



My Workouts: Brad Mehldau, independence, deep learning

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Abstract The core of this thesis is a collection of workouts (exercises) I've developed during many years of studying improvisation at the piano. Pianist Brad Mehldau has been a constant source of inspiration. In particular his revolutionary use of the left hand and his mastery of voice leading, polyphony, polyrhythms, polymeters and odd meters have radically influenced my studies, and therefore this work which tries to summarize them. The concept of independence is an underlying theme, the main focus being hands' independence and rhythmic independence. Independence means also freedom from rules and conventions, therefore innovation. Deep learning algorithms and the concept of flow provide an interpretation key; they underline the vital role intuition and enjoyment play in learning complex matters like improvisation, and in the improvising process itself.			
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Andrea La Mantia, 2017

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1 INTRODUCTION

1.1 What's this about?

This work is a recollection and gathering of my ideas about music in general, and about studying improvisation on the piano in particular. These thoughts have often led to experimenting new methods, because, as Bill Evans (1966) wisely tells us, a serious jazz player is ultimately going to teach herself/himself. Especially when we consider improvisation as a fundamental part of music, infinite possibilities means infinitely different paths for reaching them. That's why, as music students and teachers, I think it's important to share our own findings; music evolves as a collaborative effort.

In the last few years, the pianist who has influenced me the most is Brad Mehldau. That's why you saw his name in the title, and you're going to see it many more times if you keep reading.

1.2 Who's Brad Mehldau?

I'm not going to waste my time and yours by writing a bad version of Mehldau's life's story; if you're interested go read it on Wikipedia, or on Brad's personal web page (links in the References section). What's important here is that he is "the most influential jazz pianist of the last 20 years" (Chinen 2013). There's a reason anybody would say something like that. There are many innovative elements in his playing; the most important are his use of the left hand and his mastery of dynamics, polyphony, polyrhythms, polymeters and odd meters.

1.3 What's independence?

I've chosen the word *independence* as an underlying theme for this thesis. It mostly means '**freedom**'. Before we dig into the more practical stuff, I'd like to go over some ideas that will provide a key to interpret this work and better understand my approach to studying music. Feel free to skip these and go straight ahead to the main content at Page 10.

1.3.1 Music and language

Music and language have something in common, we've probably all heard it from time to time. Both are forms of communication, can be written and put into sound. Even some of the terminology is used in both fields; think of *phrases*, *call and response*.

Scientists have been studying this connection. Neuroscientist Aniruddh D. Patel (2010) has

written a big book on the subject. A team of researchers at John Hopkins University monitored the brain of 11 pianists as they improvised from inside an MRI, trading fours with another musician in the room. The syntactic areas of the brain were very active, but the semantic areas weren't working at all. The parts of the brain used by spoken and musical communication were overlapping, even though they were not exactly the same. (Bisceglia 2014.)

Also musicians have been wondering about this similarity. Bass player Victor Wooten (2012) thinks we should learn music in a similar way to how we learned our first language. Many of us think music is something that should be learned following a strict discipline, under the guidance of a teacher. Instead, it's probably better to **spend more time playing rather than practicing**, accepting mistakes and avoiding too many rules. When children learn to speak, they don't do it by learning grammar rules. They just learn by listening and talking with more advanced speakers. In the same way beginners should be allowed to play with more advanced players.

Being interested in both music and languages, I've come across some methods and concepts used in language learning, which in some way have influenced my way of studying music. While studying Japanese I came across SRS, 'Spaced Repetition Software', which I've been using for some years. Learning about Japanese culture, I found out about the ancient Chinese board game of go, which in turn led me to Google DeepMind's AI *AlphaGo* and the concept of *deep learning*. Turns out deep learning is used also in the natural language processing field, so we're back to language and the circle is closed (Wikipedia).

1.3.2 Spaced Repetition Software (SRS)

Spaced repetition is a learning technique based on the *spacing effect*, a learning phenomenon studied in the field of psychology. We're probably all familiar with how cramming for an exam in the last days will assure that we'll have already forgotten almost everything a couple of weeks after the exam. This is exactly what spaced repetition is about. It's been observed that a piece of **knowledge is retained more easily into long-term memory if we review it after increasingly longer intervals of time**, as opposed to reviewing it many times in a shorter period. This concept has been used to develop Spaced Repetition Software (SRS), like Supermemo or Anki. SRS is an evolution of flashcards, those cards where you have something written on one side, and you must remember what's on the other side. For example, in the context of vocabulary learning, you could have a word in your native language on the question side, and the corresponding word in the language you're learning on the answer side (or vice versa). SRS is not used only for language learning, but also in other fields where you have to memorize a big amount of information, which can be divided into small enough pieces; it's used by medicine students and programmers (Kinsella). By making the flashcard system into a software, it becomes much more versatile. If you see a word you like while

watching a movie, you can take a screenshot of that scene and include it into your cloze deletion flashcard. **The more you connect the new information to previous memories and emotional states, the easier it is to remember it** (Wozniak 1999). SRS also keep track of when you have to review each one of your cards. What happens is: you learn a card for the first time, then you review it the next day; if you got it right the next review is going to be after some days, then after some weeks, and so on as the intervals between reviews grow bigger and bigger (even *years* bigger). After seeing the answer side of the card, you can give yourself feedback about how easily you remembered it, and this will change the length of the time interval before the next review. If you don't remember the card, the learning cycle starts again from the beginning, so you'll see it the next day, and so on. This way you can focus just on the material you keep forgetting, instead of having to go over everything every time. If you forget a card too many times, to avoid spending too much time on it the card gets marked as a *leech* and gets suspended. This is a very important point: **if you want to learn efficiently, you have to let go of any perfectionist tendencies you might have**. Perfectionism and boredom are your most dangerous enemies (Khatzumoto June 2011). If we still think about language learning, it doesn't make sense to know 100% of 1000 words if in the same time you could have memorized 90% of 2000 words.

Having used SRS for some years, I've also fantasized about a software that would implement spaced repetition to study piano voicings; I've written an article about it a couple of years ago (2015), but it's still just a fantasy.

The most important lesson to learn from spaced repetition is this: when thinking for the long-term, it's better to organize your studies so that you don't keep studying the same material over and over in a short period of time. If you have more time it's better to concentrate on many different subjects, rather than a single one. You can switch from one to another during one study session, or in the course of one week. You shouldn't wait too long between study sessions with the same topic though, otherwise the progress you already made could be partly lost. And don't switch subjects so quickly that you don't have time to dig into them. This is the best way to internalize any material: finding an equilibrium between studying a single thing so often that your progress per hour rate starts declining significantly, and studying it so infrequently that you lose part of the progress you already made. Thus spaced repetition provides a framework on which you can build your workout strategy.

1.3.3 Deep learning, boredom, flow

In March 2016 a computer program beat a 9-dan professional go player for the first time. It may not seem like a big deal, since chess programs who can defeat champions have been around since the 1980s. But go is a game with many more possibilities than chess, even though the rules are simpler. In fact, the possibilities are so many, that they exceed by far the estimated total number of atoms in the universe. It would be almost infinitely long to calculate

every possibility by brute force, like chess software does. This difference between the two games means that go players have to rely much more on **intuition**, whereas chess players are more analytical. AlphaGo, developed by DeepMind, is a self-learning AI, which is based on a *deep learning* neural network algorithm. Martinez (2016) does an excellent job of explaining how deep learning works, so I suggest you watch his video on the Computerphile YouTube channel if you're interested. I'll try to give you the gist of it.

Conventional software takes an input (one or more values), has a set of instructions about what to do with that input (an algorithm), and by following these instructions it produces an output. Pretty straightforward (or not, considering the amazing things that can be done with *just* that). A deep learning algorithm takes the input values, and instead of just following a set of rules, it kind of makes his own connections. For example, it can try to combine a set of values, and then combine the result of that with another set of values, and so on for many levels (hence *deep*). After all those levels, an output is produced. That output is then judged, either by the programmer, or automatically by the machine; in a game of go for example it could be that the output corresponds to the final score of the game, so the higher the better. Out of all those intermediate connections between values and set of values that it has created, the machine learns which ones it should keep, because they have produced a better value. Some deep learning algorithms are called *artificial neural networks* precisely because these extremely complicated connections are similar to the ones between the neurons in our brains. These machines usually learn by themselves, and the programmer has no idea about what is happening in the deeper layers. AlphaGo was first programmed with the basic rules of the game, and it was fed data from thousands of games played by strong amateurs. After that, it was copied and it was made play against itself 30 million times. (Altraide 2016.)

Deep learning is being implemented in fields like computer vision, speech recognition, natural language processing and medicine. This rapidly developing technology has so many different applications, that it's both exciting and scary. But let's come back to music. Music, like a language, is a highly complicated subject. Therefore it makes no sense to try to learn it only by brute force. What I mean by this will be clearer in each specific example, but in general I'm thinking about exercises which try to memorize many different possibilities, with the aim of knowing at least something very well. This is a good strategy, especially at the beginning when you don't have much, and anything is better than nothing. Later on these exercises should only be seen as you feeding data to your brain, which is useful; but similarly to when we feed data to a deep neural network, we shouldn't expect to have any idea about what is going on in the brain, and how or when the results of that data will come out as output, and what that output will be. For example, if we learn a transcription, we shouldn't try to use parts of it in our own solos. If we force it, it just sounds unnatural and fake. It's good to analyze the transcription and understand what could we do to achieve a similar effect, but if something good will come out of it, it will do so at its own time.

“Anything which is practiced attentively and regularly will make its appearance during improvisation in its own time. Trying to hurry the process can cause the improvising to sound too premeditated, or it may disrupt the flow in a way which greatly increases the tendency toward mental blocks and mistakes

in execution.” (Dobbins 1994, 127.)

This is exactly why listening to a lot of music is so important. Especially if you have trained your ears well and you’re able to recognize which notes are being played. You’re essentially feeding a lot of precious, good quality data (hopefully you listen to good stuff) to your brain, which in turn, without you even knowing it, will some day regurgitate all that greatness, recombined and transformed with your personal signature style, into your own playing. Back to practicing. It’s important that it doesn’t become too stiff, because it could become boring. **The problem of boredom.** The general attitude is that even if something is boring, you have to suffer to gain something good. This is just a romantic/Christian/Asian/samurai-like idea, but it’s not true. What is true, is that it’s better to do something, than to do nothing. But if you insist with something that obviously doesn’t interest nor entertain you, probably in the end you will have learned something, but you will have wasted so much time in the process, that you could have learned way more if you just had done something interesting and fun. Khatzumoto is the owner of the AJATT (All Japanese All The Time) website, and he learned Japanese from zero to fluency in a year and a half, without attending any Japanese class, and while being a full time IT engineer student. I really like what he says about boredom (March 2011): “Boredom means ‘**stop doing this and start doing something else**’. Boredom is pain. You don’t keep your hand on the hot stove because it *builds character*, you take it away before you really hurt yourself.” It’s important to understand that this doesn’t mean laziness, it’s just a more efficient way to learn. It’s not just because I, or Khatzumoto (who’s he anyway), say so; it’s because psychologists and scientists say so. *Flow* is “the mental state of operation in which a person performing an activity is **fully immersed** in a feeling of energized focus, full involvement, and enjoyment in the process of the activity”. We all know how short is our attention span. Since in flow every single ounce of our attention is focused on the activity we’re performing, this is the best state not only for learning (employed for example in Montessori schools) but also for improvising music. (Wikipedia.)

The lesson to learn from deep learning algorithms is that we can’t hope to tackle complex problems like improvisation only with analysis. Analysis is important, but it’s only together with intuition that we can get the best results. So don’t over-analyze everything, and don’t try to force the learning process; a big part of it is happening without your awareness of it. Play more than you practice, or at least the same amount of time. Using my own words from the Music Workouts Facebook page’s *About* section, *Story* field:

“So much is time intrinsic to music, our art can reach its peak only when we are entirely into the moment. What we create in this state of mind, we couldn’t imagine before, and cannot completely explain. If the most fascinating things are the ones we don’t expect or comprehend, then why do we relentlessly try to figure out more and more about music?

By pushing the line between conscious and subconscious further and further, we are able to reach deeper into uncharted territory every time we cross it. In other words, the more we understand, the more what we play subconsciously evolves accordingly.” (La Mantia, 2015.)

The lesson to learn from the concept of flow is that we should avoid boredom. Practicing something we already know is also bad tendency, though (Dobbins 1994, 127). We should find a good balance; our workouts should be challenging enough to keep us interested and

allow us to actually learn something new, but they shouldn't be so difficult that we end up overthinking and not having fun. We should also **be flexible**. At Page 6 we talked about how space repetition can be a framework with which to build our workout strategy. But when we're actually studying we shouldn't be afraid to modify our plans based on how we feel at the moment. If we see that we're being blessed with a flow state of mind, we should play something that can take full advantage of it (see also Page 61 about freefall workout). If we notice that in a particular day we get really bored with a particular workout we should switch to another one, even if it isn't what we planned for that day's session. One of the advantages of having many subjects to study is that we can switch between them. We should be flexible also in the context of a single workout. A workout shouldn't be stiff; it's always possible to evolve gradually towards completely free improvisation. So if after a while we get bored, little by little we can get rid of some of the rules we established for that workout, and play more and more freely. Don't give up too soon, but don't beat your head stubbornly against a stone wall either. There is a reason why we say *play* music. It's supposed to be fun.

1.3.4 Music Workouts

A word about words. I'm using the term *workout* when referring to exercises or practice routines. This is related to a project of mine called *Music Workouts*; it's a platform for sharing my own study methods, and to discuss them with fellow musicians. You can check it out on Facebook (2015).

2. INDEPENDENCE FROM STYLE AND GENRE CONVENTIONS

If music is like a language, composing is like writing, and improvising is like speaking without writing a speech beforehand. Therefore it is natural to assume that improvising is a fundamental element of music, necessary to achieve a deeper understanding of it. Improvisation was common also in Western art music, at least until the 19th century. Then it became somehow less common, and nowadays it's almost completely disappeared. I think this is a great loss for classical musicians; even though they might not realize it, it could give freshness to the performance (even if it's not improvised), and it could help when composing. In an interview with his brother Harry, Bill Evans (1966) recalls how, before being introduced to jazz and improvisation, he could play intelligently a difficult piece, but couldn't play a single note without a score.

In that same interview he said that he considers jazz not much as a style, but as a process, in the sense that jazz has brought back what was lost in classical music: improvisation. Evans thinks that **when teaching jazz (improvisation), one shouldn't teach style**, but instead try to teach those abstract concept of music which are independent from any style. I think this is a really valid statement, because in the context of improvised music the musician who has a

personal sound is always appreciated. If we teach jazz as a style, we are already restricting our students' creativity and crippling their search for a personal voice. Of course, both as a beginner and as a professional, **it's only healthy to steal what we like** from our colleagues, but as teachers we should never say: "Your lines were good, but they don't quite fit with the tune's style; this is a bebop tune so you *should* play more like yada yada yada". If your teacher says something like this to you, just ignore it, or say a bunch of ugly words to him/her; you're probably better off studying by yourself, than with a bad teacher.

Brad Mehldau, an all-around musician, is a really good example of independence from style. He's always evolving, trying not to get stuck playing in the same way all the time. The style of his improvisation has evolved. The style of his compositions has evolved. Take *Elegiac Cycle* (1999), piano solo with a classical vibe, then *Highway Rider* (2010) a mix of pop and jazz with an orchestra, and now *The Old Shade Tree* from his new duo album (2017) with mandolinist and vocalist Chris Thile, which has some folk flavors. The trio and piano solo formations are always present (though never the same), but there's space for experimentation in many different genres, like the electronic duo *Mehliana* (2014) with drummer Mark Guiliana.

In addition to his own compositions, Mehldau doesn't play only jazz standards, or pieces from other jazz artists. He plays covers from artists as diverse as Soundgarden, Nirvana, Massive Attack, The Verve, Radiohead, Pink Floyd, Beatles, Jimi Hendrix, Nick Drake, Jeff Buckley and Johannes Brahms among others. And when he goes to Vienna (2010) to play a piano solo concert on a Steinway, he plays with a Grateful Dead T-shirt. How cool is that! In his improvisation he incorporates elements from everywhere, and therefore he's **beyond styles**. He even steals a great deal from classical music, which is something more of us should do, because there is a lot of interesting stuff there. The fact that some classical musicians snob jazz is not a good reason to do their same mistake, and miss out on classical music.

An example of Mehldau's classical influence is the mind-blowing solo that he played in *Anthropology* with the Mehldau & Rossy Trio in Barcelona (on a piano that I've heard was *almost unplayable*) in 1993 (yes, he was only 23). At about 4:50 Brad starts to play a polyrhythmic line with both hands in the bass register, somehow reminiscent of Tristano's *Turkish Mambo* (1955), and then than at about 5:00 he transforms it into a typically Bachian phrase. It's amazing.

3. HANDS INDEPENDENCE

Now we start to get into the more practical stuff. Hands independence. In many different ways. Firstly, **from each other**. Everyone who has ever played the piano knows how difficult is to split your brain, and play two different things with your hands. When playing thoroughly written music, somehow we are able to use muscle memory to bypass in part this problem. Since our hands know where they are going, we can mostly avoid the problem of really

concentrating on the two separate things we are playing. Of course with experience we learn to overcome the mere mechanicalness of the process, and develop an ability to truly hear and feel both things at the same time. When we introduce improvisation, things become much more complicated. And of course there could be more than two *things* going on, even if we just have two hands. Let's call these things *voices*, and let's say they can be either melodies, or rhythmic patterns, or chords, or single repeated notes (*pedals*). Think of Bach's C#- fugue in the first *Well-Tempered Clavier* (BWV 849): we can have as many as five voices going on. Then it becomes practically impossible to *feel* every single voice, and you have to choose which ones are more important, and concentrate on those. You have to be sure that this is not just in your head, because the listener, too, has to be given the possibility to split his listening mind, and appreciate those voices going on at the same time, both in their individuality, as in their interweaving combination. To achieve this, we have to **use dynamics to bring out the voices** we think deserve the most attention at any given moment. Otherwise, if we keep the dynamics flat, the voice that's going to catch the attention is usually the highest. And that's boring. Speaking about Bach, one who's really good at bringing out the voices is Glenn Gould. Do you know who else is a master of voices and their dynamics? Exactly. Me. Just joking. Talking about our Brad. *Elegiac Cycle* (1999) is a masterpiece in this sense. Brad is a master also of hands' independence **from their conventional roles**. In jazz piano the conventional roles would be more or less:

- solos: right hand plays melody, left hand plays chords

- in a band without bass: left hand plays the bass, right hand plays chords or melody

And this is because the masters of the past played this way. I think not even one of my teachers ever suggested the possibility of playing melodies with the left hand, apart from when doubling the melody played by the right hand. Probably they thought that I couldn't even play the conventional stuff, so why bother. Which makes sense. But in this way, we are basically just teaching style. While we should instead try to teach the general principles of music, like Bill said in the last chapter. It's not just a question of egalitarianism or fighting discrimination. It's a question of using everything we have. Sure we can make great music without any of this. Brushy One String (2013) has a wicked groove with just one string on his guitar. Still, think about Rahsaan Roland Kirk (1972), and how he wanted so badly to play more than just one line at a time, that he played as many as three saxophones together; it's so much easier to do that on the piano, still some pianists don't even try. It's a bit like when you say to your children: "Come on, finish what you've got in your plate, you know that children in Africa die of starvation, so don't waste your food!". In the same way you can say: "Come on, use both of your hands like you mean it, play every single key of that piano; you know poor Brushy has only one string, so don't waste your instrument's potential like that!".

So, we should give students every weapon available, not precluding them any possibility right from the start. I don't think these concepts should be saved for advanced players only. If one is interested in developing more his left hand and a different style of playing, while should we try to conform her/him to the norm? While at the same time we are in a field, where the

exception to the norm and originality are what's valued.

We can say that Mehlldau's hands are even independent **from their conventional positions**. What I mean by that is, he often plays **cross-handedly**, with the left crossing over the right or vice versa. It's nothing new, there are countless classical pieces where you're supposed to cross your hands. But I wouldn't say that it's common in jazz. While it may seem like a pointless trick, it's actually really useful, for example when you have a continuous pattern going on in the middle register, played by one hand, and you want to play something over it, or under it. You could just continue the pattern with the other hand, and there would no need to cross, but it's actually much more easy, and it sounds more natural, to let the same hand continue the same pattern. I was playing the transcription by André (2011, 169-190) of *Goodbye Storyteller (for Fred Myrow)* from *Elegiac Cycle* (1999), but I hadn't been listening to it for a while. It was really difficult to play the lower bass notes at bar 105-109 (minutes 4:56 and 5:01 in the recording) with the left hand, and at the same keep up the left hand broken chord pattern. Then I was watching a video on YouTube of a live version of that same piece (Mehlldau 1999), and I noticed that in many occasions Brad was reaching over with his right hand to play bass notes, as the left hand continued with its pattern (at 1:38, 3:20, and 3:39 in the video). You can see that even from other videos of the same song, like the one from the Jazz in Marciac festival (Mehlldau 2011). Then, when I listened to the album version again, I realized that those bass notes I was having trouble with had actually been played by the right hand reaching over. It was really clear, because of the dynamics (those bass notes are quite loud, probably Brad wanted to emphasize them) and because the left hand pattern just continues on in such a natural way, that would be impossible if one were to play those notes with the left hand.

Which brings us to an interesting question, which is very similar to the age-old chicken-or-egg question: which came first, the music or the hands? It seems quite straightforward that the **music** should come first, in our mind, and be **expressed independently from the hands**, meaning when an idea is born, it doesn't matter which hand plays it, as long as it gets played. The hands are just a means to translate a thought into sound. Especially when there are more than two voices, very often it happens that a voice in the middle gets played alternatively by both hands. Going back to Bach, his fugues and his *Three-part inventions* often require us to switch hands and continue playing the same voice with the other hand. Also an element that was before played by one hand, can be played by the other one, it depends on which hand is busy, which hand is closer. Brad in that same video of *Goodbye Storyteller (for Fred Myrow)* (1999) at 3:47 plays with the left hand a figure he just had played with his right hand reaching over at 3:42, because his right hand was too busy at that moment, but he still felt that important bass line movement in his head, and had to play it somehow.

So, back to our chicken-or-egg question, does music come always first? Actually I don't think so. I think **listening is important**. I don't just mean listening to others people playing. I mean listening to what we play, to the various voices, the movement of each part. Sometimes, very often actually if you're brave enough, you play something really good by chance, and if you

are able to catch it with your ear, and recognize that it's gold, you then keep it alive and play with it. In this case **first come the hands, and then the music**. I know that it's still your mind that control your hands, but some things always always are semi-automatic, even in improvisation. When something good comes by chance from those semi-automatic hand movements/brain processes, if you're able to catch, you can make good music with it. Soon we'll go through some workouts more in detail, but first I'd like to tell you about some more general, deep learning-like methods I tried in the past years (for more on deep learning see also Page 7).

I wanted to improve my ability to play more voices at once, with a good command of dynamics; I wanted to improve my ability to listen to more voices at once; I wanted to improve my hands' independence. I also felt I needed to improve my prima vista skills in every tonality, so Bach's *Well-Tempered Clavier* (BWV 846–893) felt like the perfect choice. And the fugue is such an interesting format, and so fitting to improvisation, since it's based on countless different variations of a simple theme (which we'd call *riff* back there in the dark side). I started reading the first volume; I'd just go through it, playing each piece only once, and then starting again from the beginning. Of course this could happen over the course of weeks, because I was also studying other stuff in the meantime. This way I was sure to rely less on muscle memory and more on reading ability, thus developing a more general skill for playing multiple voices (not writing any fingering number down and so on). This was probably also very good from a spaced repetition point of view, since some time was passing before I played again the same piece, maybe that allowed me to get what I could from it and store it more securely into long-term memory (for more on spaced repetition see Chapter X). Then after some time (more than one year for sure) I went on to the second volume, and kept playing a couple of favorites from the first one from time to time.

I don't mean to say this would be good for anyone; I actually don't even know if it was good for me, since we are not able to pinpoint exactly from where does our improvement come, and it may come after a very long time anyway. Still, it makes sense to study such material, which has the precise characteristics we're seeking to acquire. And since there's no shortage of high-quality material in classical music, it doesn't hurt to look into that, too; we don't need to be separated anyway.

Another method I tried is something I was forced to do by circumstances, but it turned out to be quite interesting. Three gigs were coming up, with three different bands. I did something wrong, probably practiced too much or too intensively, and my right hand became quite sore. I couldn't take a week-long break from playing, because the gigs were coming up and we had the last rehearsals before that. So I just stopped using the right hand. They were all bands with a bass player, so I didn't have to play too much stuff in different registers anyway. I found that quite challenging and fun. You get a new perspective on things, you may have to play a bit less, but new ideas keep coming. It's a good way to develop our ability at interchanging hands roles. Plus, my right hand improved and I was able to play the gigs, so I killed two birds with one stone. I don't like killing birds actually; still that was a fantastic way to train. Never over-

practice before a concert by the way.

That time I also tried another thing, which sounds really Asian-martial-arts-training style. And it's really general and deep learning. But mainly I did it to stop the pain, that first time at least. I was still using my right hand for everyday tasks, but it was really tense, so I decided to stop using it completely. Things like eating with spoons and forks, brushing teeth, pour drinks from a bottle, use the computer's mouse or trackpad and so on...all with the left hand. It's funny because you feel dumb/mentally impaired, all those things seemed so easy but they are not! If you feel particularly da Vincian you can even try writing, but that's some next level stuff. Anyway, as usual I have no way of knowing if it actually helped develop my left hand's playing skills, but I like to think that by using it more often for all kinds of stuff, a general improvement in the fingers' fine motor skills takes place in the brain.

Now let's move on to more specific workouts.

Let's go through different situations. Even though Mehdau can keep at least 4 voices at the same time, we'll keep it a bit simpler and consider only cases with a maximum of 3 voices going on. In real life these will often overlap and change quickly into one another, but for the sake of our study it's easier to try them out one at a time.

- One hand is playing chords.
- One hand is playing a melody.
- Both hands play chords with the same rhythm.
- Both hands play chords with a different rhythm.
- Both hands play a melody with the same rhythm.
- Both hands play a melody with a different rhythm.
- One hand plays chords, the other one plays a melody.
- Three voices going on, usually chords, a melody and a bass line.

As you see a big discriminating factor is rhythm, when it's not the same for both hands we need to study also **rhythmic independence**. We are going to skip the first two cases, because we don't need hands independence there, since only one hand is playing. For many of the situations in the next subchapters we'll talk about different context, like playing piano solo or playing with at least a bass player. Anyway the main concepts are going to be valid regardless, and we must remember to keep a certain *flexibility* about our own role in different formations. What I mean is that, even though some behaviors are common sense, we shouldn't take them as absolute rules. When playing with a bass player, we usually don't play in the bass register, because that's where the bass player usually is, so if we're both in the same area the sound could become muddy. But sometimes that effect can be sought on purpose. And what if the bass player goes up in the middle register for a while? Then if we also stay there we'll have the same problem. So instead of establishing for ourselves a safe to-do-not-to-do list, we should just listen to what's happening, and play what's needed at the moment. John Medeski mentions something similar in the 9th track of the album made from the Marian McPartland's *Piano Jazz* radio show (2006). He recalls a previous episode of the show that he had recorded, where Joanne Brackeen was asked about playing with bass and with drums. She simply

answered that she listened to the whole thing, and tried to put in whatever wasn't there, what needed to be there.

If you're interested in learning about jazz piano I suggest you check out other episodes of McPartland's show. You can find a bunch of them on the NPR's site (2017), and some have been released commercially as albums, like the one with Medeski and the one with Brad Mehldau (2007). In the 3rd track of the album, *Conversation*, Mehldau and McPartland discuss about getting a lot of voices moving at the same time, something which Mehldau and his teacher Fred Hersch can do really well.

[McPartland:] “[...] wanting to have several voices going at one time, and not having, like, the melody line and the chord changes [...] lines going on in all directions [...] sort of like a contrapuntal thing almost.” [Mehldau:] “[...] actually really voice lead and not just get into this thing of... like you say, your left hand almost kind of becoming just as... claw. [...] I think it's just something that's nice to do when you're playing the piano, because you can! It's almost like... that's a great thing to do on the instrument, 'cause it's all out in front of you, you know, and you just get to try that out if you can, but... it's tough, and I always feel like... I'm always working on that.” [McPartland:] “[...] Well, that's probably harder to do than just pounding away with your left hand, but it sure is effective, gee, I loved it!” (McPartland, 2007.)

In the next subchapters we'll see how harmony and melody are not so clearly separated. By *chord* I mean something that gives a harmonic background, without taking too much attention in a way. Sometimes it can be even a melodic pattern, most of the time continuous and repetitive; so that there's never actually two notes played together. But as long as it's not the main focus of attention, and it takes care of defining some harmony, let's call it chord. *Melody* instead is the focus of attention, and it's function is more melodic than harmonic. So a block chord phrase in a solo can actually be considered a melody, rather than chords.

Here's Mehldau talking about harmony.

“What's really fascinating to me and great about music is harmony. You know, people think a lot in terms of, you know, how does an improviser or a musician or a composer sort of identify themselves, and often people think of melody. You know, what type of melody do you write, you know, can you write a great melody. [...] When I think of anyone from Schubert, or Brahms, all the way through, you know, the Beatles, for jazz certainly Coltrane, Duke Ellington; people like that, they were really great harmonists. You know, in the sense that they wrote these great melodies, but the melodies wouldn't have been too much if there wasn't this harmony under it that often times is this sort of thing, that's mixing a very simple melody with harmony that, something that's not as simple, you know, sort of has a darker side to it, so it sort of mixes the two together.” (Mehldau 1999, Nicolas Klotz's documentary.)

Before proceeding to the next chapter let's talk about the concept of **seeing a scale**. When we improvise often we choose a specific group of notes to play, based on the harmony we want to generate. So, using this group of notes we build melodies and chords. To a certain extent it doesn't matter too much which notes of that group we play, if we're not talking about the main melody. So for chords and melodic patterns with a harmonic function, if we can just hit something from that group with the right rhythm, it'll do the job. The piano gives us a very big advantage in this task: everything is clearly visible before us, so we should train to be able to clearly *see* those separate group of notes on the keyboard, and play some of them.

Keep in mind that when trying out these workouts you should feel free to change things and experiment; I tried to **reverse** everything and think about many different combinations, but I'm sure there are many I didn't think about. And we're considering only 3 voices maximum, so if you can do 4 the possibilities are even more.

The whole idea from which to start is that **hands' roles are completely interchangeable**. From here we start experimenting. This might not be true for everybody, but I find that in practice hands' roles are not *perfectly* interchangeable. For example if you play a melody at the bass and some harmony over that, you might have to play a melody with less tensions and more chord notes for it to sound good (much like it happens when playing a walking bass line). But sometime it works just fine to have more basic harmony in the right hand, and tensions in the left, for example here there's a stunning melody from the ending of Bela Bartok's *Bear Dance* from *10 Easy Pieces*, Sz.39 (1908), where the right hand plays a plain D major triad, while the left hand melody is based on a D altered dominant (AKA super Locrian mode) (Figure 1).

FIGURE 1. *Bear Dance*, r.h. D major triad, l.h. super Locrian mode

Creating a melody on the spot require a lot of mental power, so doing something we're not used to in the meantime (like playing chords with the right hand) can be really challenging at first. I believe this is worth it, though. I love music in which powerful melodies appear in every part of the harmony, from the bottom to the top. If you don't know what that sounds like and you want to get the idea, I suggest you listen to a piece I composed, *Wind*; written for choir or singing ensemble, it's a study on how the theme melody (Figure 2) can be singed alternatively by each of the four voices.

FIGURE 2. *Wind*, theme melody

You can find the full score at the end (Appendix 7), and you can listen to it while watching the score, in which the voice who's singing the theme melody has been highlighted (La Mantia 2014). Considering the piano, only by having melodies also in the middle and bass registers can we truly appreciate the whole spectrum of tones that this wonderful instrument has to offer. We already mentioned Tristano. He also liked to play melodies in the middle-bass register, like you can hear in his solos on *Line Up* and *East Thirty Second Street* from *Lennie Tristano* (1956). That sound, the roundness of it, is something I don't want to throw away without even trying.

3.1 Both hands play chords with the same rhythm.

This is basically **voicings** study. Of various approaches I read or heard about, the one I like most is Dobbins' (1994). It's basically a way to go through every possible voicing you could ever play on the piano. If only you had enough time. It's very analytic and methodical, almost scientific; but also really slow. One concept on which Dobbins is very keen on is **linearity** in harmony, which can already be seen in the title of another book of his, *Jazz arranging and composing – a linear approach* (1986). Here are some interesting words from the preface

“The aim in this conception is to give each instrument in the ensemble a line which is as melodic as possible. [...] Sometimes it may be possible to give each horn a tuneful and melodically independent line while, at the same time, creating a strong sense of harmonic movement. I think it is important to give each instrument a good line for two reasons. First, when each musician in the ensemble has a part which makes musical sense and is fun to play, everyone will be able to play the music with much more enthusiasm and conviction. Second, when the individual lines move in a clear and convincing manner, the fabric of the music is stronger and richer.” (Dobbins 1986, 8.)

Harmony as the union of beautiful melodies. As we saw before (see Page 15) melody and harmony are not two clearly separated entities.

This is why group improvisation works; even if the bass player and pianist decide to play a different substitution on a particular chord, the logicity and conviction of their single lines will make the ensemble sound good.

Mehldau is also on this way of thinking in his interview with McPartland on her show *Piano Jazz* (2007). Linearity in harmony means being able to listen to the internal movements of harmony, of the single voices, not just churning out a chord after another, as if they were separate entities; the end result is something on a completely different level, sounding very natural and substantial. Someone could call this thinking about the chords **horizontally**, instead of vertically. If we are working on a chord progression, it doesn't make much sense to listen to how chords sound in an absolute manner; instead we should listen more attentively to how they evolve into each other. Even Bach could sound harsh if you were to listen to a single, isolated moment. If the single lines sound better, also the collective end result should sound better. **Voice leading**, and not only in the top voice. I can give you an example of how I used this concept in a bluesy outro for a piano trio arrangement of *Body and Soul*. I got to the first version (Figure 3) by thinking about basic drop2 voicings.

38 $\text{Db}7$

39 $\text{Db}13\#9$ 8va

Ped.

FIGURE 3. *Body and Soul*, bluesy outro, basic drop 2 voicings

Then I listened to the movements of the single voices, and changed them so that they sounded better by themselves, regardless of how unconventional the resulting voicings may seem at first (Figure 4). You can try them and judge by yourself which one sounds better.

38 $\text{Db}7$

39 $\text{Db}13\#9$ 8va

Ped.

FIGURE 4. *Body and Soul*, bluesy outro, more linear harmony

Another key concept in Dobbins' piano harmony book (1994) is simplicity, since it starts by studying structures made of four different notes, avoiding any doubling. Dobbins prefers to play one note with the left hand and three notes with the right, which allows you to keep the same fingering when adding a bass note (1994, 11). Unlike him I like to play two notes with each hand, because it's dynamically more balanced and it's easier to add notes to the right hand, for example doubling the second note from the top one octave higher, which adds mass to these voicings. Playing voicings in a balanced way helps with certain comping styles, as we'll see later (Page 24). Dobbins (1994, 9) also says that voicings should be transposed in all keys without looking at the book; I disagree. Transposing voicings you're learning for the first time is complicated and slow, and overthinking is pointless, as we said before (Page 8). It's

best to find a balance between the material being challenging enough to keep you interested and learning, yet not so difficult that you'd just strain without having fun, thus slowing your progress. If you're good enough at reading sheet music, you should take advantage of that. You will assimilate the transposed voicings more easily and quickly if you just read them. With this in mind I wrote two exercises: one (Appendix 3) with less common drop2 voicings on *Countdown's* changes, the other (Appendix 4) with upper structure voicings on *Giant Steps'* changes.

It's stylish to concentrate on voicings with a small number of notes; something renown and appreciated by many in jazz, play-fewer-notes-but-the-right-ones kinda thing. But Dobbins' method is also very slow. So to speed things up we can learn to see the chord tones (see Page 15) and improvise voicings on the fly (see also Page 61 about freefall workout), and we can **combine voicings**.

The way I want to use hands' independence here is by having them play different one hand voicings together. So independence here is helping us dividing a single big entity into two smaller components, which are more easily elaborated by our brain. It's easier and more effective to combine already possessed knowledge into new information, than it is to create something new altogether. Combine three note and four note voicings, for example three note quartal voicings in the left hands and four note voicings in the right, or vice versa. Also, combine two triads or a triad and a two notes chord to form upper structure voicings, and try to reverse every combination you try, meaning that you'd switch what you play with your right and you left hand. Dobbins also writes about combining smaller voicings into bigger structures (1994, 110). We're not going to go over every kind of combination here, but I'll mention one that I like, and I think it's relatively easy to build: voicings with a three or four note close position chord in the left hand, and octaves in the right hand (or octaves with something in between, like a fourth, fifth, third or triad). This block chords are really good also for soloing, because the doubling of the top note gives it even more power. And think about Hancock's block chords, like these ones (Figure 5) I transcribed from his solo in *Driftin'* from *Takin' Off* (1962).

72 F#-7 F-7 Bb7b13 Eb Bb13sus Bb7b13 Bb-7 Eb7#9 Eb7 Eb7#9

75 Ab7 G7b13 C-7 Bb-7 Eb7 Ab7 G7b13

The image shows two systems of musical notation for the piece 'Driftin' by Hancock. Each system consists of a grand staff with a treble clef on top and a bass clef on the bottom. The right hand (treble clef) plays octaves of chords, while the left hand (bass clef) plays block chords. Above the first system, chord symbols are provided: F#-7, F-7, Bb7b13, Eb, Bb13sus, Bb7b13, Bb-7, Eb7#9, Eb7, and Eb7#9. Above the second system, the chord symbols are: Ab7, G7b13, C-7, Bb-7, Eb7, Ab7, and G7b13. The music is in 4/4 time and the key signature has two flats (Bb and Eb).

FIGURE 5. Hancock's block chords from *Driftin'*

In the left hand there's some 3 or 4 notes chord, and in the right hand there's an octave, which could be filled with something (like a 4th, a 5th or triad). The doubling at the top note gives it strength, so you can play beautiful lines with this. By the way, you can notice how we can find a very similar kind of voicings in *Clair de lune*, the third movement of Debussy's *Suite bergamasque* (Figure 6). So remember to steal from everyone, even from classical musicians!

Tempo rubato

15 *pp*

17 *m.d.*

The image shows two systems of musical notation for the piece 'Clair de lune' by Debussy. Each system consists of a grand staff with a treble clef on top and a bass clef on the bottom. The right hand (treble clef) plays octaves of chords, while the left hand (bass clef) plays block chords. Above the first system, the tempo marking 'Tempo rubato' is written. Above the second system, the dynamic marking 'm.d.' is written. The music is in 9/8 time and the key signature has three flats (Bb, Eb, and Ab). The first system starts at measure 15 and the second system starts at measure 17.

FIGURE 6. Debussy's block chords in *Clair de lune*

Another thing to keep going in parallel to the Dobbins' analytical method to make progress faster, is a deep learning related thing. Often I've been said, you have to know for certain some voicings, then you start using them, then you learn others, use them too, and so on. In other words try to play only voicings you know for sure. But instead I think you should play also voicings you don't know, but just create on the spot, or play intuitively. When we talked

about deep learning (Page 7) we mentioned how intuition it's the best way to tackle largely complex problems. As we've seen, the piano harmony problem is so big, it could by itself take up the entirety of our lifetime. So we should just play around with it, getting little by little a **general understanding of how a certain shape would sound**. For example, we would know that a certain shape in the right hand and a certain shape in the left hand sound a certain way in a certain register, apply the shape to the group of notes we are considering (see also Page 15 about seeing a scale). We can then use these improvised voicings even in real life, when playing real music. And by that I mean when we play with, or for, someone.

Also, try to **be cool** and not be too conventional with harmony (see also Page 58 about playing out). Talking about voicings, don't automatically exclude any of them. Those with a minor second on top are often avoided by default, for example; but listen how good they sound in this background for drums solo (Figure 7).

FIGURE 7. Mehldau's background for drums solo in *All The Things You Are*

This is taken from Mehldau's live versions of *All The Things You Are*, you can listen to it either from 4:49 until the end in the Jazz Festival Vitoria-Gasteiz version (2006), or from 10:13 until 11:24 in the *Art of the Trio 4: Back at the Vanguard* (1999). I can give two examples of not-so-conventional chords I stumbled onto, liked, and kept for my arrangements. In Figure 8 you can spot an Ab7 quartal voicing with 3 and both #9 and 9. And I think it sounds great and really blues.

FIGURE 8. Bar 36: Ab7 voicing with 3, #9 and 9 (*Body and Soul*)

And here from bar 5 through 8 you can see a beautiful voice leading between voicings based on fifths, from a *How Deep Is the Ocean?* arrangement of mine (Figure 9).

FIGURE 9. Bars 5 – 8: fifths based chords (*How Deep Is the Ocean?*)

Next we take a brief look at large voicings with lots of sixths and sevenths, which work very well in building solo piano arrangements. I guess you could call them double-drop2 drop3 voicings, because from the close position the second note from the top is dropped two octaves lower, and the third note from the top is dropped one octave lower. They are relatively simple (it's just four notes), but have a really full sound (they're so spread apart), and really good voice leading. I like to move just some of the voices at the same time, and every once in a while play around with one at a time, play little melodies. Here's an example (Figure 10).

FIGURE 10. Large, double-drop2 drop3 four note voicings for solo piano (*All of You*)

Like it happened here, voice-leading harmony often goes more easily downwards. Trying not to play the same things over and over, it can be good to find some progressions that go upwards instead. In Figure 11 there's an example of an upward progression on the rhythm changes.

FIGURE 11. Upward chord progression (rhythm changes)

Write down cool voicings and cadences you happen to like. In Figure 12 there's an example of a cadence I've played by mistake, liked and written down for future reference. It would otherwise be a typical IV- I cadence, but it has a peculiar bass line I really like.

FIGURE 12. A cadence I live with a beautiful bass movement

Here are two voicings which I've stolen from Mehdau because I like them very much (Figure 13). The chord in the first bar is used in *The Falcon Will Fly Again*, from *Highway Rider* (2010); see also Figure 17 at Page 25 for the whole comp pattern. The chord in the second bar is used for example in *Resignation* from *Elegiac Cycle* (1999); it can also be seen as a maj7 chord with the major third at the bass, but I prefer to see it as minor.

FIGURE 13. A couple of really cool Mehdau's voicings

Of course I stole those chords and started using them, for example I used the first one in *Wind's* (2014) ending (Figure 14).

FIGURE 14. *Wind's* ending, Dadd4 chord I've stolen from Mehdau

Also try to **be creative** with how you use chords. In Figure 15 there's an excerpt from my transcription of Hancock's solo in *Driftin'* from *Takin' Off* (1962)', where he uses arpeggiated chords as a color.

The image shows a musical score excerpt for Hancock's 'Driftin'' in 4/4 time. The left hand (bass clef) plays arpeggiated chords with triplet markings. The right hand (treble clef) plays a melodic line. Chords are labeled as C13^{b9}, F-7, and B^b7. The score starts at measure 47.

FIGURE 15. Excerpt from Hancock's *Driftin'*; arpeggiated chords add color

Thinking about Brad, he surely uses chords in many different creative ways; but if I had to mention one, it would be the piano solo technique where he repeats chords every sixteenth note, changing some things little by little and evidencing voices or melodic lines in the middle of that beautiful mess. Harmony like a **potent, iridescent wall of sound**. An idea so simple, yet so effective. We can hear it in *Bittersweet symphony* (2010), from the beginning until about 3:50, when it changes into broken chords, and then progressively into melodic repetitive patterns with harmonic function (see also Page 39). In *Goodbye Storyteller (for Fred Myrow)* from *Live in Marciac* (2011) we have a similar passage, but in inverse order, with broken chords becoming repeated sixteenth notes' chords at about 5:52, and continuing likewise until the end of the next track, *Exit Music (for a Film)*. These two songs are actually fused together in this particular live version, which gave me the idea for the arrangement you can find at the end (Appendix 5).

3.2 Both hands play chords with a different rhythm.

We could probably fit many more things into this chapter, but I'd like to talk about one in particular. It's a **comping style** that in some way **mimics both guitar and drums**. First you have to balance your two-handed voicings more or less equally between your two hands, and by that I mean that each hand should have approximately the same number of notes. This feels quite natural to me; as I mentioned before (see Page 18) I usually play two notes with each hand when I'm playing drop2 four notes voicings. Then it's easy to add extra notes and find something that will work with this comping style.

Once you have your balanced voicings, just make rhythms with your hands, like you would do when playing drums. In this case, rather than rhythmic independence we should talk about rhythmic co-dependence, since the hands are creating a rhythmic pattern together. With this technique it's easier to achieve a good groove and also emulate typical guitar comping rhythms. Here I made the piano version of the acoustic guitar comp at the beginning of *Wonderwall* (Oasis 1995) (Figure 16).

FIGURE 16. *Wonderwall* intro, guitar comp, piano version

Mehldau uses often this technique. In Figure 17 you can check out the basic comp rhythm of his composition *The Falcon Will Fly Again*, from *Highway Rider* (2010).

FIGURE 17. *The Falcon Will Fly Again*, basic piano comp

In *The Old Shade Tree* from Mehldau's and Chris Thile's duo album (2017) this comping style appears many times throughout the entire duration of the tune, mixed and fused together with melodies and other comping techniques.

3.3 Both hands play a melody with the same rhythm.

A very well known technique that falls into this category is to double the right hand melody with the left hand, one or more octaves lower. This is really effective, but since it's pretty straightforward and widely used and taught, I'm not going to say anything more about it. Listen to a superb example by Mehldau, in *Anthropology* from *When I Fall in Love* (1993) he doubles the theme and solo melodies, from the beginning until 1:27 one octave lower, then from 1:27 until 2:03 two octaves lower.

Our main topic in this chapter is going to be when the two melodies are actually different from each other.

There's the special case, where the rhythm both hands play is fixed, like an ostinato. An example could be a montuno like the one in Figure 18.

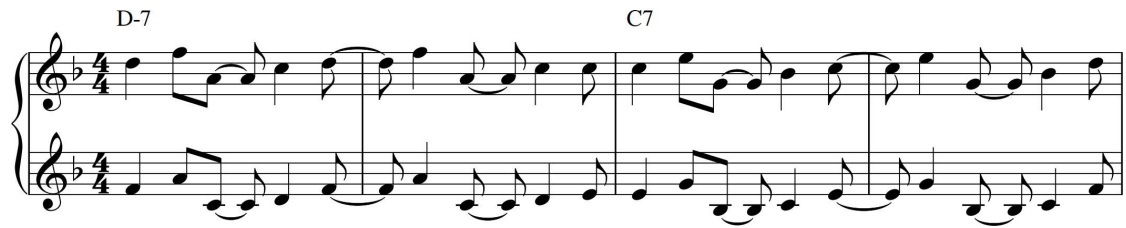


FIGURE 18. A montuno

If you're interested in Cuban music and montunos I suggest you check out Rebeca Mauleón-Santana's book (2005).

We are going to develop a concept we already talked about, seeing the scales as zones (see Page 15). Classical pianists practice their scales in parallel and contrary motion. By contrary motion I mean when the hands go in opposite directions (Figure 19).

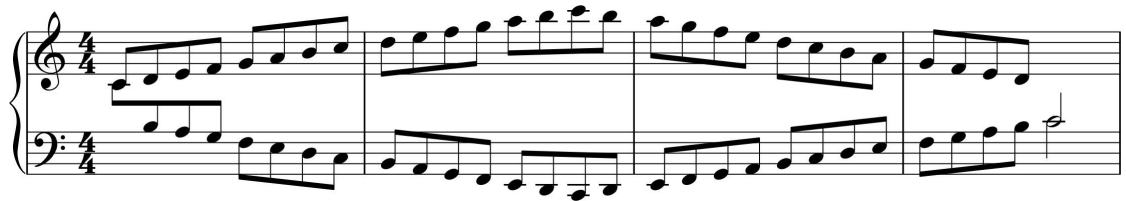


FIGURE 19. C major scale, contrary motion

I don't know why they do it, but this is actually a step in the direction we're going to take. First let's play melodies at a fixed distance; the intervals can be diatonic or chromatic (Figure 20)

FIGURE 20. 10th intervals, one chord

Then let's try the same workout (with a different interval) on a chord progression (Figure 21).

FIGURE 21. 6th intervals, chord progression (*All The Things You Are*)

Our workout here consists of simply playing whatever notes, with whatever rhythm, as long as they are part of our chosen group of notes. A few things to keep in mind about this:

- try not to play the same note at the same time with both hands, because that would weaken the harmonic effect
- start with smaller group of notes, like chord tones, and then move on to larger ones, like scales
- start by taking just one group of notes at a time, then later move on to chord

progressions, so that the group of notes which you are considering keeps changing together with the underlying harmony

- one hand can be harmonically simpler than the other, for example one could play just chord tones, while the other one plays notes from a scale
- start with the hands close to one another, and take advantage from being able to easily see what keys both of them are hitting
- as you start to get confident, try to progressively increase the space between the hands, to the point where you can focus your eyes only on one hand at a time, forcing yourself to know what you're playing without looking at it too much (like learning to type without looking at the keyboard)

This workout is really just playing around and **getting a feel** of how two melodies can fit together. Since it's so general, you really don't need a written example, but just to be clearer I made some anyway. First let's play just chords tones over only one chord (Figure 22).

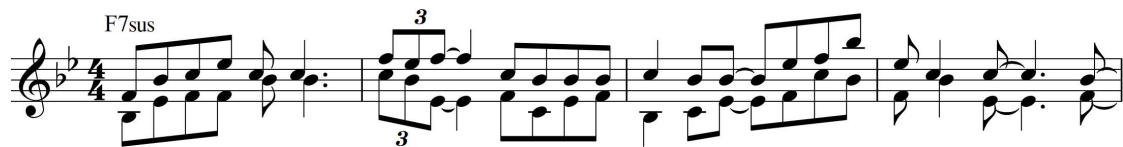


FIGURE 22. Two melodies, same rhythm, chord tones, one chord

Then let's play scale notes, over only one chord at a time (Figure 23).



FIGURE 23. Two melodies, same rhythm, scale notes, one chord

Then chord tones over a chord progression (Figure 24).



FIGURE 24. Two melodies, same rhythm, chord tones, chord progression (blues)

Then scale notes over a chord progression (Figure 25).



FIGURE 25. Two melodies, same rhythm, scale notes, chord progression (*Wave*)

Then let's try moving the hands farther away from each other, and playing chord tones with the left, and scale notes with the right (Figure 26).

The musical score for Figure 26 is written in 4/4 time and features a key signature of three flats (B-flat major). The left hand plays a sequence of chords: F-7, Bb-7, Eb7, and AbΔ. The right hand plays a melodic line consisting of eighth notes, with the same rhythm as the left hand's chord tones. The melody starts on F4 and moves up stepwise through the scale.

FIGURE 26. Two melodies, same rhythm, far away, left plays chord tones, right plays scale notes, chord progression (*All The Things You Are*)

OK, so now we know what we're working on. Let's hear an example from the master. In *Unrequited* from *Metheny/Mehldau* (2006), at 1:50 during Metheny's solo Mehldau comps by playing melodies, which sometimes are played by both hands simultaneously with the same rhythm.

We've been very generic in this chapter, but now let's see one specific case. This is a technique that works really well when playing piano solo. Its function is probably more harmonic than melodic, but it's pointless to discuss these formalities since we've seen that we can't clearly draw a line between those two categories. This technique consists in playing continuously notes of the same value (for example all eighth notes, or all sixteenth notes), repeating the single notes a certain number of times (like two or three), with the last repetition being on the beat. At the same time the hands are moving quite often in opposite directions, so if the left goes up, the right goes down, and vice versa. Listen to an example by Mehldau in his *Goodbye Storyteller (for Fred Myrow)*, from *Elegiac Cycle* (1999), from 4:12 until about 4:40, and then again with different note values from 6:12 until 6:20. To get a better understanding you can check out the transcription of that in André's book (2011, 178-180, 185). Here's an excerpt from that transcription (Figure 27).

The musical score for Figure 27 is written in 3/4 time and features a key signature of three sharps (F# major). The score is divided into two systems, starting at measure 89 and 92. In both systems, the left hand plays a continuous pattern of eighth notes, often moving in the opposite direction to the right hand. The right hand also plays a continuous pattern of eighth notes, creating a complex harmonic texture. The melody is the same in both hands.

FIGURE 27. *Goodbye Storyteller (for Fred Myrow)* repeated notes two hands pattern from Mehldau's solo

Remember that it doesn't have to be perfect, and chromaticisms are welcome. Here's an example I made of this technique, on the chord changes from Soundgarden's *Black Hole Sun*, from their album *Superunknown* (1994). You can notice how in some points I change one hand's harmony earlier or later than the other hand's (Figure 28).

FIGURE 28. *Black Hole Sun* repeated notes two hands pattern's example

3.4 Both hands play a melody with a different rhythm.

This is basically the same thing of the last chapter, but evolved. There can be many different cases.

One really cool thing to do is to play a sort of **call and response** between hands. It doesn't necessarily have to be just one hand playing at a time; they could be playing together, but alternatively would get more concentration (by the player) and attention (by the listener). This **shift of focus** from one hand to another can be underlined with the use of **dynamics** (the voice we focus on has more volume) and with **rhythmic complexity** (the voice we don't focus on is rhythmically monotonous and repetitive). In Brad's rendition of *Bittersweet symphony* (2010), at about 5:45 the left hand plays the main melody, while the right is playing something rhythmically monotonous with more of a harmonic function. Soon after that, the right becomes gradually the center of attention. This is an example of shift of focus in only one direction. We have a call and response situation only when the focus shifts more quickly from one hand to the other.

As a workout we can try a similar approach to the one at Page 26 and following. With all that in mind, let's take a blues structure and improvise melodies with both hands, with a call and response intent. We can also decide to fix the length of each call and response, as if we were

trading fours with our bandmates; so for example each call and each response would last two bars, or n bars (Figure 29).

FIGURE 29. Two melodies, different rhythm, call and response (blues)

About hands playing melodies with different rhythms; let's consider the particular cases when **both hands are playing fixed rhythms**. This is similar to what we saw in Figure 16 at Page 25, and Figure 17 at Page 25; it's not exactly the same, though. In all these cases the two hands build a complex rhythm together, but here each hand's rhythm is important also on its own; that has to come out in our playing. To develop this skill of rhythmic independence (and co-dependence) I like to play together two different instruments' parts from the same tune, trying to bring out both rhythms. Here are the bass and guitar riffs from Dave Holland's *How's Never*, from Gateway's *Homecoming* album (1995) (Figure 30).

FIGURE 30. *How's Never*, guitar melody and bass line

Another particular case is when only **one hand** is playing a **fixed rhythm**, while the other one has a more variegated rhythm. We have this when the left hand plays **walking bass** while the right hand solos. Practicing walking bass with your left hand alone is extremely useful. You can get a deeper understanding of a tune's harmonic progression, and you can improve your left hand melody playing technique. Then when you're used to it you can add on top of the walking bass some chords or a solo melody. When you need to concentrate on a solo melody, the walking bass line is obviously going to become simpler and more predictable. As Earl "Fatha" Hines suggests us in his educational video (Hines n.d.), if your hands are big enough, you can boost your walking bass by playing tenths (Figure 31).

FIGURE 31. Boost your walking bass line by playing 10th intervals

Anyway, walking bass techniques are very well known and taught; there's probably tons of good quality material on walking bass already available, so we're going to move on.

Since our premise is that hands' roles are interchangeable (see Page 16), it makes sense to try to **reverse** this walking bass plus solo, so that the right hand's melody has a fixed rhythm (every quarter note for example). In Figure 32 we have an example of a walking bass line plus melody.

Figure 32 shows a musical score for 'Stella By Starlight' in 4/4 time with a key signature of two flats. The right hand is labeled 'play solos' and contains a melody. The left hand plays a walking bass line. Chords are indicated above the staff: Eø, A7alt., C-7, and F7.

FIGURE 32. Walking bass plus melody (*Stella By Starlight*)

Then we'll reverse it and get something like Figure 33.

Figure 33 shows a musical score for 'Stella By Starlight' in 4/4 time with a key signature of two flats. The right hand plays a melody. The left hand is labeled 'play solos' and contains a walking bass line. Chords are indicated above the staff: Eø, A7alt., C-7, and F7.

FIGURE 33. Walking bass plus melody, reversed (*Stella By Starlight*)

It can be that both hands form a pattern together. This can mean in some cases they both play fixed rhythms, which combined together form a pattern. One example is this two hands' pattern (Figure 34) from Debussy's *Doctor Gradus ad Parnassum*, first piece of the suite *Children's Corner* (L. 113).

Figure 34 shows a musical score for 'Doctor Gradus ad Parnassum' in 4/4 time. It shows three systems of music. The first system starts at measure 55 with a 'cresc.' marking. The second system starts at measure 57 with the instruction 'En animant peu à peu' and a forte 'f' dynamic. The third system starts at measure 59. The score shows a complex, rhythmic pattern for both hands.

FIGURE 34. *Doctor Gradus ad Parnassum*, two hands' pattern

It's basically arpeggiated block chords, so it can be easily used in a melodic way, like block

chords. Here's an example I made of this pattern applied to *Infant Eyes'* chord changes (Figure 35).

FIGURE 35. Debussy's two hands pattern applied to *Infant Eyes* (B and C part)

These patterns can sometimes be more of a color than a melody, like the one from Hancock we saw in Figure 15, Page 24.

For developing these kind of more variegated approaches to playing melodies what's best in my opinion is to play free (see also Page 61). And of course stealing from other musicians' ideas is also great, as we saw with the Debussy pattern.

Another case of both hands playing melodies but with different rhythm is when they form a **polyrhythm** together. I'm very fond of polyrhythms, and a couple of years ago I made a YouTube video about some 2:3 and 4:3 polyrhythm workouts with the metronome; check that out if you're interested (2015). That video's focus is playing polyrhythmically against another rhythm: the metronome's, or a bandmate's rhythm in real-life situations. Here, though, we're talking about you playing against yourself; for example in the case of a 4:3 or 3:4 polyrhythm, one of your hands would be playing in three, and the other one in four.

Mehldau is also fond of this kind of stuff. In that version of *Anthropology* we already mentioned (1993), during the first part of his solo Rossy at the drums plays polyrhythmically against the his brother at the bass, with Mehldau mostly following the bass's rhythm, while sometimes playing along with the drums', like at 1:15. In the same tune, from 5:00 to 5:10 he probably plays some polyrhythmic figure between his two hands; I can't be sure about what is it actually, but it sounds great.

An example of polyrhythm between hands that is easier to identify is found in *Goodbye Storyteller (for Fred Myrow)*, from *Elegiac Cycle* (1999). As André notes (2011, 170), in the solo part Mehldau uses progressively smaller note values for the accompanying arpeggios,

accelerating from eighth notes to eighth note triplets, sixteenth notes and sextuplets of sixteenth notes. He returns back to eighth notes only before the finale theme. Many of those passages include polyrhythms between hands. At 3:38 the left hand arpeggios accelerate from eighth notes to eighth note triples, while the right hand still plays eighth notes. Then at 4:00 the left keep playing eighth note triplets, and the right plays sixteenth notes; then after a while the left starts playing sixteenth notes, too. You can more easily follow all this from André's transcription (2011, 177-185).

Here's a workout I tried for training polyrhythms between hands. I played it on a blues structure, but basically you can try it on whatever harmony you want, possibly starting out with single chords since it could be quite challenging. I start by playing a walking bass line in 4/4 with the left hand, and simultaneously half note triplets with the right hand. Then every once in a while you try to switch those two without losing your tempo, so that you would be playing half note triplets with the left hand and quarter notes with the right (Figure 36).

FIGURE 36. 3:4 and 4:3 polyrhythms' workout (blues)

You can try this also with other polyrhythms, like 2:3 (Figure 37).

FIGURE 37. 3:2 and 2:3 polyrhythms' workout (blues)

3.5 One hand plays chords, the other one a melody.

When one hand plays chords and the other hand a melody, they could be playing the same rhythm, or a different rhythm.

Think of Evans' soloing style; very often he plays a melody with the right hand, while the left hand is playing chords with almost exactly the **same rhythm** as the right hand's melody, emphasizing it and adding volume. We can hear it for example in *My Romance (take 1)* from

Waltz for Debby (1962), from 2:24 until 3:15. Techniques that **add volume** to the piano, making it more similar to a wind solo instrument, were even more common in times when there wasn't enough electronic amplification to be heard over the drums. In an educational video pianist Earl "Fatha" Hines says his melodies couldn't be heard when playing with a band, so he brought to prominence a technique called *trumpet style* (Hines n.d.), which consists in playing melodies with **octaves**. So please be flexible and keep in mind that in all these workouts, when we talk about *melody* you could play octaves, another harmonic interval or even chords. Think about those Hancock's block chords we saw in Figure 5, Page 20. Again, harmony and melody are not clearly separated concepts (see Page 15). Back to Evans, let's try that solo technique of his we were just talking about, with the right hand playing a melody (solo or theme) and the left hand playing chords with roughly the same rhythm. An example in Figure 38.

FIGURE 38. Evans's style: l.h. chords with same rhythm as r.h. melody (*Nardis*)

And then of course let's reverse it, with the left hand playing a solo melody and the right hand playing chords with roughly the same rhythm (Figure 39).

FIGURE 39. Evans's style reversed: r.h. chords with same rhythm as l.h. melody (*Nardis*)

The contrary of the Evan's style we just saw would be to play chords mostly during pauses in the melody, as a sort of **call and response**. Here's an example with the right hand playing a melody (Figure 40).

Figure 40 shows a musical score for a right-hand solo. It consists of two systems of three measures each. The first system features chords F Δ , F $\#$ o7, and G-7. The second system features chords C7, A-7, and D-7. The right hand plays a melodic line, and the left hand plays a bass line.

FIGURE 40. Call and response, r.h. solo (*Have You Met Miss Jones?*)

And then one with the left hand playing a melody (Figure 41).

Figure 41 shows a musical score for a left-hand solo. It consists of two systems of three measures each. The first system features chords F Δ , F $\#$ o7, and G-7. The second system features chords C7, A-7, and D-7. The left hand plays a melodic line, and the right hand plays a bass line.

FIGURE 41. Call and response, l.h. solo (*Have You Met Miss Jones?*)

Let's consider some cases where the hands play different rhythms from one another. It could be that **both hands are playing fixed rhythms**. This is quite similar to what we saw in Figure 16 (Page 25), Figure 17 (Page 25) and Figure 30 (Page 30). The hands are in fact creating a rhythm together, being rhythmically co-dependent rather than independent. Many comping rhythms fall into this category, like this basic bossa nova comping (Figure 42).

Figure 42 shows a musical score for basic bossa nova comping. It consists of two systems of five measures each. The first system features chords D Δ , B \flat 7, A-7, D13 \flat 9, and G Δ . The second system features chords D Δ , B \flat 7, A-7, D13 \flat 9, and G Δ . The right hand plays a complex chordal pattern, and the left hand plays a bass line.

FIGURE 42. Basic bossa nova comping (*Wave*)

When both hands' fixed rhythms have different lengths, it turns into a good polymeters' workout (for more about polymeters see Page 52). Here's one example: the right hand's pattern lasts for two $\frac{3}{4}$ bars, while the left hand's lasts five eighth notes (Figure 43).



FIGURE 43. Polymeter, patterns of different lengths, r.h. two 3/4 bars, l.h. 5/8

In these cases it's not worth it to write the rhythms in an easier to read way, because I feel like it's a way better workout if you just do it without reading, trying to feel the two different patterns interweaving. You can recycle the same pattern just by changing the meter, which gives it a different feel; for example in Figure 44 there's the same pattern but in 12/8 meter.



FIGURE 44. Polymeter, patterns of different lengths, r.h. 12/8, l.h. 5/8

If the meter in which we're playing doesn't match with the length of either pattern, then it adds even a third element to the polymetric texture (Figure 45).



FIGURE 45. Polymeter, neither pattern's length matches with the meter

When only **one hand is playing a fixed rhythm** we get a better chance to study **rhythmic independence**. I felt I could manage to keep a simple rhythm with the left hand, while improvising something with the right. But I had no idea how much more difficult it can be to do the opposite! Even keeping the most simple rhythm with the right hand, like quarter notes on 4/4, can be super challenging for me. Anyway, let's try these out. The first workout consists in playing chords with the left hand in a steady quarter note rhythm, while the right hand plays a melody (Figure 46)

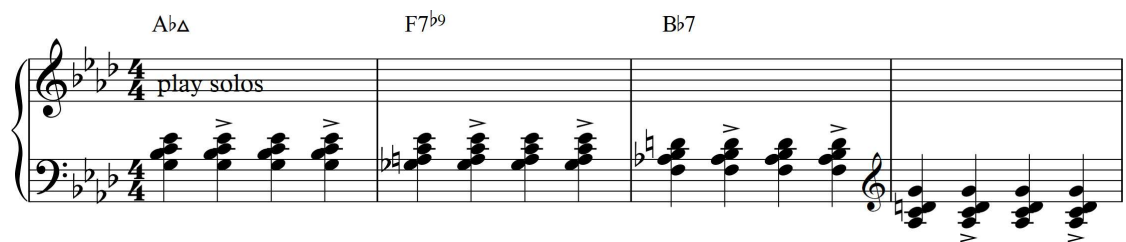


FIGURE 46. L.h. chords fixed rhythm, r.h. melody (*Donna Lee*)

Then as usual we're going to reverse it, switching hands' roles (Figure 47).

Figure 47 shows a musical score for *Donna Lee*. The right hand (treble clef) plays a fixed rhythm of chords: $A\flat\Delta$, $F7\flat 9$, and $B\flat 7$. The left hand (bass clef) is labeled "play solos". The key signature has three flats and the time signature is 4/4.

FIGURE 47. R.h. chords fixed rhythm, l.h. melody (*Donna Lee*)

Let's try with a different rhythm: this time we're going to play chords on the upbeats of two and four (Figure 48).

Figure 48 shows a musical score for *Stella by Starlight*. The left hand (bass clef) plays a fixed rhythm of chords: $E\emptyset$, $A7\text{alt.}$, $C-7$, and $F7$. The right hand (treble clef) is labeled "play solos". The key signature has three flats and the time signature is 4/4.

FIGURE 48. L.h. chords fixed rhythm, r.h. melody (*Stella by Starlight*)

And then let's reverse it (Figure 49).

Figure 49 shows a musical score for *Stella by Starlight*. The right hand (treble clef) plays a fixed rhythm of chords: $E\emptyset$, $A7\text{alt.}$, $C-7$, and $F7$. The left hand (bass clef) is labeled "play solos". The key signature has three flats and the time signature is 4/4.

FIGURE 49. R.h. chords fixed rhythm, l.h. melody (*Stella by Starlight*)

It can also be that the hand keeping a fixed rhythm is playing a melody, like when playing walking bass and chords (Figure 50).

Figure 50 shows a musical score for *There Will Never Be Another You*. The right hand (treble clef) plays a fixed rhythm of chords: $E\flat\Delta$, $D\emptyset$, and $G7\flat 13$. The left hand (bass clef) plays a walking bass line. The key signature has three flats and the time signature is 4/4.

FIGURE 50. *There Will Never Be Another You*, walking bass and chords

Since we're exploring as many possibilities as we can think of, let's try reversing that too, playing a melody with a fixed rhythm with the right hand, and chords with free rhythm with the left hand (Figure 51).

Figure 51 shows a musical score for *There Will Never Be Another You*. The right hand (treble clef) plays a fixed rhythm of melody: $E\flat\Delta$, $D\emptyset$, and $G7\flat 13$. The left hand (bass clef) plays chords. The key signature has three flats and the time signature is 4/4.

FIGURE 51. *There Will Never Be Another You*, walking bass and chords, reverse

Then there's the case where neither hand keeps a fixed rhythm. So basically we can do the

similar workouts to those we just saw, only without any fixed rhythm. Here's an example (Figure 52).

FIGURE 52. R.h. chords free rhythm, l.h. melody (*Beatrice* – Sam Rivers)

We can still keep the tempo, but it's really useful to **play also without tempo**, exploring attentively and thoroughly each chord's harmonic and melodic possibilities and combinations. Another thing to keep in mind: chords **don't have to be four notes voicings**. In fact, one workout that I like is playing a melody from one scale with one hand, and three notes **quartal voicings** with the other one. I find it's really good for improving scale-seeing abilities (see Page 15), since the quartal harmony is quite indefinite, it's more about the sonority of the mode rather than the sonority of the single chords. Therefore it's easier to start studying quartal voicings in a scalar motion. As usual, start with one chord at a time, and then practice on progressions. With quartals I usually make symmetrical progressions, like chords which are a minor or major third apart from each other (Figure 53).

FIGURE 53. L.h. quartal voicings scalar motion, r.h. melody, Dorian modes

And remember, even though I wrote it in 4/4 you can play it in another meter or without tempo. Now let's reverse hands of course (Figure 54).

FIGURE 54. R.h. quartal voicings scalar motion, l.h. melody, Dorian modes

Then let's try to move from one chord to another in a non-scalar fashion, by larger intervals; and without keeping any fixed rhythm (Figure 55).

FIGURE 55. R.h. quartal voicings non-scalar motion, freer rhythm, l.h. melody, Dorian modes

Another thing: chords don't have to be literally chords. Once again, we see how melody and harmony are not two clearly separated concepts (see Page 15). A chord can be anything with a mainly harmonic function. Even a melody with a predominantly harmonic function can take the place of chords. **Broken chords** are something in between. Traditionally *broken chord* means 'a sequence of single notes originated from one chord'. Arpeggios are one kind of broken chords. Here I take the term with a wider meaning, including also situations where a chord has been broken into smaller chords, possibly played quickly after one another. This device is used very often by Mehl dau, especially in his solo playing. Here are some workouts I wrote on the changes from Massive Attack's *Teardrop* from *Mezzanine* (1998). First some broken chords, which are made respectively from the 1st with the 3rd, and the 2nd with the 4th notes form the top of the original chords (Figure 56).

The musical score for Figure 56 is in 4/4 time and consists of two systems. The first system shows the right hand (r.h.) playing broken chords for the A and G chords. The A chord is formed by the 1st and 3rd notes, and the G chord by the 2nd and 4th notes. The left hand (l.h.) is marked 'play solos'. The second system shows the right hand playing broken chords for the D and A chords, with the same construction as the first system. The left hand continues to be marked 'play solos'.

FIGURE 56. *Teardrop*, r.h. broken chords 13-24, l.h. melody

Then some that combine respectively the 1st with the 4th, and the 2nd with the 3rd form the top of the original chords (Figure 57).

The musical score for Figure 57 is in 4/4 time and consists of two systems. The first system shows the right hand (r.h.) playing broken chords for the A and G chords. The A chord is formed by the 1st and 4th notes, and the G chord by the 2nd and 3rd notes. The left hand (l.h.) is marked 'play solos'. The second system shows the right hand playing broken chords for the D and A chords, with the same construction as the first system. The left hand continues to be marked 'play solos'.

FIGURE 57. *Teardrop*, r.h. broken chords 14-23, l.h. melody

Keep in mind those were just examples, you can use whatever combinations you like, even use many of them at once in a freer way, similarly to what you see in Figure 58.

The musical score for Figure 58 is in 4/4 time. The right hand (treble clef) plays broken chords in a rhythmic pattern. The first measure is marked with a chord symbol 'A' and contains a broken chord pattern. The second measure is marked with a chord symbol 'G' and contains a broken chord pattern. The left hand (bass clef) plays a melody consisting of eighth notes. The first measure of the left hand is marked with a '3' above the staff, indicating a triplet. The first measure of the left hand is marked with a chord symbol 'D' and the second measure with 'A'. The bass line is labeled 'play solos'.

FIGURE 58. *Teardrop*, r.h. varied broken chords, l.h. melody

The next passage would be when the broken chords are actually made from single notes, creating therefore a melody with a predominantly harmonic function. I find playing some accents here and there helps give it a more harmonic sense. In Figure 59 there's an example, as you see the accents in the first half of each bar are always the same, so as to create a rhythmic pattern.

The musical score for Figure 59 is in 4/4 time. The right hand (treble clef) plays melodic broken chords. The first measure is marked with a chord symbol 'A' and contains a melodic line with accents. The second measure is marked with a chord symbol 'G' and contains a melodic line with accents. The left hand (bass clef) plays a solo melody consisting of eighth notes. The first measure of the left hand is marked with a '3' above the staff, indicating a triplet. The first measure of the left hand is marked with a chord symbol 'D' and the second measure with 'A'. The bass line is labeled 'play solos'.

FIGURE 59. *Teardrop*, r.h. melodic broken chords (harmonic melody), l.h. solo melody

We already mentioned a couple of examples where Mehldau making this **progressive transition** from chords to broken chords to melody with harmonic function, or vice versa (see Page 24).

3.6 Three voices.

Three voices. They could be melodies, chords, riffs, bass notes, or something else, or in between. To get used to taking care of three voices at once, I like to just take some tune I know well, then take from it three simple elements I want to play with, and mix them in every way I can think of. It's easier to explain with an example, so let's take Radiohead's *Exit Music (For a Film)* from *OK Computer* (1997). The three elements we're starting with are the vocal melody, guitar chords with their rhythmic pattern, and bass notes. First let's play the melody on top, the chords in the middle and the bass notes at the bottom (Figure 60).

FIGURE 60. *Exit Music (For a Film)*, melody top, chords middle, bass bottom

Then let's start mixing; let's move the melody to the middle and the chords to the top (Figure 61).

FIGURE 61. *Exit Music (For a Film)*, chords top, melody middle, bass bottom

Same thing, but with melody and bass notes an octave higher (Figure 62).

FIGURE 62. *Exit Music (For a Film)*, chords top, melody middle, bass bottom

Since the melody is in the middle, it can be played by either hand; so now let's try to play it with the right hand. The chords can be a little smaller to make it easier (Figure 63).

FIGURE 63. *Exit Music (For a Film)*, chords top, melody middle (r.h.), bass bottom

In this case the left hand is pretty idle, just playing a few bass notes. Let's try to employ it a bit more then, playing some bass lines every once in a while, especially when there are pauses in the main melody (Figure 64).

FIGURE 64. *Exit Music (For a Film)*, chords top, melody middle (r.h.), bass bottom (with more bass lines and fills)

Going on like this we can try many other combinations, and keep working on the ones we like most. There's not much improvisation here, this kind of workout is more about arranging, combining simple things in fresh new ways. At the same time, though, we are developing our solo piano skills, and our ability to think and play, more voices, at the same time.

Now let's play Coldplay's *Speed of Sound*, from *X&Y* (2005). This time we're going to take also a riff as one of the elements (voices); it's the riff in the intro, which fits also in the verse because the chords are the same. So, first the melody on top, the riff in the middle, bass notes at the bottom (Figure 65).

FIGURE 65. *Speed of Sound*, melody top, riff middle, bass bottom

Then let's move the melody to the middle, and the riff to the top (Figure 66).

FIGURE 66. *Speed of Sound*, riff top, melody middle, bass fixed rhythm bottom

Then let's move the riff to the bottom, and the melody to the top; in the middle let's play chords (Figure 67).

FIGURE 67. *Speed of Sound*, melody top, chords middle, riff bottom

Then, keeping the riff at the bottom, let's move the melody to the middle, and the chords to the top (Figure 68).

FIGURE 68. *Speed of Sound*, chords top, melody middle, riff bottom

And like before, we can mix even more of course, these were just a few examples.

Let's take another tune, *Part of Your World* from the 1989 Disney movie *The Little Mermaid*; you can watch the original clip on YouTube (Benson 2014). The elements we're starting with are the vocal melody on top, a riff from the intro in the middle, and bass notes at the bottom. In the songs that riff stops after a while, but we can keep it going for as long as we like, of course adapting it to the chord changes (Figure 69).

FIGURE 69. *Part of Your World*, melody top, riff middle, bass bottom

Then let's move the riff to the top, and the melody to the middle (Figure 70).

FIGURE 70. *Part of Your World*, riff top, melody middle, bass bottom

Then let's move the riff to the bottom and the melody to the middle; as a third element let's add to the top single notes with harmonic function (Figure 71).

FIGURE 71. *Part of Your World*, single notes top, melody middle, riff bottom

Then instead of those single notes we can also try playing small chords (Figure 72).

FIGURE 72. *Part of Your World*, chords top, melody middle, riff bottom

Then let's move the melody to the bottom, the riff to the top, and the single notes with harmonic function to the middle (Figure 73).

FIGURE 73. *Part of Your World*, riff top, one note middle, melody bottom

Then, instead of the riff, let's try playing chords at the top (Figure 74).

FIGURE 74. *Part of Your World*, chords top, single notes middle, melody bottom

Then instead of those long chords let's play broken chords, like those we talked about at Page 39 (Figure 75).

FIGURE 75. *Part of Your World*, quarter notes broken chords top, single notes middle, melody bottom

Then let's play them faster, as eighth notes (Figure 76).

FIGURE 76. *Part of Your World*, eighth notes broken chords top, single notes middle, melody bottom

Now some rhythmic variations. At Page 32 we talked about polyrhythms between hands; see also Figure 36 (Page 33) and Figure 37 (Page 33). Let's take what we had in Figure 70, Page 44; we'll modify the theme melody, so that it forms a polyrhythmic texture with the riff (Figure 77).

FIGURE 77. *Part of Your World*, riff top, 3:4 polyrhythmic melody middle, bass bottom

Another kind of rhythmic variation is rhythmic displacement; for more about it see Page 49. Let's go back to what we had in Figure 71, Page 44; we'll displace the riff at the bottom so that it starts an eighth note earlier (Figure 78).

FIGURE 78. *Part of Your World*, single notes top, melody middle, displaced riff bottom

Then let's displace in the same way also the single notes with harmonic function at the top; we'll leave the melody in its place, otherwise there wouldn't be anything left to stand out against the displaced elements (Figure 79).

FIGURE 79. *Part of Your World*, displaced single notes top, melody middle, displaced riff bottom

At Page 12 we talked about playing **cross-handedly**, which makes things easier when we want to keep a voice going on in the middle, and then play alternatively over and under it. Switching hands in the middle of a continuing voice is quite difficult; it will sound more natural if the hand playing the continuing voice in the middle it's always the same, while the other hand cross over it when needed. Let's try this on Massive Attack's *Teardrop* from *Mezzanine* (1998). One hand plays the riff in the middle, the other hand plays solos, alternatively over and under it. Solos can be melodies, chords, a mix of them, whatever. We can try this both ways: with the right hand in the middle and the left hand crossing over, then vice versa, with the left hand in the middle and the right hand crossing over (Figure 80).

FIGURE 80. *Teardrop*, riff middle (r.h. or l.h.), solos alternatively top and bottom (l.h. or r.h.)

Now instead of the riff let's play chords in the middle (Figure 81).

FIGURE 81. *Teardrop*, chords middle, solos top and bottom alternatively

One of the elements can also be a **pedal point**, which is a note that doesn't change while the surrounding harmony changes. It's usually found **in the bass**, but it could be also the melody **at the top**; think of Antônio Carlos Jobim's *Samba de Uma Nota Só* (AKA *One Note Samba*). Pedal points can be even **in the middle** of the harmony. Mehdau has used this technique in many occasions in his solo playing; André calls it tonic pedal in his book (2011, 171). He mentions some examples from Mehdau's recordings, which I'll report here, so that you can listen to how this technique sounds when played by a master. You can hear it in *Resignation* from *Live in Marciac* (2011), in *Blackbird* from *Love Songs* with von Otter (2010), and in *Goodbye Storyteller (for Fred Myrow)*, from *Elegiac Cycle* (1999).

I song I like to play this in is *Infant Eyes*; a note that fits well throughout the chord changes is Bb. Let's try playing a Bb pedal point in the middle with one hand, and improvised solos and chords over and under it with the other hand (Figure 82).

FIGURE 82. *Infant Eyes*, Bb pedal middle, solos and chords top and bottom

Since the hand playing the pedal has not too much to do, it can play also other things in the meantime. The pedal point is a very simple element, so we can also try to play it alternatively with the left or the right hand, whichever one is closer and less busy.

Now let's play pedal points and chords in the middle with one hand, while the other hand plays solos alternatively over and under it (Figure 83).

The image shows a musical score for a 4/4 piece. It consists of two staves: a treble clef staff on top and a bass clef staff on the bottom. The key signature has two flats (Bb and Eb). The piece is divided into four measures, each with a different chord: G-7, F-7, EbΔ, and A7alt. Above the treble staff, the text 'play solos' is written. Above the bass staff, the text 'play solos' is also written. The notation shows a continuous broken chord comping pattern in the bass staff and a melodic line in the treble staff.

FIGURE 83. *Infant Eyes*, Bb pedal and chords middle, solos top and bottom alternatively

Here ends this chapter about hands' independence, the longest in this work. Before moving on to the next one I'll mention more examples from Mehldau's playing that include things mentioned in this chapter.

In *Teardrop* from *10 Years Solo Live* (2015), from 2:12 until 4:15, there are about four voices going on; there's a riff, some bass, melodies at the bass, melodies and chords over the riff. Probably Mehldau is playing the riff and sometime the bass with the left hand, and the middle-bass melodies and the high chords and melodies with the right hand; but we can't tell for sure, he could even be switching hands in the middle of one voice.

In the version of *Goodbye Storyteller (for Fred Myrow)* from Klotz's documentary (Mehldau 1999), from 5:03 until 5:33 he plays three or four voices; the right hand starts playing a trill, and at the same time over that also single notes that form a line, and the left hand in the meantime plays a continuous broken chord comping.

In *Make peace* from the duo album with Metheny (2006), Brad starts his solo at about 4:00 with a melody played by the right hand, as the left plays chords with strong voice leading and sometimes melodic lines that go together with, or respond to, the right's melody (like at 4:13-4:20). Then from 4:35 until 5:45 the right hand plays chords, and the left hand takes care of the middle and bass voices, sometimes playing a melody in the middle, sometimes bass notes and rhythmic chord patterns entwined with the right hand's. Then from 5:45 until the end of the solo it's the right again that takes care of the melody.

4. RHYTHMIC AND METRIC INDEPENDENCE

I love all kinds of rhythmic illusion and confusion. In this chapter we'll go through some phenomena related to rhythm and meter. We've already talked about rhythmic independence (see Page 14, Page 24, Page 30 and Page 36). We've mentioned also **rhythmic displacement**; now we're going to dig into it more deeply.

4.1 Rhythmic displacement

I heard about it from an educational video by Ari Hoenig and Johannes Weidenmueller (2009). Hoenig is the guru of rhythmic and metric mischievousness; I suggest you check out Hoenig's educational material because it's brilliant (Hoenig n.d.). Also, listen to Wayne Krantz. Rhythmic displacement consists in moving a rhythmic pattern so that it starts earlier, or later.

When the beat is divided into three parts, we have three possibilities for displacement; when the beat is divided into four we have four possibilities, and so on.

In Figure 78 (Page 47) and Figure 79 (Page 47) we had *Part of Your World*, which was divided in groups of four eighth notes; we displaced some elements one eighth note earlier. Now an example of rhythmic displacement in the opposite direction. I've been playing electric piano in guitarist Toni Taskinen's project; we recorded fusion versions of Erik Satie's *Trois Gnossiennes*. Bassist Henri Laitinen composed a beautiful bass riff for *Gnossienne No. 2*, using rhythmic displacement. Here's the idea from which he started (Figure 84).



FIGURE 84. Henri Laitinen's bass riff's origin

It's a really straightforward bass riff, which I had already heard many times before. We can write it also in 4/4 (Figure 85).

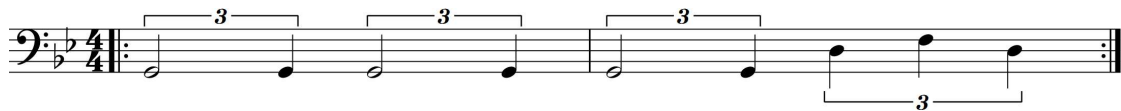


FIGURE 85. Henri Laitinen's bass riff's origin 4/4

The idea was to have an Afro comping, so let's write it in 12/8 (Figure 86).



FIGURE 86. Henri Laitinen's bass riff's origin 12/8

Now the part which makes it super cool: let's displace it an eighth note later (Figure 87).



FIGURE 87. Henri Laitinen's bass riff, rhythmic displacement

And then let's rewrite it with a different subdivision; each beat is clearly separated, this makes it easier to read (Figure 88).



FIGURE 88. Henri Laitinen's bass riff, rhythmic displacement, easier to read

What's really cool about this kind of rhythmic tricks, is that you can use them to create illusions. To hear that an element is displaced, there has to be another, non-displaced element, against which we can hear the displacement. I love it when a song starts with a single element with an easily recognizable rhythm, and then another element comes in, and only then you notice that the first element isn't what you thought it was. In our version of *Gnossienne No. 2* after the first theme Henri plays the bass riff in Figure 88; but he plays alone, so instinctively everyone thinks that he's actually playing the non-displaced riff in Figure 84. Then drummer Antti-Pekka Rissanen comes in, but he plays together with Henri, in such an ambiguous way

that nobody thinks they're both displaced. Then, little by little, A-P starts to be less ambiguous and comes back to playing on the non-displaced beats, ultimately evolving into a full-blown shuffle comping.

Here there are more examples of rhythmic displacement; these are from my video about practicing polyrhythms with the metronome (2015). We're displacing the stride-like left hand comping, while the right hand melody stays the same. The tune is *Straight No Chaser*. Since we're playing it with swing eighth notes, which are approximately based on a triplet, we have a total of three possibilities for displacement, including the original, non-displaced version. Let's start with that (Figure 89).

FIGURE 89. *Straight No Chaser*, stride-like comping, no displacement

Then let's displace the comping one triplet eighth note earlier (Figure 90).

FIGURE 90. *Straight No Chaser*, stride-like comping displaced one triplet eighth note earlier

Then the last option available: displacing the comping one triplet eighth note later (Figure 91).

FIGURE 91. *Straight No Chaser*, stride-like comping displaced one triplet eighth note later

When I'm playing solo piano I like to displace the left hand comping every once in a while.

Let's try displacing an arpeggiated comping, while soloing over it. The tune is *Black Hole Sun* by Soundgarden, from their album *Superunknown* (1994) (Figure 92).

FIGURE 92. *Black Hole Sun*, rhythmically displaced arpeggio comping

Mehldau does something similar in *Resignation* from *Elegiac Cycle* (1999); André mentions it in his book, calling it *rhythmic shifts in the bass* (2011, 61).

So many of the workouts in the previous chapter can be displaced; let's try with the one from Figure 47, Page 37 (Figure 93).

FIGURE 93. R.h. chords displaced one triplet eighth note earlier, l.h. solos (*Donna Lee*)

Then let's displace it in the opposite direction (Figure 94).

FIGURE 94. R.h. chords displaced one triplet eighth note later, l.h. solos (*Donna Lee*)

These were just examples, there are many other possibilities; experiment as much as you like.

4.2 Polyrhythms / polymeters

Another rhythmic phenomenon we already talked about is polyrhythms (see Page 32 and Page 46). Some make a distinction between polyrhythms and **polymeters**: polyrhythms are measure-preserving, while polymeters are beat-preserving; then there are polytempi, which don't preserve neither measures not beats (Wikipedia). I'm not a stickler for nomenclature, so how we call them it doesn't matter much, but the distinction itself is interesting because it presents us two ways to explore those phenomena.

The whole idea of having two or more meters, and therefore two tempi, going on at the same time, is as fascinating as having two or more voices going on at the same time. Mehldau also likes this concept; here's a transcript from Nicolas Klotz's documentary (Mehldau 1999) where Mehldau talks about his trio work, and how they like to two pulses going on at the same time:

"It's pretty specific what I'm doing, I think, especially with the trio, you know. We have the regular pulse that's going on and then we have another pulse, that would seem to be unrelated to that, and the idea is to make your phrases and your melodies in that other pulse, in that other tempo; but that time is

still going by, just as slow or fast, from the first tempo. So you have two different tempos going on at the same time, but your form and your shape is still the same. So, I think with the time it's always a matter of retaining that form, you know, and that's sort of what makes it interesting to me, is if you can retain the form of what you were originally doing and step out of the time, but always have it in mind. So it's sort of two things going on at once I guess." [interviewer:] "Do you get lost?" [Mehldau:] "Sometimes. I think what's great about playing with Jorge and Larry, with that trio, is that at various times, sometimes one of us gets lost. Almost never are we all lost together, and I think the trick is to get good at being able to find your way back again. When you get lost, very quickly realizing it, and listening to the other guys, where they are, and then coming back to it." (Mehldau 1999, Nicolas Klotz's documentary.)

In his essay *ROCK HEMIOLAS* that you can find on his website (Mehldau n.d.) Mehldau calls this polyrhythmic/polymetric phenomenon *hemiola*. There he mentions his trio version of Oasis' *Wonderwall* from *(What's the Story) Morning Glory?* (1995). In Mehldau's trio version, which you can find in *Brad Mehldau Trio Live* (2008), bassist Larry Grenadier plays a bassline that has clearly got a different pulse than the rest of the band, which plays in 4/4. I've been playing it with some musician friends, and this is the way I thought to write the bass riff (Figure 95).



FIGURE 95. Mehldau Trio's bass riff on 4/4 *Wonderwall*

In 4/4 time signature it starts again from the 1st beat of the bar only after 27 bars.

When improvising I like to play these kind of irregular loops, that don't fit with the length of the bar. It's a good idea to practice them, so they would come more naturally during improvisation. Here's an example of a 7/4 loop over 4/4; it can also be seen as a double 7/8 loop (Figure 96).



FIGURE 96. 7/4 loop over 4/4

After getting comfortable with playing a certain loop, we can keep the loop's rhythmic pattern and improvise with it.

4.3 Odd meters

Some years ago I realized that I was quite comfortable with playing this kind of over-the-bar loops in 4/4, and somehow I could manage also in 3/4; but in any other meter it felt almost impossible to keep track of where I was. When I tried to improvise in **odd meters** I always got stuck playing the same rhythmic patterns, which were just variations of the basic subdivision of the bar; for example in 7/4 I would always be playing some phrase that implied a 4/4 – 3/4 subdivision. So I decided to study odd meters, in particular 7/4/ and 5/4. I wanted to be able to play more freely, with phrases that surpassed the bar subdivision and went over

bar lines. I figured the skills I'd learn from that would also come in handy when playing in good old 4/4.

Mehldau is at ease with odd meters. A number of his own tunes are in 7/4, like *Resignation* from *Elegiac Cycle* (1999) and *The Falcon Will Fly Again* from *Highway Rider* (2010). Also when he plays covers he sometimes plays in a different meter than the original. His trio version of *All The Things You Are* from *Art of the Trio 4: Back at the Vanguard* (1999) is in 7/4; in Figure 7 (Page 21) we saw a the background for drums solo from that version. Also in his trio version of *Black Hole Sun*, from *Brad Mehldau Trio Live* (2008), he changes the original 3/4 meter into some 11/4 and 12/4 monstrosity. Which sounds good anyway. Here's *Black Hole Sun*'s riff from the middle part of the original version from Soundgarden's *Superunknown* (1994) (Figure 97).



FIGURE 97. Riff from *Black Hole Sun*'s middle part

And here's Mehldau Trio's version (Figure 98).



FIGURE 98. Riff from Mehldau Trio's version of *Black Hole Sun*

Note that in the last 11/4 bar the phrase's rhythm is basically the same as before, but it's just rounded up to quadruplets.

To get used to odd meters I started playing tunes that were originally played in odd meters, and also changing the meter of tunes there were played in 4/4. Here are some of these. There's *There Will Never Be Another You*, which I've played in 5/4 (Figure 99).



FIGURE 99. *There Will Never Be Another You*, 5/4

I suggest you don't write down the modified melodies beforehand. Instead, just learn very well the tune in the original meter, and then try every time to improvise how to fit the theme's melody to the new meter. Here's a less conventional version of the same tune, where all the notes in the first bars have the same value, so that the melody is more similar to the original, but at the same time also more strange because it doesn't fit nicely into the new meter's bars. Going over the bar lines is one of our goals, indeed (Figure 100).



FIGURE 100. *There Will Never Be Another You*, 5/4, less conventional

Another tune I've played in many different meters is *How Deep Is the Ocean?*; here's my 5/4 version (Figure 101).



FIGURE 101. *How Deep Is the Ocean?*, 5/4

Here's my 3/4 version of the same tune. Note that I have modified the original melody a little (Figure 102).



FIGURE 102. *How Deep Is the Ocean?*, 3/4

For meters with big numerators it could be good to fit two bars of the original meter into one bar of the new meter. Let's try this on *How Deep Is the Ocean?* in 5/4 (Figure 103).



FIGURE 103. *How Deep Is the Ocean?*, 5/4, two bars in one

I don't think it works so well in this case, because we end up having the chords change too quickly at some points. It works better when playing *All The Things You Are* in 7/4, like Mehldau does on *Art of the Trio 4: Back at the Vanguard* (1999) (Figure 104).



FIGURE 104. *All The Things You Are* theme in 7/4

Another rhythmic/metric device I like to play with is **metric modulation**. There are metric modulations where the total duration of one bar stays the same, but the beat changes and the tempo becomes either slower or faster. Here's an example from my medley arrangement of *Goodbye Storyteller (for Fred Myrow)* in 3/4 and *Exit Music (For a Film)* in 4/4; you'll find the full score in the end as Appendix 5. This is the metric modulation from the first tune to the second (Figure 105).

30 B B-6 C#7/B C7/B

34 B- Bsus2 Bsus4 B- Bsus2 Bsus4

FIGURE 105. Metric modulation from *Goodbye Storyteller (for Fred Myrow)* in 3/4 to *Exit Music (For a Film)* in 4/4

This is the metric modulation back to the first tune in the end (Figure 106).

74 B- F# Bsus4 B B B-6 C#7/B

FIGURE 106. Metric modulation from *Exit Music (For a Film)* in 4/4 to *Goodbye Storyteller (for Fred Myrow)* in 3/4

To ease these passages and make the modulation more natural, before modulating I'd play some arpeggios or broken chords with a note value that fits in both meters; something like Figure 107.

30 B B-6 C#7/B

33 C7/B B- Bsus2 Bsus4

FIGURE 107. Arpeggios/broken chords to aid the upcoming metric modulation (4/4)

Then, during the repetition, I'd play similar arpeggios or broken chords, but grouped in a way that highlights the upcoming meter (4/4), something like Figure 108.

FIGURE 108. Changing the arpeggios/broken chords subdivision to match the upcoming meter (4/4)

I would do a similar thing for the modulation back to 3/4, so first something like Figure 109.

FIGURE 109. Arpeggios/broken chords to aid the upcoming metric modulation (3/4)

And then during the repetition something like Figure 110.

FIGURE 110. Changing the arpeggios/broken chords subdivision to match the upcoming meter (3/4)

Then there's a different kind of metric modulation, where the bar's duration changes. Still, in some cases it's still possible to maintain the structure of the tune; we take a certain number of bars, replace them with an appropriate number of bars in a different meter, so that together they last the same amount of time as the original bars. So basically the metric modulation could also be played only by part of the band, while the others continue to play in the old meter, creating a polymeter. The tune is Steve Kuhn's *The Saga of Harrison Crabfeathers*, from *Steve Kuhn Live in New York* (1972). Here's the original C part, from bar 33 until bar 40 (Figure 111).

FIGURE 111. *The Saga of Harrison Crabfeathers*, original C part

In the C part I like to modulate to a simple meter (each beat is divided into two) with a slower tempo, while the drummer plays a very accentuated backbeat comping. In the original recording they also play this kind of modulation, even though it's not emphasized too much. The new meter could be 4/4 (Figure 112).

FIGURE 112. *The Saga of Harrison Crabfeathers*, C part 4/4 metric modulation

The new meter could be also 3/2, which fits better with the theme melody (Figure 113).

FIGURE 113. *The Saga of Harrison Crabfeathers*, C part 3/2 metric modulation

These meters could also be written with bigger denominator values, so that notes' values would be equal before, after and during the modulation, like in Figure 114.

FIGURE 114. *The Saga of Harrison Crabfeathers*, C part 3/1 metric modulation

5. INDEPENDENCE FROM HARMONY, OR PLAYING OUT

Playing out is one of the most challenging things for me. I started my musical studies with

classical music. When I started studying electric guitar, and I was asked to improvise, it was really difficult, since until then I had just played music that was written on the score, or that I had listened to. I had done some improvising when composing, but it wasn't like improvising with someone else in a tune's structure. After many years spent improvising, when I tried for the first time to play out of the harmony it was like when I had been asked to improvise for the first time. It was like a second birth; and playing out is like the 2nd power of improvising, (improvising)². I've found some good ideas in *The Jazz Theory Book* by Mark Levine (1995, 183-192). But if you want to go real deep into this, I suggest you read David Liebman's *A Chromatic Approach to Jazz Harmony and Melody* (2015). Even though my knowledge of this subject is still very limited, I'll share with you some thoughts I've had.

First, the importance of **blues**. For an out melody to sound good, it has to be powerful, and blues sounds really powerful to me. I really like acid melodies and sounds, the kind you could describe using the Finnish word *härski* ('rancid, dirty'). A blues phrase, especially out of contexts, has a certain down-to-earth, *härski* quality. I noticed how in many non-blues tunes there are some **blues melody fragments**. For example the melody at the end of the A part of *Body and Soul* is clearly blues (see Figure 8, Page 22). At bar 14 – 15 of the theme in Mehdau's *Goodbye Storyteller (for Fred Myrow)* from *Elegiac Cycle* (1999), there is a blues phrase out of nowhere. Blues can also be **implicitly hidden in the harmony**. Whenever there's major and minor at the same time, or close together, there's blues. For example in Hancock's *The Sorcerer* from *Speak Like a Child* (1968), in bar 4 there's both F and E, which are bar 5's chord's (Db6/9) minor and major third. In addition, the downward minor third bass movement from E in bar 4 to Db in bar 5 further emphasizes the hidden blues in the harmony (Figure 115).

$\frac{4}{4}$	Db Δ	D Δ /Db	E- \flat /9	D- \flat /9/E	
	Db \flat /9	D \flat /9	A7 \sharp 11	D7alt.	
	Ab-7	G-7	Ab13 \sharp 11 \flat ₉	D-7	
	C-7	G- Δ /A	A13sus	Ab \circ Δ	

FIGURE 115. *The Sorcerer*: hidden blues at bars 4 – 5

Even in pop we can find hidden blues, for example in Duffy's *Warwick Avenue* from *Rockferry* (2008) there's a cadence from Gb to Bb, that gives a sense of blues because, once again, there's both Bb's minor third (Db, in the Gb chord) and major third (D, in the Bb chord).

All these examples we made were still *in* the harmony though, but blues sounds good also when it's *out*. To develop an intuitive sense for blues melodies, in deep learning style, I felt I had to be able to play blues really well in all keys. I suggest you try that.

Another workout I did with blues is playing blues scales over quartal voicings. There are at least four blues scales that sound *in* with quartals built from one major scale. For example

with quartals built from C-7 Dorian, at least the C-, F-, D-, and A- blues scales are going to sound in.

Another way I tried for playing out is using symmetries. Symmetries in harmony have been used a long time before Coltrane. Here's an excerpt from Debussy's *Serenade for the Doll*, the third piece in the suite *Children's Corner* (L. 113). You can see that Debussy used minor third and whole tone symmetries (Figure 116).

The image shows three systems of musical notation for Debussy's *Serenade for the Doll*. Each system consists of a treble and bass clef staff. The first system (measures 69-72) features a piano (*pp*) dynamic in the bass and a fortissimo (*sf*) dynamic in the treble. The second system (measures 73-76) also shows *pp* in the bass and *sf* in the treble. The third system (measures 77-80) includes dynamics of *p* and *sf* in both staves, with the instruction 'sans retarder' above the treble staff and 'dim. molto' below the bass staff in the final measure.

FIGURE 116. *Serenade for the Doll*, whole tone and minor 3rd symmetries

Here's another excerpt from the same piece, with more minor third symmetries (Figure 117).

The image shows two systems of musical notation for Debussy's *Serenade for the Doll*. The first system (measures 53-56) is titled 'En animant un peu' and features a piano (*p*) dynamic in both staves. The second system (measures 57-60) also features a piano (*p*) dynamic in both staves. The notation includes various rhythmic patterns and chordal structures.

FIGURE 117. *Serenade for the Doll*, minor 3rd symmetries

The idea is just to superimpose symmetric phrases onto the original harmony; they have an intrinsic logic, so they sound good even if they're out. The difficult part is resolving them

back into the harmony in a way that sounds natural.

6. INDEPENDENCE FROM STRICT PRACTICING

Some years ago when I first tried collective free improvisation with the band Chicken Cage Of Terror, I didn't have any idea of how much I would learn from that. I was curious about free jazz, but I didn't think it would be so rewarding. Instead it opened my mind, it broke barriers and clichés I didn't even know I had in me. It taught me what it really means to listen when you play. It forced me to be creative, and discover new ways to play the piano. It helped me to fight the unconscious fear of playing something wrong. Sometimes we'd play a *normal* tune after a free session, and thanks to the state of mind we'd reached we'd be playing way more adventurously and creatively than what we normally did. Some years later I continued to explore free jazz with No Holds Barred.

The best music seminar of my life was a free improvisation seminar. Our guides were Xavière Fertin (clarinet) and Camille Emaile (percussions) of Oxke Fixu. We started just making sounds with our voice, with our eyes closed. It was mind-blowing how much that helped to get comfortable with a group of strangers, so that later in the day we could play with a free mindset, without holding back.

I think playing free is fundamental for anyone who's studying improvisation, regardless if he's ever going to perform free improvisation for an audience. It's not only collective free improvisation which is useful, but also free improvisation during your individual workouts. Many musicians do this, including John Medeski (McPartland 2006). I like to call this **freefall workout**. There are times when I start playing the piano, and immediately get really excited by how good it sounds. This happens to me more often when I start playing after a few days' break. The excitement makes me play better, which in turn makes me more excited about how good it sounds, and so on in a **virtuous cycle**. This is probably the flow state of mind (see Page 8). For me this happens quite rarely, so I feel like it would be a shame to waste that state of mind on some more basic workout I could do in any other moment, which could also make me a little bored and lower that precious excitement. I prefer to improvise freely whatever comes to mind, possibly recording the whole session. Sometimes I'd play on a familiar tune's changes, but I'd be able to play adventurously in new creative ways. I usually end up practicing also some of the things I would be practicing anyway, but I don't get stuck with them, I just move on. I'd just keep in mind general directions, for example if I want to train the left hand I'd play more lines with it, and so on. It's very useful also for when you don't have much time for practicing, so you have to maximize what you get out of the little time you have. And the improvisational skills you learn will come out eventually (see Page 7 about deep learning). If you record these sessions, by listening to them later you can even analyze what you did, and try to incorporate it into your normal workouts. And for a pianist it's a beautiful thing to be able to perform free improvisations. On 13th February 2016 I went to

Mehldau's solo piano concert in Espoo; he played also completely improvised pieces. Even if you don't like *listening* to free improvisation you should try it yourself, because there is so much to learn from it.

7. INDEPENDENCE FROM EVERYTHING BUT THE PRESENT MOMENT

One's state of mind is crucial to improvising, obviously (see also Page 8 about flow). It makes sense to spend time understanding what things have an influence on your state of mind. They could be sleep, food, psychoactive substances (including alcohol, coffee and drugs), physical exercise, sex, masturbation, general mood, recurring thought patterns, meditation, and many others. Everybody's mind works in different ways, so everyone has to find out what works for her/him. Some people's state of mind might not even fluctuate so much to have a relevant influence on one's playing. For me it can make such a huge difference, that the first priority in my studies should be to learn how to influence it and control it better.

I had always had big problems with performing live for an audience. When I was performing classical music I was terrified of mistakes, but since there wasn't any improvisation I couldn't do too much damage. When performing and improvising, my stage fright would lead me to play more safely, and therefore without any creativity or energy. It usually gets even worse when the gig is an exam of mine and I'm begin evaluated by teachers. I can somehow identify the mental process which cause stage fright, but I haven't been able to stop it at will. Usually I get stage fright because I'm too concerned about what others are thinking of my playing, and that distracts me from the music itself. I start overanalyzing what I'm playing, when I should just enjoy it. There have been gigs in which I have been able to bypass this process, but I couldn't understand exactly *how* I did it. Of course, with time you get used to certain situations, and some things become easier; but I never got rid of the problem altogether.

I still haven't found a way to solve this problem psychologically, but at least I found some physical ways that help a little. I noticed an improvement when I started swimming regularly. With regular physical exercise of medium-high intensity, the heart's bpm at rest decreases. So when I got stage fright and started getting anxious, at least I didn't get anymore those mad palpitations I used to have before. I also found that if I exercise the same day of the gig, most of the time my mental state will be better. If I eat a lot of good food some time before the gig, I'll usually play better. Sometimes it didn't have to be a lot, neither did it have to be good; but at least I have to eat something, like an apple, in this case immediately before the gig. If I sleep poorly (which happens quite often) it messes up my tempo and my groove. Sex has usually a positive effect, because it makes you feel good and you're in a good mood, which reflects into your playing. I didn't notice anything about masturbation; the only thing that's almost a certainty for me, is that I can't be too many days without doing it, otherwise I can't even sleep, let alone be in a calm mental state when playing. I noticed that if I feel even a little cold, that gets amplified by my tension, and intensifies it in return. So I started to wear more

clothes than I normally would during gigs. I avoid coffee before gigs because it would an upcoming anxiety. I also avoid alcohol and any other psychoactive substance. The effect of a psychoactive substance on a single performance could also be positive; but I feel like in the long run the negative effects would outweigh the positive ones, especially considering my particular case of stage fright, which has a psychological origin. For more about this topic I suggest you read Mehldau's essay *DRIVING AND PLAYING MUSIC* (2010), from his official web page.

8. CONCLUSION AND COMING SOON

That's all for now. More material is coming hopefully, to be sure not to miss anything go check out the Music Workouts Facebook page, or subscribe to my YouTube channel. One thing I'll like to explore in the near future is all the different ways to transform and connect musical ideas, in improvisation and composition. Simple ones, like augmentation and diminution, and more complex ones. For example, listen to Hancock's solo in *The Sorcerer* from *Speak Like a Child* (1968), from 2:44 until 2:54; he repeats his rhythmical idea with increasingly shorter pauses, raising the solo's intensity. I feel like the ways we modify ideas play such a big role in defining a good phrase, that it makes sense to concentrate directly on them. Another thing I'd like to concentrate on is a free improvisation workshop.

Thank you for reading, I hope you found something you like! If you have any comments or ideas you want to share with me, please contact me through the Music Workouts Facebook page (you can find the links in the Abstract, Page 2).

In the beginning (Page 4) we mentioned the wise Bill Evans (1966), stating that a serious jazz player is ultimately going to teach herself/himself. Everyone is different, therefore you have to make your own way. Don't waste you life doing something you don't like; keep it always interesting for yourself, it's the best way to learn.

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All The Things You Are Outro

Brad Mehldau Trio, The Art Of The Trio, Vol. 4
and Jazz Festival Vitoria-Gasteiz 2006 (YouTube video)

transcribed by Andrea La Mantia

♩ = 290-230

The score is for a piano accompaniment in 7/4 time, key of D major. It consists of four systems of two staves each (treble and bass clef). Measure 1 starts with a repeat sign and a fermata. Chords are AΔ/C# and D-11. Measure 2 has AΔ/C# and C6/9. Measure 3 has C#-9b6 and F7add4/C. Measure 4 has Bb6/9/D, Aadd4/C#, and E7/C#. The piece ends with a double bar line and repeat dots.

1 AΔ/C# D-11

3 AΔ/C# C6/9

5 C#-9b6 F7add4/C

7 Bb6/9/D Aadd4/C# E7/C#

Black Hole Sun

composed by Chris Cornell
played by Brad Mehldau Trio
transcribed by Andrea La Mantia

♩ = 44

E Δ G Δ #11 D Δ #11 C#-7

5

Csus B7sus E Δ D Δ #11 Gsus

9

Gsus Csus B7sus E Δ D Δ #11 Gsus

15

Csus B7sus A7 Badd4 Gsus x times

♩ = 167

free harmony x5 x5

D.S. with rep.
x times

Countdown drop2 voicings

♩ = 100

Andrea La Mantia

E-7 F9#11 BbΔ Db9 GbΔ#11 A7b9 DΔ

Musical notation for measures 1-4. Each measure contains a single chord voicing. The chords are: E-7, F9#11, BbΔ, Db9, GbΔ#11, A7b9, and DΔ. The notation is in 4/4 time, with the bass clef on the bottom staff and the treble clef on the top staff.

5 D-7 Eb13 AbΔ B13 EΔ G7alt. C%

Musical notation for measures 5-8. Each measure contains a single chord voicing. The chords are: D-7, Eb13, AbΔ, B13, EΔ, G7alt., and C%. The notation is in 4/4 time, with the bass clef on the bottom staff and the treble clef on the top staff.

9 C-7 Db9#11 GbΔ A13b9 D% F7alt. BbΔ

Musical notation for measures 9-12. Each measure contains a single chord voicing. The chords are: C-7, Db9#11, GbΔ, A13b9, D%, F7alt., and BbΔ. The notation is in 4/4 time, with the bass clef on the bottom staff and the treble clef on the top staff.

13 E-7 F9#11 F13 BbΔ#11 Bb6% Eb7alt. Eb13sus

Musical notation for measures 13-16. Each measure contains a single chord voicing. The chords are: E-7, F9#11, F13, BbΔ#11, Bb6%, Eb7alt., and Eb13sus. The notation is in 4/4 time, with the bass clef on the bottom staff and the treble clef on the top staff.

17 C#-7 D9#11 GΔ Bb9 EbΔ#11 F#7b9 BΔ

Musical notation for measures 17-20. Each measure contains a single chord voicing. The chords are: C#-7, D9#11, GΔ, Bb9, EbΔ#11, F#7b9, and BΔ. The notation is in 4/4 time, with the bass clef on the bottom staff and the treble clef on the top staff.

21 B-7 C13 FΔ Ab13 DbΔ E7alt. A%

Musical notation for measures 21-24. Each measure contains a single chord voicing. The chords are: B-7, C13, FΔ, Ab13, DbΔ, E7alt., and A%. The notation is in 4/4 time, with the bass clef on the bottom staff and the treble clef on the top staff.

25 A-7 B \flat 9 \sharp 11 E \flat Δ F \sharp 13 \flat 9 B \flat 9 D7alt. G Δ

29 C \sharp -7 D9 \sharp 11 D13 G Δ \sharp 11 G \flat 9 C7alt. C13sus

33 B \flat -7 B9 \sharp 11 E Δ G9 C Δ \sharp 11 E \flat 7 \flat 9 A \flat Δ

37 G \sharp -7 A13 D Δ F13 B \flat Δ D \flat 7alt. G \flat 9

41 F \sharp -7 G9 \sharp 11 C Δ E \flat 13 \flat 9 A \flat 9 B7alt. E Δ

45 B \flat -7 B9 \sharp 11 B13 E Δ \sharp 11 E \flat 9 A7alt. A13sus

49 G-7 A \flat 9 \sharp 11 D \flat Δ E9 A Δ \sharp 11 C7 \flat 9 F Δ

53 F-7 F#13 B Δ D13 G Δ Bb7alt. Eb6%

57 Eb-7 E9#11 A Δ C13b9 F% Ab7alt. Db Δ

61 G-7 Ab9#11 Ab13 Db Δ #11 Db% Gb7alt. Gb13sus

65 C-7 Db9#11 Gb Δ A9 D Δ #11 F7b9 Bb Δ

69 Bb-7 B13 E Δ G13 C Δ Eb7alt. Ab6%

73 Ab-7 A9#11 D Δ F13b9 Bb% Db7alt. Gb Δ 8va-----

77 C-7 Db9#11 Db13 Gb Δ #11 Gb% B7alt. B13sus

81 A-7 Bb9#11 EbΔ F#9 BΔ #11 D7b9 GΔ

85 G-7 Ab13 DbΔ E13 AΔ C7alt. F%9

89 F-7 F#9#11 BΔ D13b9 G%9 Bb7alt. EbΔ

93 A-7 Bb9#11 Bb13 EbΔ #11 Eb%9 Ab7alt. Ab13sus

97 F#-7 G9#11 CΔ Eb9 AbΔ #11 B7b9 EΔ

101 E-7 F13 BbΔ Db13 GbΔ A7alt. D%9

105 D-7 Eb9#11 AbΔ B13b9 E%9 G7alt. CΔ

109 F#-7 G9#11 G13 CΔ#11 C% F7alt. F13sus

113 Eb-7 E9#11 AΔ C9 FΔ#11 G#7b9 C#Δ

117 C#-7 D13 GΔ Bb13 EbΔ F#7alt. B%

121 B-7 C9#11 FΔ G#13b9 C#% E7alt. AΔ

125 Eb-7 E9#11 E13 AΔ#11 A% D7alt. D13sus

129 G#-7 A9#11 DΔ F9 BbΔ#11 Db7b9 GbΔ

133 F#-7 G13 CΔ Eb13 AbΔ B7alt. E%

137 E-7 F9#11 BbΔ Db13b9 Gb% A7alt. DΔ

141 G#-7 A9#11 A13 DΔ#11 D% G7alt. G13sus

145 F-7 F#9#11 BΔ D9 GΔ#11 Bb7b9 EbΔ

149 Eb-7 E13 AΔ C13 FΔ Ab7alt. Db%

153 C#-7 D9#11 GΔ Bb13b9 Eb% F#7alt. BΔ

157 F-7 F#9#11 F#13 BΔ#11 B% E7alt. E13sus

161 D-7 Eb9#11 AbΔ B9 EΔ#11 G7b9 CΔ

165 C-7 Db13 GbΔ A13 DΔ F7alt. Bb6%

169 Bb-7 B9#11 EΔ G13b9 C6% Eb7alt. AbΔ

173 D-7 Eb9#11 Eb13 AbΔ#11 Ab6% Db7alt. Db13sus

177 B-7 C9#11 FΔ Ab9 DbΔ#11 E7b9 AΔ

181 A-7 Bb13 EbΔ F#13 BΔ D7alt. G6%

185 G-7 Ab9#11 DbΔ E13b9 A6% C7alt. FΔ

189 B-7 C9#11 C13 FΔ#11 F6% Bb7alt. Bb13sus

Giant Steps

upper structures voicings

Andrea La Mantia

BA D7#11 GΔ Bb7^{b13}₉ EbΔ #11 A-7 D7^{#11}₉ GΔ Bb13^{b9} EbΔ #11 F#7^{#11}₉

7 BA F-7 Bb7^{#11}₉ EbΔ #11 A-7 D7^{b13}₉ GΔ C#-7 F#13^{#11} BΔ #11

14 F-7 Bb7^{#11}₉ EbΔ EbΔ #11 C#-13 F#13^{b9} F-7 Bb7^{#11}₉ EbΔ EbΔ #11 C#-13 F#7^{b13}₉

8^{va} AbΔ B7^{#11} EΔ G7^{b13}₉ CΔ #11 F#-7 B7^{#11}₉ EΔ G13^{b9} CΔ #11 Eb7^{#11}₉

AbΔ D-7 G7^{#11}₉ CΔ #11 F#-7 B7^{b13}₉ EΔ Bb-7 Eb13^{#11} AbΔ #11

D-7 G7^{#11}₉ CΔ CΔ #11 Bb-13 Eb13^{b9} D-7 G7^{#11}₉ CΔ CΔ #11 Bb-13 Eb7^{b13}₉

FΔ Ab7#11 DbΔ E7b13 AΔ#11 Eb-7 Ab7#11 DbΔ E13b9 AΔ#11 C7#11

8va-----

First system of musical notation, piano accompaniment. It consists of two staves (treble and bass clef). The music features a series of chords: FΔ, Ab7#11, DbΔ, E7b13, AΔ#11, Eb-7, Ab7#11, DbΔ, E13b9, AΔ#11, and C7#11. A repeat sign with a first ending bracket is present at the end of the system.

(8)

FΔ B-7 E7#11 AΔ#11 Eb-7 Ab7b13 DbΔ G-7 C13#11 FΔ#11

Second system of musical notation, piano accompaniment. It consists of two staves. The music features a series of chords: FΔ, B-7, E7#11, AΔ#11, Eb-7, Ab7b13, DbΔ, G-7, C13#11, and FΔ#11. A repeat sign with a first ending bracket is present at the end of the system.

8va-----

(8)

B-7 E7#11 AΔ AΔ#11 G-13 C13b9 B-7 E7#11 AΔ AΔ#11 G-13 C7b13

Third system of musical notation, piano accompaniment. It consists of two staves. The music features a series of chords: B-7, E7#11, AΔ, AΔ#11, G-13, C13b9, B-7, E7#11, AΔ, AΔ#11, G-13, and C7b13. A repeat sign with a first ending bracket is present at the end of the system.

DΔ F7#11 BbΔ Db7b13 GbΔ#11 C-7 F7#11 BbΔ Db13b9 GbΔ#11 A7#11

Fourth system of musical notation, piano accompaniment. It consists of two staves. The music features a series of chords: DΔ, F7#11, BbΔ, Db7b13, GbΔ#11, C-7, F7#11, BbΔ, Db13b9, GbΔ#11, and A7#11. A repeat sign with a first ending bracket is present at the end of the system.

DΔ Ab-7 Db7#11 GbΔ#11 C-7 F7#13 BbΔ E-7 A13#11 DΔ#11

Fifth system of musical notation, piano accompaniment. It consists of two staves. The music features a series of chords: DΔ, Ab-7, Db7#11, GbΔ#11, C-7, F7#13, BbΔ, E-7, A13#11, and DΔ#11. A repeat sign with a first ending bracket is present at the end of the system.

Ab-7 Db7#11 GbΔ GbΔ#11 E-13 A13b9 Ab-7 Db7#11 GbΔ GbΔ#11 E-13 A7b13

Sixth system of musical notation, piano accompaniment. It consists of two staves. The music features a series of chords: Ab-7, Db7#11, GbΔ, GbΔ#11, E-13, A13b9, Ab-7, Db7#11, GbΔ, GbΔ#11, E-13, and A7b13. A repeat sign with a first ending bracket is present at the end of the system.

GA Bb7#11 EbΔ F#7^b₉¹³ BΔ #11 F-7 Bb7^b₉¹¹ EbΔ F#13^b₉ BΔ #11 D7^b₉¹¹ 3

⑧

GA C#-7 F#7^b₉¹¹ BΔ #11 F-7 Bb7^b₉¹³ EbΔ A-7 D13^b_{11 GΔ #11}

⑧

C#-7 F#7^b₉¹¹ BΔ BΔ #11 A-13 D13^b₉ C#-7 F#7^b₉¹¹ BΔ BΔ #11 A-13 D7^b₉¹³

⑧

EΔ G7#11 CΔ Eb7^b₉¹³ AbΔ #11 D-7 G7^b₉¹¹ CΔ Eb13^b₉ AbΔ #11 B7^b₉¹¹

⑧

EΔ Bb-7 Eb7^b₉¹¹ AbΔ #11 D-7 G7^b₉¹³ CΔ F#-7 B13^b_{11 EΔ #11}

Bb-7 Eb7^b₉¹¹ AbΔ AbΔ #11 F#-13 B13^b₉ Bb-7 Eb7^b₉¹¹ AbΔ AbΔ #11 F#-13 B7^b₉¹³

Db Δ E7 $\#11$ A Δ C7 $\flat13$ ₉ F Δ $\#11$ B-7 E7 $\#11$ ₉ A Δ C13 $\flat9$ F Δ $\#11$ Ab7 $\#11$ ₉

Db Δ G-7 C7 $\#11$ ₉ F Δ $\#11$ B-7 E7 $\flat13$ ₉ A Δ Eb-7 Ab13 $\#11$ Db Δ $\#11$

G-7 C7 $\#11$ ₉ F Δ F Δ $\#11$ Eb-13 Ab13 $\flat9$ G-7 C7 $\#11$ ₉ F Δ F Δ $\#11$ Eb-13 Ab7 $\flat13$ ₉

B \flat Δ Db7 $\#11$ G \flat Δ A7 $\flat13$ ₉ D Δ $\#11$ Ab-7 Db7 $\#11$ ₉ G \flat Δ A13 $\flat9$ D Δ $\#11$ F7 $\#11$ ₉

B \flat Δ E-7 A7 $\#11$ ₉ D Δ $\#11$ Ab-7 Db7 $\flat13$ ₉ G \flat Δ C-7 F13 $\#11$ B \flat Δ $\#11$

E-7 A7 $\#11$ ₉ D Δ D Δ $\#11$ C-13 F13 $\flat9$ E-7 A7 $\#11$ ₉ D Δ D Δ $\#11$ C-13 F7 $\flat13$ ₉ Eb Δ F7 $\#11$

B Δ D7 \flat 13 $_9$ G Δ #11 C#-7 F#7 \sharp 11 $_9$ B Δ D13 \flat 9 G Δ #11 B \flat 7 \sharp 11 $_9$ E \flat Δ

A-7 D7 \sharp 11 $_9$ G Δ #11 C#-7 F#7 \flat 13 $_9$ B Δ F-7 B \flat 13 \sharp 11 E \flat Δ #11

A-7 D7 \sharp 11 $_9$ G Δ G Δ #11 F-13 B \flat 13 \flat 9 A-7 D7 \sharp 11 $_9$ G Δ G Δ #11 F-13 B \flat 7 \flat 13 $_9$ C Δ E \flat 7 \sharp 11

A \flat Δ B7 \flat 13 $_9$ E Δ #11 B \flat -7 E \flat 7 \sharp 11 $_9$ A \flat Δ B13 \flat 9 E Δ #11 G7 \sharp 11 $_9$ C Δ

F#-7 B7 \sharp 11 $_9$ E Δ #11 B \flat -7 E \flat 7 \flat 13 $_9$ A \flat Δ D-7 G13 \sharp 11 C Δ #11

F#-7 B7 \sharp 11 $_9$ E Δ E Δ #11 D-13 G13 \flat 9 F#-7 B7 \sharp 11 $_9$ E Δ E Δ #11 D-13 G7 \flat 13 $_9$

A Δ C7 $\#11$ F Δ Ab7 $\flat13$ ₉ Db Δ $\#11$ G-7 C7 $\#11$ F Δ Ab13 $\flat9$ Db Δ $\#11$ E7 $\#11$ ₉

A Δ Eb-7 Ab7 $\flat11$ ₉ Db Δ $\#11$ G-7 C7 $\flat13$ ₉ F Δ B-7 E13 $\#11$ A Δ $\#11$

Eb-7 Ab7 $\#11$ ₉ Db Δ Db Δ $\#11$ B-13 E13 $\flat9$ Eb-7 Ab7 $\#11$ ₉ Db Δ Db Δ $\#11$ B-13 E7 $\flat13$ ₉

G \flat Δ A7 $\#11$ D Δ F7 $\flat13$ ₉ B \flat Δ $\#11$ E-7 A7 $\#11$ ₉ D Δ F13 $\flat9$ B \flat Δ $\#11$ Db7 $\#11$ ₉

8va-----

G \flat Δ C-7 F7 $\#11$ ₉ B \flat Δ $\#11$ E-7 A7 $\flat13$ ₉ D Δ Ab-7 Db13 $\#11$ G \flat Δ $\#11$

C-7 F7 $\#11$ ₉ B \flat Δ B \flat Δ $\#11$ Ab-13 Db13 $\flat9$ C-7 F7 $\#11$ ₉ B \flat Δ B \flat Δ $\#11$ Ab-13 Db7 $\flat13$ ₉

8va-----

Goodbye, Storyteller (For a Film)

Exit Music (For Fred Myrow)

compositions by Brad Mehldau / Radiohead
 arrangement by Andrea La Mantia

♩ = 57

A at some point after the first ending: piano solo

B D#+7/B G#-/B E-6/B

5 B F+7/B EΔ#11/B D#7b5/A#

9 G#- E-Δ B/F# D#+7/G

13 EΔ/G# D#7/A# G#- E-6

17 B C/B7 C#7/B 1. E-6/B E-6/A#

21 A∅ G#7 C-/G F#7#11 2. E-6/B

26 B B-6 C#7/B C7/B D.C. with rep.

Bridge

30 B B-6 C#7/B C7/B

34 B- Bsus2 Bsus4 B- Bsus2 Bsus4

38 **B** B- F# D/A Eadd4/G#

42 B- F# Bsus4 B

46 **C** A-add4 E7/G# 3 Bsus2 B-

50 Bsus2 Bsus4/E B-/D F#7sus F#

54 **B1** B- F# D/A Eadd4/G#

58 B- F# Bsus4 B

62 **D** crescendo B- C# F#7

65 G C F#7 repeat D part x times (guitar solo)

70 **B2** KA-BOOMM!

B- F# D Eadd4 E-

74 calm now

B- F# Bsus4 B

Bridge 1

78 B B-6 C#7/B C7/B

82 distorted guitar
bass with harmonics?

E B C#7/B D#/B F/B

86 more!

G/B A/B B C#7/B

90 KA-BOOOMM!

D#/B F/B G/B A/B

94 calm now

C-11 G-11

98 rall.

C7/B B C7/B B

London Blues

composed by Brad Mehldau
sheet by Andrea La Mantia

♩ = 280

A

Ebsus4

D7#9

Db9sus C13sus

B9

Musical notation for measures 1-4 of section A. The piece is in 4/4 time with a key signature of one flat (Bb). The notation includes a treble clef and a bass clef. The melody in the treble clef starts with a quarter note G4, followed by eighth notes A4, Bb4, and C5. The bass line features a walking bass pattern with quarter notes G2, F2, E2, and D2. Chords are indicated above the staff: Ebsus4, D7#9, Db9sus, C13sus, and B9.

5

BΔ

D%

F#%

AΔ#11

D7#9



Musical notation for measures 5-8 of section A. The melody continues with quarter notes D5, E5, and F#5. The bass line has quarter notes C3, B2, A2, and G2. Chords are indicated above the staff: BΔ, D%, F#%, AΔ#11, and D7#9.

9

Ab13sus Db9add4

piano fills

Ab13sus

Db9add4

Musical notation for measures 9-12 of section A. The melody has a whole note G4. The bass line has quarter notes F2, E2, D2, and C2. Chords are indicated above the staff: Ab13sus, Db9add4, Ab13sus, and Db9add4. The text 'piano fills' is written above the staff between measures 9 and 10.

13

Ab13sus Db9add4

piano fills

Ab13sus

Db9add4

C13sus

Musical notation for measures 13-16 of section A. The melody has a quarter note G4, followed by eighth notes A4, Bb4, and C5. The bass line has quarter notes B1, A1, G1, and F1. Chords are indicated above the staff: Ab13sus, Db9add4, Ab13sus, Db9add4, and C13sus. The text 'piano fills' is written above the staff between measures 13 and 14.

17

B

BΔ#11

D-11

Db9add4

F#%

B%

AbΔ9/C

B13#11

Musical notation for measures 17-20 of section B. The melody has a quarter note G4, followed by eighth notes A4, Bb4, and C5. The bass line has quarter notes F2, E2, D2, and C2. Chords are indicated above the staff: BΔ#11, D-11, Db9add4, F#%, B%, AbΔ9/C, and B13#11.

21 $Bb9add4$ $8va^{--1}$

solos start (free)
bass starts walking

after B solos continue on a blues-like structure;
between solos play B, after last solo: **D.C. al Coda**
after repeat

25

29 C $Ab13sus$ $Db9add4$ piano fills $Ab13sus$ $Db9add4$

33 $Ab13sus$ $Db9add4$ piano fills $Ab13sus$ $Db9add4$ 1.

37 $Db9add4$ $C13sus$ 15^{ma} 8^{vb}

Wind

John Ronald Reuel Tolkien

Andrea La Mantia

♩ = 63 *Light*

SOPRANO

ALTO *p*

TENOR

BASS

The wind was on the with-ered heath, but in the for-est stirred no leaf:

5

pp

The

pp

there shad-ows lay by night and day, and dark things si-lent crept be-neath. The *p melody*

The *pp*

The

wind came down from moun-tains cold, and like a tide it roared and rolled; the

wind came down from moun-tains cold, and like a tide it roared and rolled; the

wind came down from moun-tains cold, and like a tide it roared and rolled; the

wind came down from moun-tains cold, and like a tide it roared and rolled; the

branch es_ groaned, the for - est moaned, and leaves were laid__ up - on the mould. The *p*

branch es_ groaned, the for - est moaned, and leaves were laid__ up - on the mould. The *p*

branch es_ groaned, the for - est moaned, and leaves were laid__ up - on the mould. The *mp* melody

branch es_ groaned, the for - est moaned, and leaves were laid__ up - on the mould. The *mp* melody

wind went on from West to East; all move-ment in the for - est ceased,

wind went on from West to East; all move-ment in the for - est ceased,

wind went on from West to East; all move-ment in the for - est ceased,

wind went on from West to East; all move-ment in the for - est ceased,

but shrill and harsh a - cross the marsh its whis-ting voic - es__ were re-leased. The *mp*

but shrill and harsh a - cross the marsh its whis-ting voic - es__ were re-leased. The *mf* melody

but shrill and harsh a - cross the marsh its whis-ting voic - es__ were re-leased. The *mp*

but shrill and harsh a - cross the marsh its whis-ting voic - es__ were re-leased. The

grass - es hissed, their tas - sels bent, the reeds were rat - tling on it went

grass - es hissed, their tas - sels bent, the reeds were rat - tling on it went

grass - es hissed, their tas - sels bent, the reeds were rat - tling on it went

grass - es hissed, their tas - sels bent, the reeds were rat - tling on it went

29

o'er shak-en pool un-der heav-ens cool where rac-ing clouds were torn and rent. It *f melody*

o'er shak-en pool un-der heav-ens cool where rac-ing clouds were torn and rent. It

o'er shak-en pool un-der heav-ens cool where rac-ing clouds were torn and rent. It *mf*

o'er shak-en pool un-der heav-ens cool where rac-ing clouds were torn and rent. It *mf*

33

passed the lone - ly Moun-tain bare and swept a - bove the drag-on's lair:

passed the lone - ly Moun-tain bare and swept a - bove the drag-on's lair:

passed the lone - ly Moun-tain bare and swept a - bove the drag-on's lair:

passed the lone - ly Moun-tain bare and swept a - bove the drag-on's lair:

out of time
ff **p**

there black and dark lay boulders stark, and flying smoke was in the air. It

out of time
f

there black and dark lay boulders stark, and flying smoke was in the air.

out of time
f

there black and dark lay boulders stark, and flying smoke was in the air.

out of time
f

there black and dark lay boulders stark, and flying smoke was in the air.

left the world and took its flight o - ver the wide seas of the night. The

pp

Uu

pp

Uu

pp

Uu

moon set sail up - on the gale, and stars were fanned to leap - ing light.

Uu

Uu

Uu

Uu

Uu

Uu

Wind - Reduction

John Ronald Reuel Tolkien

Andrea La Mantia

♩ = 63 *Light 2.*

SOPRANO
ALTO

The wind was on the with-ered heath, but in the for-est stirred no leaf:

TENOR
BASS

5 there shad-ows lay by night and day, and dark things si-lent crept be-neath. The a2

9 a2 a2
wind came down from moun-tains cold, and like a tide it roared and rolled; the a2

13 a2
branch es__ groaned, the for - est moaned, and leaves were laid__ up - on the mould. The a2

17 a2 a2
wind went on from West to East; all move-ment in the for - est ceased,

21
but shrill and harsh a - cross the marsh its whis-ting voic - es__ were re leased. The a2

25

grass - es hissed, their tas - sels bent, the reeds were rat - tling on it went

29

o'er shak-en pool un der heav-ens cool where rac-ing clouds were torn and rent. It

33

passed the lone - ly Moun-tain bare and swept a - bove the drag-on's lair:

37

there black and dark lay boul-ders stark, and flying smoke was in the air. It

out of time

41

left the world and took its flight o - ver the wide seas of the night. The

Uu

45

moon set sail up - on the gale, and stars were fanned to__ leap - ing light.

Uu

Uu

Wonderwall

Brad Mehldau Trio's version

composed by Noel Gallagher (Oasis)
sheet by Andrea La Mantia

Intro

Bass riff (see ending)

Drums enter

8

8

Musical notation for the Intro section, showing a 4/4 time signature and two measures of a bass riff.

17

A Bass plays riff or varies it and improvises on E- pentatonic (blues)

Musical notation for the first system of the main section, measures 17-20. Chords: E7no3, Eo7, A-, E.

21

Musical notation for the second system of the main section, measures 21-24. Chords: Gsus4, B, Fsus4, A.

25

Musical notation for the third system of the main section, measures 25-28. Chords: C-, A7, C13, Eadd4.

29

Musical notation for the fourth system of the main section, measures 29-32. Chords: A7, Ab7#5, G13. First ending bracket.

Musical notation for the second ending, measures 31-32.

34 **B** C% D9sus Esus4 E-

38 C% D9sus Esus4 E-

42 C% D9sus G D/F# G/E Gsus2/D

Bass plays chords

46 A7sus A

50 **C** C E- G E-

54 C E- G E-

58 C E- G E-

62 C E- G E- Drums' fill 3 Bass riff starts 16

Then solos on A, then B, C, in the end riff unisono and drum solo

Bass riff

“Easier” way to think the bass riff?