Solving Technical Problems
*With a Definitive List of Practice Hacks**

This article is the second in a series adapting How to Practice *workshops I led for classical and traditional musicians in the Washington, D.C., area in 2017.*

In the first article we filled a column with about 30 different practice goals you might have. Now let's get specific, and start with one of the most universal ones: at some time or another, everyone practices to solve technical problems.

*In this article we'll discuss a problem-solving process and help you start your collection of Practice Hacks.**

***Hack: "an appropriate application of ingenuity." The Meaning of "Hack" / Hacker Folklore**

Houston, we have a problem.... (photo courtesy of Sarah Jeffery/Team Recorder, www.youtube.com/SarahBlokfluit)

How do you know you've got a problem?

Most people find this out the first time they try to play through a new piece at performance tempo, and they hit a snag. Some snags work themselves out with repetition; snags that don't disappear get elevated to **problem status**. Perhaps you've got a nearby teacher with a ready supply of good suggestions, but it never hurts to have your own cache of possible fixes.

This is just to say: we're concentrating on problems that appear in a specific piece of music, not ongoing personal flaws, though there might be some overlap. Here's my short list of sample problems: fast runs, hard skips, tongue-twisting articulations, tricky ornaments, difficult fingerings, extended techniques. What would you add?

First we'll look at a useful seven-step method to address problems like these. Later in this article, we'll check out a way to understand a piece of music before you practice, which can help you figure out what and how to practice.

By Tina Chancey

Tina Chancey is director of HESPERUS, which performs early music soundtracks for classic silent films. Currently known for her work with early bowed strings, particularly viol and pardessus de viole, she has also played recorders, shawm, krumhorn and rauschpfeife with her late husband Scott Reiss in the Folger Consort at the Folger Shakespeare Library in Washington, D.C., as well as in the New York Renaissance Band, the New York Ensemble for Early Music, and on tour with rocker Ritchie Blackmore in Blackmore's Night.

A prize-winning composer by the age of 15 at Interlochen National Music Camp, Chancey conducted her own double woodwind quintet at her high school graduation. She subsequently attended Oberlin College and received a Master of Arts in Performance from Queens College; a Master of Arts in Musicology from New York University; and a Ph.D. in Musicology, Music Technology and Women's Studies from the Union Institute. Chancey teaches, performs, improvises, produces recordings, composes and arranges, and directs both the Sound-Catcher: Play by Ear *and* What's That Note: Tune-Up *workshops. Her articles on playing by ear and improvisation appear in* AR *and* Early Music America *magazines.*

Recent artist residencies have taken Chancey to Geneva, Switzerland; Melbourne, Australia; Hamburg and Berlin, Germany; Oberlin College Conservatory; and the Hong Kong Academy of Performing Arts. She has received an Early Music America Special Education Achievement Award, and four Wammies for best classical instrumentalist by the Washington Area Music Association.

THE PROBLEM-SOLVING PROCESS

- Define the problem
- Analyze the problem
- Identify potential solutions
- Try them out
- Implement the best one
- Monitor the results
- Switch potential solutions as needed

Define and analyze the problem

That's harder than it sounds. You know you can't do something, but why? Is it a finger, a breath, an articulation, an eye or a brain problem? A combination? Also, can you identify where the problem actually happens? Maybe you missed the high notes in bar 5 because of a lapse in concentration while recovering from a hard passage in bar 4.

Identify potential solutions and try them out

Many professionals I've talked to suggest teaching yourself what you're trying to learn by making it into some kind of exercise. This generally involves slowing it down, and either breaking it down into fragments or looping and repeating the passage—or both, usually with a metronome. Sometimes you need to temporarily alter the rhythm to distract your brain and allow your fingers to take over (we'll cover some possible patterns below).

Most of the time, there are a few ways to handle a problem, and this **Problem-Solving Process** asks you to remember and keep track of them—and have patience. As you try to notice whether an approach makes the problem a little easier or not, you'll be training your ear as well as your fingers.

Implement the best one and monitor the results

If you're not sure which is the best solution, choose a good possibility and stick with it for a few days. Try to set the metronome slow enough that you don't hesitate at all.

When you can play straight through the passage slowly, speed up the metronome by a few clicks. How many? You'll know—because if it's too many, you'll feel jolted and won't be able to get through it. Each day, start slowly and work the passage faster by increments. (Begin on the first day at 60 and work it up to 70; on the next day, start at 63 and work up to 73; the next day, start at 66-76, etc., until you can play the passage up to tempo.)

If you don't see improvement after two or three days, this may not be your best solution.

Switch potential solutions as needed

Of course, this means you have to remember what else you tried. Why not make a list or take a video snapshot?

Since you're teaching yourself, you can't afford to go into automatic drill mode. You have to pay attention just like a teacher would.

This approach works best if you keep it simple. In order to notice when something changes, it's best to keep everything else the same. Establish a good starting tempo for your metronome. Explore the possibilities; pay attention to how you sound, and how the different exercises feel. Notice when something improves. Compare the different methods.

You may not be used to listening for these things when you play in a group—most of us listen to the others to stay in time and in tune. When we listen to ourselves, it's generally to make sure we're in the right place in the music, and aren't playing too loudly or softly.

You also may not be used to paying attention to how your fingers feel after practicing a passage a certain way. Developing that kind of "kinesthetic memory" is smart; it's a useful tool and a dependable diagnostic, and no one can access it but you.

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Basic Hacks

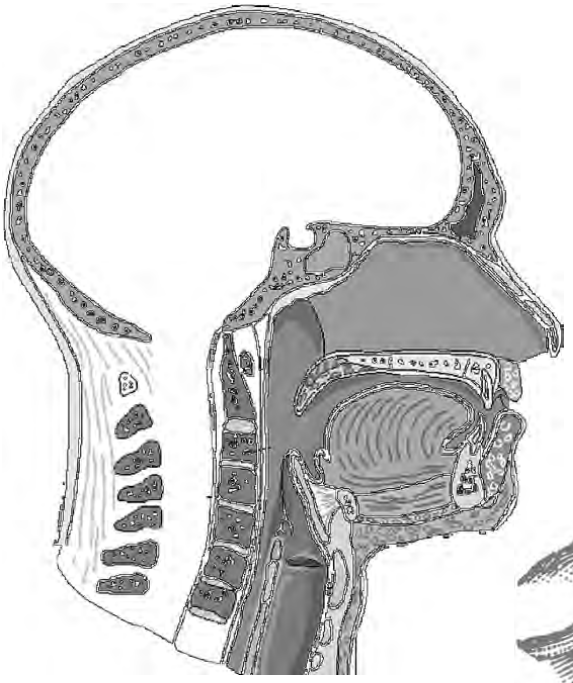
- *Always slow it down*—then gradually metronome it faster.
- *Be mindful*—listen, watch your fingers play the patterns, feel when something hard is resistant to change, notice when something hard gets a little easier.
- *Play it in different rhythms*, the more counter-intuitive the better. Some possibilities:
  - Pair notes in chains of *long-shorts*—and don't forget *short-longs*.
  - Make triplets into duplets and vice versa.
  - Organize 16th-note runs into four-note groups and practice lengthening the first of four, second of four, etc.
- *Practice pairs of notes* for tricky skips, practice getting from one to the other, forward and backward.
- *Practice the fingering and articulation separately, then together.*
- *Notice your anxiety level.* It's an indication that you may have fixed the problem, but your fingers aren't yet comfortable with it. You'll want to practice until that anxiety doesn't rise when you get there.
- Start practicing a hard passage *a few notes earlier* than you think the problem starts, and continue *a few notes after* it ends.
- Above all: **never practice a mistake**. When mistakes happen, *stop, take a breath and re-focus*, then try again.

Remember when I asked, is it a finger, breath, articulation, eye or brain problem?

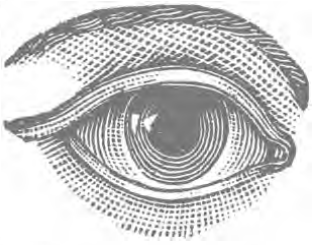
- For **finger** problems, experimenting with changing rhythms work best.
- For **breath** problems, you need to choreograph your breath just as you would choreograph your movements if you were dancing. We'll be discussing that in a YouTube video later on.
- For **articulation** problems, a good first step is to mouth the articulation syllables in rhythm (with a metronome), without fingering the pitches. Then combine articulation syllables in rhythm while fingering pitches, but without blowing air through the instrument. Finally, add breath.
- For **eye** problems (not reading fast enough): if memorizing the music isn't an option, practicing speed reading techniques can help. In speed reading, you train your eye to touch down twice per line—at the beginning and end—gathering the words in between on the fly. The musical parallel would be to accent fewer beats in a bar—thinking of a duple piece in 2 rather than in 4, for example. This makes your eye jump from strong beat to strong beat, and your eye will work less.
- For **brain** problems, when the issue is brain fatigue from trying to control everything all at once, the dual answer is to delegate and automate. Your smart fingers and mouth (which you're training to have a kinesthetic memory of the piece) can take over the mechanical part of the task, and you can keep time with the ticker in your upper chest. Your ears supervise to make sure you're playing the right notes in time and in tune.

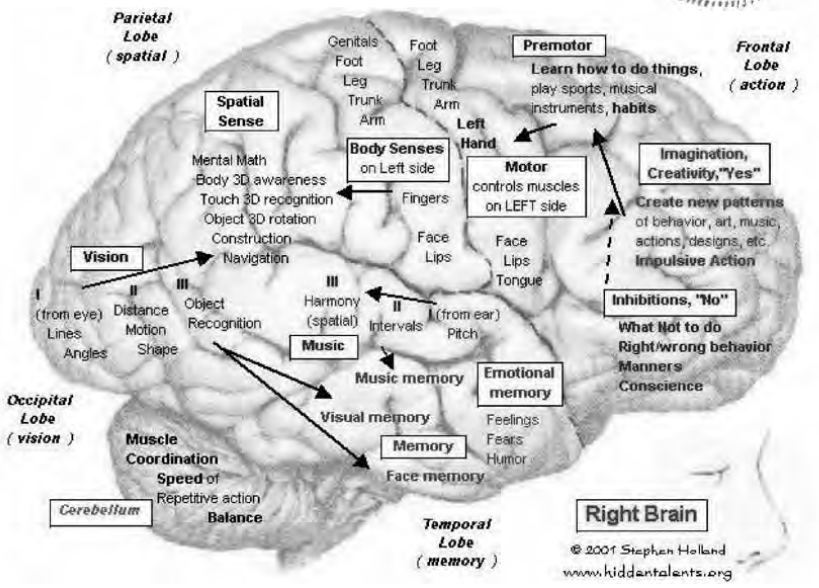
One way to essentially automate some of your brain functions, and also help it to work less, comes into play when you understand better in advance what's happening in the piece.

- Look for **PATTERNS**. There are always patterns in music; composers delight in them.
- Look for **SHAPES** in the design of the melody and in the overall direction of the piece.



Is it a finger, breath, articulation, eye or brain problem?





Having an intimate knowledge of the story of the piece gives you a familiar context, which means there are no surprises. If you expect what's coming, you can be ready for it.

- Learn the **FORM** of the piece—how it's structured. Scan for repeats. What changes and what doesn't?
- Listen for the drama of the **HARMONY**, the march of the **METER**. Enjoy the texture of the **MELODY**—notice its skeleton, and how that skeleton is covered with figuration and surface rhythms.

Having an intimate knowledge of the story of the piece gives you a familiar context, which means there are no surprises. If you expect what's coming, you can be ready for it. One of the best ways to understand what's happening in a piece is to use **SHMRG**.

Are you hearing about **SHMRG** for the first time? It's a way of talking about music that gets to the nitty-gritty. It helps us describe what the music is like, what story it tells, what *drives* the piece.

Introducing SHMRG

Devised by New York University professor Jan LaRue in 1970, this acronym (pronounced **SHMeRG**) is a great way to talk about all sorts of music. I think of it as a productive oversimplification. Bear with me as I start small and build it up.

A good piece of music is constructed a lot like a good, multi-ingredient cookie. They're both made from a combination of different ingredients that interact in pleasing ways. Change the proportions of ingredients, get a different cookie experience. Add more nuts and it's all about crunch. Add extra chocolate chips and you notice the creamy texture. Add more ginger and the spiciness comes out.

In music, your three main ingredients are **Harmony, Melody** and **Rhythm**. They're combined in varying proportions—but, since music happens in time, the flow of these combinations matters too. We frame our

David McGown (l) and Tina Chancey

musical recipe with two time-sensitive bookends: how does the piece **Start**, and how does it **Grow**? **SHMRG.**

Start (or **Sound**) tells you what you've got to work with. What's your starting point? What kind of piece, what instrumentation, what genre? How do you identify the music?

Harmony refers not only to polyphony—multiple parts sounding simultaneously to form chords—but also to the ways a single line can imply harmonies: by arpeggiation, or by playing a polyphonic melody (think Telemann fantasias).

Melody consists of everything heard as line in the musical fabric.

Rhythm is a vast, multifaceted category that includes all aspects of duration. We can talk about a single note, or a regular grouping of notes that we call meter.

Growth describes how the piece changes/develops as it continues. One aspect of that is the form of the piece (sonata form, virelai, rondo, some pattern of new and repeated material). We could also talk on a smaller level about how, as the piece continues, the melody uses bigger and bigger skips, the phrase structure starts overlapping, or the harmonic rhythm gets faster.

SHMRG is flexible: you describe what you notice. **SHMRG** can also include the influence of non-musical elements: song texts, a story line, something that affects the development of the music.

Still with me? Sit with this idea a while, and use the flip side of this page as a workbook to make notes on a piece of music you plan to play.

I think that each piece of music is driven by its own particular combination of **SHMRG**-ish elements, and one usually dominates—and that being aware of this will make you practice and play better.

In the next article, we'll consult some specialists who come at practicing from radically different directions.

#For more about the nature of SHMRG, hear an introduction recorded by me at ***http://tinachancey.com/the-practice-project***.

#To see recorder player David McGown and me put **SHMRG** into practice when playing portions of the Handel C major sonata (with the movements also downloadable so you can follow along), visit ***www.youtube.com/americanrecordermag***.

#Joanna Pepple has created an interactive "SHMRG tree" to help musicians understand and manipulate the different **SHMRG** categories. Click the arrows below the tree at ***https://prezi.com/d4b3km1smwav/shmrg.***

See you in the next edition of AR, *or online at the* ***AR Practice Project, https://americanrecorder.org/practice_project.php***

Tina Chancey

SHMRG Repertoire Observations

Use the **SHMRG** acronym to help you figure out what goes on in the music before you begin playing and performing it. Decoding your music prior to rehearsal and performance will lead to deeper understanding, and may uncover a clearer path for practicing. In the chart below, provide as much descriptive information as you can in regards to the repertoire. Which element dominates this piece? Circle or highlight those observations.

Title of Piece: _____

Composer: _____ **Date of Composition:** _____

Category	Observations
Sound/Start: What does the piece start with? What is the instrumentation? What is the overall texture? What language is used? Articulations? How does the piece move forward?	
Harmony: What is the key? Major/ minor/other? Perhaps a mode? Do we change keys? Do you notice any dissonance?	
Melody: Stepwise? Any dramatic skips or leaps? Wide or narrow range? Tessitura for each voice part? Overall shape of the melody?	
Rhythm: Meter? Tempo? Are voices moving in similar rhythm or different? Does tempo/meter change? Any repeated rhythmic patterns?	
Growth: How does the piece change? Dynamic contrasts? Form (ABA, repeated motive, sections)?	