

An abstract painting of a piano, rendered in a highly expressive, painterly style. The piano is the central subject, with its keyboard and keys visible in the lower right. The background is a vibrant, multi-colored composition of brushstrokes in shades of blue, green, yellow, orange, and red, creating a sense of movement and energy. The overall effect is one of a musical instrument brought to life through color and texture.

SOUND & COLOR

Boris Giltburg





ABOUT THE ARTIST

Moscow-born, Israeli pianist Boris Giltburg is lauded across the globe as a deeply sensitive, insightful and compelling interpreter. At home in a broad range of repertoire, in recent years he has been increasingly recognized as a leading interpreter of Rachmaninov. To celebrate the Beethoven anniversary in 2020, Giltburg embarked upon a unique project to record and film all 32 of Beethoven's piano sonatas across the year, blogging about the process as it unfolded, and releasing it on Naxos (where he has released award-winning albums by Schumann, Liszt, Shostakovich, and more.)

He regularly plays recitals in the world's most prestigious halls. In 2021-2023 he plays the complete solo works of Ravel at Wigmore Hall and in Brussels at BOZAR and Flagey, also performing part of the cycle at the Amsterdam Muziekgebouw. In Autumn 2021 he curates the chamber music series of the Dvorak Prague Festival. He has collaborated with countless major orchestras worldwide.

Giltburg's blog "Classical music for all" is aimed at a non-specialist audience, and he complements it with articles in publications such as Gramophone, BBC Music Magazine, Guardian, Times and Fono Forum. During the lockdown period in spring 2020, Giltburg regularly streamed live performances and masterclasses from home; to this date these streams received more than 1 million views.

What does color mean on the piano? Giltburg recalls a conversation with a teacher who told him the piano sound had only one color. This frustrated him because it went against what he knew instinctively to be true, though he could not respond at the time. While it is true that strings can play sul ponticello and woodwinds can play brighter or darker, the piano has a tremendous variety in color too, and we can access them by exploring the full spectrum of sound production. Color is practiced in the methods by which we bring the sound in our imagination to life.

This course first explores the physical mechanisms behind sound production. Second is looking at the score and imagining the possibilities inherent in the music, trying them out, and selecting the best one. The third is applying the physical mechanisms we learned about in part I to the specific use cases we've selected. **In short: what can we manipulate, what does music call for, and how do we apply it to specific pieces?**

In real life, this process is organic. We can start anywhere in the cycle, and we'll continue moving through it as we learn more. We create a feedback loop of experimentation and self-analysis that allows us to improve perpetually.

Color and sound can be very memorable for the audience. Now, the color of a singer's voice is probably easier to identify than the specific color of a pianist, but there are certain colors we associate with Horowitz or Gould that set them apart. It's the beauty or the ugliness or a particular sound that's what we remember after leaving the concert hall.

a pianist's physical toolkit

WATCH LESSON

levers

The first step of sound production is knowing our body: what are the parts of the hand, what do they do to sound, and how do we use them? Our toolkit is not large, but it is modular – we can use them in various quantities.

To play the piano, we must transmit energy from our bodies to the strings of the piano. There are two levers involved in this transfer of energy: the first is from the key to the piano string, and the second is our arm and hand.

The first lever is the easiest to manipulate. The farther up we go on the key (toward the fallboard), the more energy we need to obtain the same dynamic. From this perspective, it is to our advantage to play as close to the edge of the key as possible, especially for the black keys.

The second lever is a bit more complicated. We can actually control the length of this lever by tensing or “blocking” certain muscles in the body. The lever begins at the tip of the finger and works backward through the hand, wrist, elbow, forearm, shoulder, and shoulder blades (upper back). If, for example, we tense the wrist, we are only using the muscles below the wrist in the lever. If the wrist is loose and the elbow is tense, the wrist becomes part of the lever. When the arm is completely relaxed, the sound comes from the shoulder blades.

As a general rule, the shorter your lever, the harsher your sound will be in loud passages. For the roundest sound, assume the default position of a “relaxed noodle” with the arm. The objective is to get as close as possible to complete relaxation with the arm (this is not 100% possible; otherwise, it would literally hang limp) while allowing us to retain control. Connect your fingertip to the key and allow the arm to continue its downward motion. Any motion after we strike the key is not changing the sound – so there is no purpose for further tension after depressing the key.

Another way to ensure the relaxation of the hand after playing a key is to introduce a “shock absorbing” motion. This is a slight motion to the right (if using the right hand) or left (if using the left hand) of the wrist and elbow during playing. This allows us to produce sound all the way from the shoulder blades.

Try this:

Make three to four relaxed circles with the arm and then play a single note at the keyboard.

Make sure the arm doesn’t tense up after striking the key, and continue the downward motion of the arm using a shock-absorbing motion. Aim for the warmest, roundest sound possible.

Then, repeat with a C major chord at various dynamic levels. Even playing very loud, the sound should not be harsh.



fingertips

The fingertips aren't often discussed in piano playing. What is wrong with simply using the weight of the hand to push the finger onto the key? The key issue with a sound that doesn't come from the fingertips is that it doesn't project and it lacks a strong core. This sort of sound will stop a few meters in front of you.

The image Giltburg uses to convey this concept is to imagine that you have teeth at the rounded tip of your fingers. These teeth bite or pinch the key while playing. Playing staccato with an entirely relaxed arm is a great way to practice this. Activate the fingertip by biting the key, generating a short, powerful impulse. Try this pinching motion on the other palm to see it up close.

The physical difference is that the finger is no longer functioning as a solid unit. We are taking advantage of the independence of the finger joints to maintain a relaxed yet active hand.

This is the fundamental method of sound production for all repertoire (with a few rare exceptions), and it doesn't only apply to staccato. We can bite the key while playing legato, too.

weight

The final element is that of weight; how much weight do we allow to fall onto the hand? Try playing with a heavy and a light hand, independent of active fingertips or the size of your lever.

imagining sound

WATCH LESSON

This step lies in the imagination. We aren't often aware of it because it usually happens as we're at the keyboard, but it doesn't have to. We can use our imagination when looking at a score or even just thinking about a piece.

The first question to ask ourselves is whether a passage should concern itself with sound at all. Is this passage mostly about phrasing, dynamics, or texture? Or is sound a key component? A good example is the opening of Beethoven's Fourth Concerto. We all imagine a different sound for this G major chord, but we'd all agree that the first sound the audience hears is critical!

Giltburg thinks this should be a soft, indirect sound, with an upper voice more resonant than the lower voices. You might imagine this as something entirely different, and that's ok! What's important is that we imagine something so we can take steps to realize it.

A different example is the opening of Rachmaninoff's C-sharp minor prelude. If we agree that these notes are bells, the question becomes how to make a string instrument activated by percussion sound like a bell. If we imagine a heavy, dull object crashing into the ground, we'd apply much different sound production elements.



In the second theme of Chopin's first ballade, he writes pianissimo and sotto voce ("under the voice"). We might translate this as half-spoken, half-played – a special sound. What would Chopin want here, and what do we see in this music? Should the upper melody float above the rest of the line? Is it coming from afar? How is a pianissimo sotto voce different from just one or the other? These are the questions we ask to approach a technical solution.

Without taking the time to think these ideas through, we might stumble onto the right sound by accident, but it won't necessarily be using the full potential of emotional and lyrical expression.

The image displays a musical score for Chopin's first ballade, specifically measures 65 through 70. The score is written for piano and features a key signature of two flats (B-flat major). The tempo and dynamics are marked as *meno mosso* and *sotto voce* (pp). The score includes various musical notations such as notes, rests, and dynamic markings like *ritenuto* and *pp*. The score is divided into two systems, with measures 65-69 on the first system and measures 70-74 on the second system. The notation includes a variety of note values, rests, and articulation marks, as well as a *ritenuto* marking and a *meno mosso sotto voce* tempo change. The score is presented in a clear, professional layout with a white background and black notation.

The final step in the process is applying the physical principles to our imaginative concepts to realize the vision. Let's start with the opening of Clair de lune and imagine two different sounds: the first is "crystalline and jewel-like," while the other is "dreamy and cloudy." How are they different, and how are they achieved?

Crystalline and jewel-like (clear, bright, present):

A lot of finger activity and a lot of weight, though soft and relaxed with the arm. Voicing is also often a question – the upper voice in Clair de lune should be more present, so heavier.

Dreamy and cloudy:

Relaxed and light hand, with fingers still engaged but only at the bare minimum. The hand caresses the key very gently.

These classifications are not binary. It's never "weight vs. no weight," but always "how much weight?"

Bell-like sound:

For the opening of the C-sharp minor prelude by Rachmaninoff, a bell-like sound comes from a very wide shock-absorbing motion utilizing the full power of the shoulder blades.

While we can't affect the sound after we press the key, shock-absorbing movements do impact the quality of sound because, at the moment of contact with the key, the hand is softer and less rigid, resulting in a less harsh sound.

Sharp attacks:

If we wanted a very harsh attack, we could minimize our shock-absorbing motion and make precise contact with the key. We may even tense up the arms.

“Magical” sound in Chopin:

There are no easy answers for this Chopin *sotte voce* passage. The fingers should softly caress the keys, the arm should stay relaxed, and quite a bit of weight should be added. This is in contrast to *Clair de lune*, which is mostly attack; here, we want a much softer attack.

projecting into a hall

The finger activity also impacts the projection of our sound. Regardless of repertoire or size of the hall, finger activity is essential so that your sound is heard. It's just like a singer using their diaphragm to control their air.



sound study no. 1:

bach: sinfonia no. 11 in G minor, BWV 797

[WATCH LESSON](#)

How can we apply the various elements we discussed before to this piece? Given the instruments of Bach's day and the polyphonic writing, we don't need to apply the weight of our entire body to the keys. However, we can still work down from the forearms.

All three voices play the opening motive at some point, so we'll want to separate the voices to distinguish them when important. Is this purely keyboard music or an imitation of strings? Or singers? Given the wide leaps in the phrase, this is likely pure instrumental music.

Let's assign the upper line to the oboe and the middle line to a violin or viola. The woodwind gets a very direct attack, the middle voice a bit softer. There are, of course, other possibilities, but this is an orchestration typical of Bach's time.

"We don't need to force an image on the music if the image doesn't survive contact with reality." Sometimes our mental images won't work. Perhaps the solution instead involves dynamics, separation, subtle agogics, or something else. Just keep trying!

Try This:

Film yourself while playing this piece, and then analyze yourself. Confronting your playing is uncomfortable at first, but being able to get immediate feedback is paramount to our improvement. Once we are aware of the gap between how we think we sound and how we actually sound, we can take actions to fix the issues. This is an iterative process – you won't solve any problems by recording and listening just once.

sound study no. 2:

beethoven: sonata no. 28, op. 101

in A major

WATCH LESSON

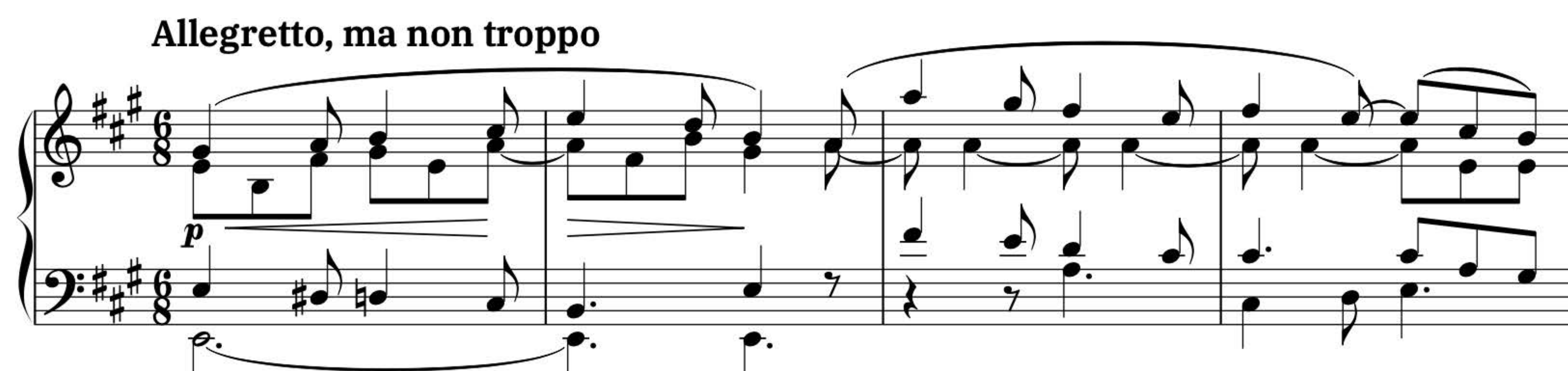
This sonata is incredibly beautiful and tender, though incredibly difficult. How do we make it sound as natural as breath or the flowing of water?

We can use more weight and body than in Bach – there is a wider range used, and Beethoven's imagination had expanded by this point in his career, though the dynamics are more restricted. The texture is polyphonic, like Bach, but the voices aren't entirely independent.

The top line must be a singing melody. What do we do with the inner voice – the repeating A? It might be a bell, in which case we want a large shock-absorbing motion. The octave leap might be crystalline, in which case we use a straightforward attack. Tempo has a range of options, as does the exact dynamic, and we could even try a very direct, stately sound.

Try This:

Record yourself playing very short passages of the piece. This helps us address basic conceptual questions that we can later apply to an entire movement. Remember to also listen for things you like – this way, you can preserve those elements on your next attempt.



sound study no. 3:

liszt: sonata in b minor, s. 178

[WATCH LESSON](#)

What to do with this thick, chordal passage? Most importantly, the melody must be distinguished from the other six or so notes in each chord. Giltburg buckets our two options into bombastic or glowing (and he prefers the latter). He pictures a sunset, like a scene in a movie, where the sun fills the screen, and you're rejoicing.

A glowing approach needs a rounded sound, a huge shock-absorbing motion, a very relaxed arm that uses the entire body, and leaning forward to apply the body's weight to the key. Even though there are many chords, we must apply these movements to each one. To help the upper layer separate from the rest, we have to make the chords quite a bit softer (not an issue of color as much as finger independence). Playing fortissimo for every single note simply won't allow the melody to be heard unless we played it so biting and metallic that the sound was poor.

A metallic, percussive sound is also possible for this passage, achieved with a more fixed upper arm and minimal shock-absorbing motion.

Try This:

The quality of feedback you get from your phone depends on the room you're playing in. In a large hall, the small microphone in a phone reacts differently than in your living room. Putting your phone farther out in a hall or your room can help you hear closer to what an audience might hear.

Grandioso (♩ = 66)

13

sound study no. 4:

scriabin: etude in b major, op. 8 no. 4

[WATCH LESSON](#)

There's a passionate melody in the middle section with a very interesting harmonic transformation, one that we can reflect in our color.

We likely all feel the need to separate the melody from the accompaniment. The intervals in the melody are vocal, as if each step has a feeling of resistance. At the same time, we want a present and full-bodied sound to contrast how light the beginning of the etude was. We cannot experience surprise unless we have something to contrast it with.

Another option is to treat the main line as singing and light. Giltburg fears this might lose the element of surprise, even though Scriabin did write the word "cantabile." A full-bodied singing sound calls for a very heavy and relaxed arm, with fingers actively caressing the keys. Then, when we come to the moment of transformation, create transparency by using less weight and a little pedal.



sound study no. 5:

prokofiev, piano sonata no. 7 in B \flat major, Op. 83

[WATCH LESSON](#)

The sound world Prokofiev creates here is dry, mechanical, and percussive. It's one of the only examples in the repertoire where an ugly sound is entirely warranted (the last two or three bars). Giltburg has a vivid image of someone evil coming to knock at your door, though the opening bars could be more lyrical.

Play with extremely active fingers without a softness in the forearm – as if you have “fingers of steel.” Practice these opening bars staccatissimo to get an angry bite on the keys. Lock the elbow and forearm for the final explosion, and hit the piano as hard as you can. We can show the stretto in the opening bars by accenting the left-hand entrance and creating a crescendo. He also brings the sound down just before the explosion to bring down the tension and create more surprise.

