaj7

The last example shows an additional tension placed a whole or a half step below the basic chord sound. It is generally good practice to keep all tensions above the F found on the fourth line of the bass clef in order to avoid a muddy sound.

Tensions Added Below Basic Chord Sound in Second and Third Measures

Cmaj7 F♯m7(9) B7(9,13) Em7(9) A7(13) Dm7 G7 Cmaj7

Voice Leading of Inversions

Inverted chord structures should include all chord tones and use no more than one octave between adjacent voices. The only exception is the distance between the lowest two voices. If you are striving for a traditional texture, do not double the bass note when it is the 3rd or the 7th of the chord. In the following example, the "x" indicates chord voicings that would be inappropriate in a traditional context. The checkmark indicates chord voicings that would work well.

Voicings of Inverted Chords

C/E C/E C/G C7/B♭ C7/B♭ C7/B♭

× √ × × √ √

3rd doubled 10th spacing on top 7th doubled

Play around with these voicings in different keys and you're one step closer to making creative orchestrations of reharmonized melodies. Check out more reharmonization tips in my Berklee Press book, *Reharmonization Techniques*.

Instructor Spotlight:

Robert Christopherson

Robert Christopherson is a professor at Berklee College of Music, where he teaches private instruction, improvisation, advanced composition, and a survey of piano styles. He performs frequently as a soloist and with his trio. He earned his bachelor's degree from Berklee and has studied with Charlie Banacos and Eddie Watson.

At Berklee Online, he co-authored *Jazz Piano* with Ross Ramsay.

When did you first start playing piano?

At an early age my mother spent time with me at the piano, she was an aspiring concert pianist, so hearing her practicing inspired me and opened my imagination to the possibilities.

Which pianists inspired you the most?

Early on my mother. Later into my teens I heard a jazz pianist by the name of Bill Gidney and was hooked on the jazz sound. I studied with him for a few years. I then discovered Chick Corea, Keith Jarrett, and Herbie Hancock!

How do you go from being a good technical pianist to becoming an artist?

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