

# Memorizing it

*“Memory is the greatest of artists,  
and effaces from your mind what is unnecessary”*

Maurice Baring

**Sample Only: Chapter 8**

**Sections indicated in RED below are included in  
this sample.**

**To read the rest, you can order your own copy of *The Practice Revolution* from [www.practicespot.com](http://www.practicespot.com)**

## ***The Practice Revolution: Chapter 8***

- **Defining the Task** • The Theory Accelerant • Lessons from Platform Games • The Scribe
- The Sketch • The Migrating Book • **The Steamroller** • A Parade of Small Pieces •

## 8. Memorizing it

### 8.1 Defining the task

There are differing views as to whose fault it is that musicians are required to play from memory, although traditionally the blame seems to rest with Franz Liszt. Whatever the initial cause, it's now an expectation from many audiences, panels and adjudicators, and students need to be comfortable delivering music without the score in front of them. Even aside from such expectations, there are a lot of students who simply play with greater freedom and expression if they are not also involved in the translation of notes.

The mechanics of memorization go well beyond the scope of this book, but before leaping into recommending practice techniques to deal with the issue, it's important to bear in mind that different students memorize in different ways.

Some students memorize according to *visual patterns*, others are heavily dependent on being able *hear* what comes next. Other students rely almost entirely on *muscle memory*, letting their hands pull them from note to note, while others still have quite an abstract *theoretical approach* to the whole process, remembering notes as a mixture of scale fragments, cadences or common broken chords. And every so often, there are students who have *photographic memories*, and who can almost see the score in front of them – to the extent that they could point to a location on the invisible page where bar 7 should appear.

To complicate matters, most students are *not aware of which method they use*. They just remember things – or they don't – and are never entirely sure why.

The techniques that follow in this chapter are therefore designed to provide memorization techniques that will suit a broad range of learning styles. By sampling widely, students will not only approach memorization in a comprehensive fashion – they'll also discover which techniques work most effectively for them, saving them practice time in the future.

## 8.7 The Steamroller

The Steamroller provides a more traditional methodical approach to memorizing, and is best suited either to students who thrive in highly structured environments, or those who have had difficulty memorizing in the past. The method is slow and unglamorous, but it's also relentless and thorough, and provides regular evidence of progress to the student—which is particularly important for those who don't think they are capable of making any.

The logic behind The Steamroller is probably best illustrated with an example that lies *outside* music lessons. Let's imagine that your task was to memorize the symbols of the periodic table. No matter how discouraged you may be feeling about the enormity of the task, it would be a simple enough matter to memorize *one* element. Here it is: "H" – hydrogen. You might write it out a few times (I know, I know, you already know what "H" means, but we're assuming here that you've never seen it before). Then you might say it to yourself, or stick it into a song:

*"H is for Hy-dro-gen. Dum dee dum de dah"*

Then pace the room, wave your arms and tell your furniture that "H is Hydrogen", while you imagine a giant cylinder of Hydrogen with a bold "H" emblazoned like Superman's "S".

Once you've rehearsed it so much that you could not imagine how H could ever possibly have been for "Horse", it's time to test yourself. Get your pencil, take a deep breath, start your watch (you only have thirty minutes!)... and start your Periodic Table quiz.

<b>Q1.</b> What element has the symbol "H"?
<b>Q2.</b> Of the periodic table elements, which one is identified by the letter "H"?
<b>Q3.</b> When looking at a periodic table, what element does "H" make you think of?
<b>Q4.</b> There is an element signified only by the letter "H". Which element would that be?
<b>Q5.</b> Professor Beaker has just asked to you name the lightest gas known, one that is colorless and has an atomic weight of 1.00793, and has given you the clue that the symbol used to indicate that element is "H". To which element is the Professor referring?

All finished? Great – check the answers below to see how you did.

Q1. Hydrogen
Q2. That would be Hydrogen
Q3. That element is in fact Hydrogen
Q4. The question is referring to Hydrogen
Q5. Professor Beaker was describing an element known as Hydrogen – although it should be noted that the atomic weight is in fact 1.00794, not 1.00793 (2 extra marks if you knew this)

We might not be gifted chemistry students, but we're all going to do pretty well on that quiz. In fact, with the amount of overkill that has gone into establishing the link between "H" and "Hydrogen" in your own mind, it's now no longer something that you need to memorize. You just *know* it.

This conversion from something you are in the process of memorizing to something that you now just know is crucial. A sleight of hand here, and the student can memorize the whole lot.

Let's go back a step to see how this trick works. While we decided it's clearly impossible to memorize the whole table, we did agree that memorizing just *one* element was not only possible, but relatively straightforward. The important thing to note now is that we no longer need to memorize Hydrogen though, *because we already know it*.

This means that there is now room to memorize something else.

In this way, introducing the second element does not contravene our framework of "only one at a time". Here you are – "He" is "Helium" ... And so the process continues. The only change is that from now on, before moving on the new element each time, there will be *two* quizzes – one for the element being memorized, and a second confirmation quiz of all the elements you have already covered.

The entire process could be represented as an algorithm:

<b>Stage 1:</b>	<i>Select</i> the new unit of information to be memorized
<b>Stage 2:</b>	<i>Rehearse</i> that unit of information until you feel you know it thoroughly.
<b>Stage 3:</b>	<i>Test</i> that unit of information to see if you really know it or not.
<b>Stage 4:</b>	<i>Incorporate</i> that unit of information into a bigger test of all units covered so far
<b>Stage 5:</b>	Go back to stage 2 with any unit of information that let you down in the test
<b>Stage 6:</b>	Go back to stage 1

So how does this help your music students? Just as we realized that while we could not memorize the whole periodic table, but could certainly manage one symbol, even your most hardened non-memorizing students will concede that while they believe they cannot memorize a whole piece, they could certainly memorize *one measure*.

So the first challenge becomes for them to do exactly that. They rehearse the first measure of their piece until they feel they can play it without the music—and then they test it to see whether that’s actually the case, by attempting to produce three error-free-and-scoreless playthroughs in a row.

No matter how difficult they find memorizing, when only confronted with a measure to memorize, they’ll quickly discover that it doesn’t take too much practice before they pass that test. You then put it to them that this measure no longer needs “memorizing”, as they have demonstrated that they know it. (You don’t have to memorize things you already know!) Which means that they now have space to memorize *one more measure*, so they can take a look at measure 2. They rehearse the new measure thoroughly, then test it when they’re done.

They then need to conduct one more test that consists of the new measure, together with the measures they already know (in this case, that test would be the first two measures of the piece) If they have difficulty with any measure in that test, they should rehearse it again and retest it until it passes. If there were no problems, move on to measure three...and so on.

It's simple, it's relentless, and it works.

### 8.7.1 Limitations of this method, and how to compensate for them

1) This can be a blunt instrument of the most extreme type (isn't a Steamroller really a blunt instrument of the most extreme type in any case?), and while it usually does work, it can take a long time, and does not automatically produce intelligent analysis of the score from the student. So while the Steamroller can produce some good results, it works better if it is used in conjunction with other memorization techniques.

2) The Steamroller algorithm weights practice heavily in favor of the *first* measure, while discriminating with progressive severity against subsequent measures. So in a piece consisting of 200 measures, by the time the student reaches the final measure, the first measure will have featured in 200 tests, while that final measure will have only featured in 2.

To overcome this, the student should start from *both ends of the piece*. So there will be one Steamroller going forwards that is memorizing measure 1, then 1&2, then 1,2&3...while another works in reverse memorizing measure 200, then 199 & 200, then 198, 199 & 200. In this way, every measure of the piece will receive equal attention.

3) This method is clearly not going to be practical for coping with a 90 page concerto, as the process would clearly take too long. However, it can be useful in delivering *sections* of a work that size. All the student needs to do is put a ceiling on the maximum number of bars that a section can contain, and "wrap" up sections as being complete once a test of that size has been passed.

They then treat the next set of measures almost as a separate piece, and performing the piece from memory simply becomes a question of playing the sections one after the other. (For more on this, see the next technique: "A parade of small pieces")

...End of sample

The complete eighth chapter of *The Practice Revolution* looks at a total of 7 different practice techniques for memorizing pieces—this preview has been but one.

**Chapter 8: Memorizing**

- Defining the Task
- The Theory Accelerant
- Lessons from Platform Games
- The Scribe
- The Sketch
- The Migrating Book
- The Steamroller
- A Parade of Small Pieces

To order your copy of *The Practice Revolution* go to [www.practicespot.com](http://www.practicespot.com)