Rapid Knowledge Acquisition Skills to Learn Faster, Comprehend Deeper, and Reach a World-Class Level

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Accelerated Learning for Expertise

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Chapter 1. Accelerate Your Expertise

The concept of expertise is something of a moving target in our modern age. Many people only want to grant the title of "expert" to someone who has earned a doctorate in a certain subject, with everyone else needing to defer. Others assert that expertise is the opposite of academic knowledge, and instead comes from firsthand experience—so-called *street smarts*. Luckily for us, the reality is far different. Expertise can be granted, earned, or bestowed in any number of ways, which is a relief.

But however we define expertise, it's clear that we all desire it. We know it's something that has the power to command respect and attention. We think that if we have enough of the right kind of expertise, it can change our lives and make us rich. This leads us to sometimes think that if we *don't* have expertise in something useful, our lives will be meaningless and empty. And so on. It can lead us to our highest highs and lowest lows. Regardless of whether or not this is true, the importance of having *an expertise* (or two) can certainly move you forward in life in tangible ways.

Let's break down what expertise is for the purposes of this book. Expertise can generally be defined as the mastery over a certain field, skill, or topic. A bartender is an expert on alcoholic drinks and small talk with customers, while a pianist is an expert on musical rhythm and hand-eye coordination. A construction worker is an expert in working with power tools and estimating amounts of lumber and cement. It doesn't matter if they have acquired their expertise intentionally or as a byproduct, they help all the same.

You may not yet be an expert on what you want, but that's what this book is for. It's to take you from Point A to Point B, where Point A is the intial awareness of an intriguing topic, and Point B is a level of mastery that outpaces that of 99.9% of the population. Surprisingly, this process is easier than you might imagine it to be. As you just read with the bartenders and pianists, gaining expertise doesn't necessarily have to follow a set path. Also notably, you don't need to be an Einstein-level genius to achieve the type of expertise you want. In this introductory chapter on accelerating your expertise, we'll cover one of the most important mindsets for learning, and the biological basis of expertise.

In fact, that's a handy starting point in our preliminary discussion of expertise: the notion of inborn genius. The myth of innate intelligence being the ultimate ceiling for our potential is a harmful myth that has been propagated over through the years. The myth that you simply have to be smart to start with, and if you're not, you'll never achieve the expertise you want. The myth that inborn intelligence is more important than hard work, perseverance, and effort.
Talent and innate intelligence can help, of course, but your *attitude* about learning is far more important when it comes to true expertise. If you believe your abilities are fixed in place, you'll put up mental blocks that hinder your learning.
These blocks, and this overall myth, create a *fixed mindset*. Have you ever heard anyone say *"I can't draw,"* or *"I'm not good at sports,"*

or *"I could never do that?"* Each statement is a subtle way that our thoughts affect our actions. All of these are examples of a fixed mindset, of people who believe abilities are set in stone and don't put forth an effort into improving them. Thus, their belief actually *does* come true. The tragedy of this mindset is that people don't take the time to practice—to work through and puzzle over something until they actually do acquire a new skill.

Take me, for instance. I used to think I'd never be able to draw. The way I understood the world was that there were artists, and then there were other people. I just so happened to be one of those unlucky "other people." I had my own areas of creativity, but drawing wasn't one of them.

For years, I carried around a belief about innate talent that meant, in my mind, I'd never be able to draw. It completely prevented me from even trying, though I would have loved to take art classes when I was younger. Because I thought no matter the effort I put into drawing, I'd never produce work I was happy with, I just decided to focus on the areas where my natural talents were. Imagine my surprise when, just a couple of years ago, I finally signed up for an art class at a local community college, and I was one of the best students in the class!

The fixed mindset is harmful because it keeps you from taking even the first step. However, according to researcher Carol Dweck, mindset is something that we can change. People tend to fall into one of two predictable patterns as they go through life: they stay mired in the fixed mindset we've talked about, or they adopt a *growth mindset.*

A growth mindset believes that challenges are opportunities, and that failure is a chance for growth. If there is effort, then there will be some tangible reward; all things are attainable. Rather than seeking out evidence that proves they're not smart, people with a growth mindset focus on pursuing process and progress, searching out opportunities to stretch their existing abilities. In other words, where a fixed mindset person would give up immediately and say "I'm just not good at it," a growth mindset person would say "I'm not good at it yet, but I *will be* after working at it!"

This belief that intelligence and talent can be developed over time has profound consequences for our quest for expertise. Believing that your qualities are carved in stone (the fixed mindset) creates constant shutdowns. People will avoid difficult situations, refuse to challenge themselves, and effectively evaluate every situation to see whether it will make them look smart or dumb, whether they will succeed or fail.

In contrast, believing that the hand you're dealt is just the starting point for development (the growth mindset), creates possibility: that your basic skills can be can cultivated through effort. A person with a growth mindset embodies a passion for learning.

This mindset ties neatly into learning. If you are struggling with learning, you have two choices. You can either subscribe to fixed mindset and give up, saying "Learning just isn't what I'm good at," or you can follow a growth mindset and say "I just haven't put in enough time and effort yet, I'll work until I figure it out! It's possible!"

Growth mindsets prioritize and even cherish challenge. People with a growth mindset know that:

- Trying and failing is part of the process; in fact, attempts and failures are the best teachers you will ever have
- Learning requires stumbling, correcting, and growing
- You don't have to know everything in advance to succeed eventually
- Practice and skill-building are more important than inborn talent
- You're always a beginner, which means you can always grow and improve
- Results aren't important; the process is
- Effort in is the important part; the outcome you want only comes with the corresponding input

You can see how this contributes to a mindset for learning and expertise. Try to embody those statements and set the correct expectations for yourself. No one is brilliant or perfect in their first go-round, and everyone struggles with different things.

Many people struggle with everything. It is only through hard work and effort that anyone *ever* improves at anything, and this is certainly how it is to learn new information and material.
If you believe you can do it, you will probably be able to do it. If you don't believe you can do it, you are probably wasting your time. That is the importance of the growth mindset, not just in learning and growing expertise. Struggle is all part of the process.
All this boils down to the proposition that you can indeed learn whatever you want, no matter what you think of yourself. Your IQ or the education level of your parents is not nearly as important as your attitude and beliefs towards learning.

There is a saying that "hard work beats talent until talent starts working hard." At the very least, we can control half of that equation—the part about working hard. Experts are made, not born. We instinctively know that humanity does not operate within a caste system, so why should our pursuit for knowledge function any differently?

The Biology of Expertise

Expertise, learning, and the ability to quickly get from Point A to Point B in terms of knowledge is something to be understood on a neurological level. What's happening in our brains that allows such a process, and how can we use this knowledge to help us?

This topic begins with the concept of neuroplasticity, which is the degree to which our brains are malleable and shapeable, much like a mound of clay. It's a positive aspect that allows our brains to develop and grow, despite its dubious description. Neuroplasticity, also known as brain plasticity, is a term that refers to the brain's ability to change and adapt as a result of experience.

Up until the 1960s, experts and scientists believed that changes in the brain could only take place during infancy and childhood. It was believed that by early adulthood, the brain's physical

structure was mostly permanent. Modern research has demonstrated that the brain continues to create new neural pathways and alter existing ones in order to adapt to new experiences, learn new information, and create new memories. After all, the human brain consists of over 86 billion neurons, and these neurons can create multiple new pathways as a result of new knowledge and experience. There has even been new research to suggest that brain neurons can regenerate in a limited set of circumstances.

Learning and expertise can be said to occur neurologically in two primary ways. The first is through funneling information into our long-term memory in the hippocampal region of the brain and making it stick. This is done through specific techniques for memorization and rehearsal. Indeed, we regard those who know facts and theories off the tops of their heads as experts. We'll cover this aspect in more detail in a later chapter.

The second way that learning and expertise occur neurologically is through the myelin portion of the neuron, which enables someone to think faster and more intensely. Of course, we also deem people who can solve problems quickly as experts.
A brief neuroscience review may be timely for greater context: neurons are the cellular building blocks of the brain. A neuron is made up of a three main components:

- Dendrites - receive signals *from* other neurons
- Cell body - processes those signals
- Axon - sends messages *to* other neurons

The signals that are sent and received are called nerve impulses, which are tiny electrical charges that travel from the dendrite, through the cell body, and out the axon to the next neuron in the brain. It's an incredibly fast process—consider how you might be able to catch something you've dropped before it hits the floor. It's faster than that! This chain of electrical impulses is the physical representation of our thoughts. Yes, this means our thoughts do have an actual upper limit on their speed.

The part that relates neurons to learning and expertise is what's known as myelin, which is the fatty tissue that covers the majority of the neuron itself. In essence, the more myelin, the faster the electrical signals are. Really, it's all about the myelin.

One compelling set of evidence comes from brain scans of expert musicians—classical pianists. There was shown to be a strong correlation between the amount of myelin in regions that a pianist would ostensibly use—the fine motor skills, visual, and auditory processing parts of the brain. These areas had a far higher amount of myelin as compared to non-musicians.

Another point in favor of myelin's expertise-enhancing abilities is what happens when it is missing. *Demyelination* is a known factor in multiple sclerosis and other neurodegenerative diseases that cause symptoms such as loss of dexterity, blurry vision, loss of bowel control, and general weakness and fatigue. This suggests that myelin is an important factor in allowing us make the most of our brain.

It may be surprising to hear that there is such a tangible, biological representation of learning and expertise. But after all, the brain, for all its manifestations and philosophical conceptions, is a physical piece of flesh and blood that gets tired, needs fuel, and doesn't always function at its best. The brain, just like any other piece of physical flesh and blood, has optimal conditions under which it functions, learns, and creates expertise.

As such, we should treat it like any other muscle. The brain consumes glucose and is composed mostly of water. It needs time to recover and has its own limits. When you think about it, it should be obvious that overall bodily health should and will affect your brain's learning abilities.

If there is a runner and she has a race tomorrow, do you think stress, sleep, and exercise will play a role in getting her ready for the race? She would have regularly exercised to be in her best shape possible, she would have reduced her stress and focused on what she needed to do, and she'll sleep as much as possible that night so she is fresh and energetic.

Now, take the brain. Will you retain information better after getting only three hours of sleep, or when you have had a full eight hours? What about if you had to work 90 hours one week, versus 35 hours another week? Finally, what if you had a long debate with a friend: are you going to feel fresh and ready to consume information?

Just like an athlete and her physical body, the brain must be ready for performance, and the factors of stress, sleep, and exercise greatly influence that. Let's begin our mini-tour of how neurological health and learning ability is directly correlated to improving your brain's functioning.

Stress is one of the biggest influences on the brain's health. If you want a clear and concrete illustration, you don't have to look any further than any veteran or trauma victim suffering from post-traumatic stress disorder (PTSD) and how their lives are negatively affected. They literally lack the ability to function in daily life because they are so tense, and they are likely to snap at any given moment as an outlet for their anxiety and fear.

A plethora of research has found that both chronic and acute stress impact the brain's health and memory systems in hugely negative ways. This is in large part due to the body's physiological response to stress. But first, it will be helpful to define the difference between the two main types of stress: chronic stress and acute stress.

Chronic stress is when you are under ongoing stress for a relatively long period of time—something as small as being under a constant heavy load at work or dealing with a relationship that is frequently combative. These are the small sources of stresses that seem insignificant until you look at the cumulative effects. When we are experiencing chronic stress (again, the amount of which is highly variable and relative to the person's tolerance), our body is in a state of physiological

arousal. This is known as the fight-or-flight response, and it's our body's main defense mechanism when it senses stress or fear.

It was once useful millennia ago when the terms "fight" and "flight" were truly taken literally—if the body sensed a stressor or a reason to be in fear, it would put itself on the highest levels of alertness and be prepared for a fight to the death, if necessary, or running away as quickly as possible. In either case, the body's hormones, heart rate, and blood pressure are highly elevated. The main stress hormone, cortisol, is released in spades and has been implicated in causing the alertness.

So if you are under chronic stress, you are permanently in this fight-or-flight mode of alertness and have spades of cortisol. Your body will very rarely reach the relaxation phase, which is known as a state of homeostasis. In other words, chronic stress makes you alert and physiologically aroused *all the time.* This is exhausting both physically and mentally, and has the effect of shrinking your brain. Studies have shown that chronic stress has caused as big as a 14% decrease in hippocampal volume, which is startling.

The hippocampus is one of the main areas for memory processing and storage in the brain. Another study (Pasquali, 2006) showed that memory in rats was negatively affected when the rats were exposed to cats, which presumably caused stress. The rats that were exposed to cats far more routinely were unable to locate certain entrances and exits. It was both cute and fascinating.

Chronic stress will cause all those negative effects in you, and the difficult part is you may not realize you are under chronic stress, because it has become normalized for you. It is just like when your shoulders tense up—you probably don't realize it until someone points it out and you can see the contrast between being relaxed and being tense.

The cumulative effects of being constantly on edge, paranoid, unable to focus, and feeling despair and overwhelmed will catch up to you. Imagine being pumped up on adrenaline for days, weeks, or months. Not only will it impair your memory and brain processing, it will leave you unable to function in general. This is what people with PTSD suffer, but to a much higher degree.

Acute stress, on the other hand, is not something that will slide by unnoticed.

Acute stress is the sudden jolt of adrenaline you experience when someone cuts you off in traffic and you nearly crash, or you get into a heated argument. Incidentally, many opportunities for acute stress tend to occur in traffic situations. It might even be getting into a car accident. However, acute stress is momentary, temporary, and you can feel it and notice it. Intense bouts of acute stress can cause headaches, muscle tension, upset stomachs, or vomiting. This is when adrenaline is coursing through your veins, trying to give you the alertness and strength you need for anything. If it persists and lasts for a longer period of time, it just may cross the threshold into chronic stress.

But the labels are unimportant. What's important is what happens to the learning and memory-processing systems when you are under any type of stress.

You can also think of the brain as simply being occupied with thoughts of stress and anxiety, so much so that it is unable to divert brainpower to memory and thinking clearly. This wouldn't be an inaccurate characterization of the role of stress. Stress can literally change your brain's structure and size, so it's something to devote a bit more attention to.

Make sure that the engine of your brain is running right when you need it. Ask yourself what the major sources of anxiety are in your life. They might be people, work, or even material objects. Whatever the case, make sure you are only doing what you need to and nothing unfairly on behalf of others.

The next part of the healthy brain equation is sleep. It has long been argued that specific modes of sleep are where memories are actually created, and where learning can be said to occur. It is thought that the brain's structure is changed and synaptic connections are formed during sleep.

Indeed, studies have teased out the specifics of how memories are enhanced or stored during sleep. In a 2005 study, Professor Matthew Walker of Harvard University was able to compare fMRI scans of the brains of subjects while awake and asleep to see the different parts of the brain that were activated—where memory consolidation occurred. He found that people's cerebellums were far more active after a period of sleep between periods of learning, and this activity was highly correlated with better learning and memory.

Professor Walker commented, "Sleep appears to play a key role in human development. At twelve months of age, infants are in an almost constant state of motor skill learning, coordinating their limbs and digits in a variety of routines. They have an immense amount of new material to consolidate, and consequently, this intensive period of learning may demand a great deal of sleep."

Specifically, rapid eye movement (REM) sleep is most important for memory consolidation and storage during sleep. There has been debate in recent years about just how important it is to memory, but sleep can also serve another purpose—we sleep to forget the unimportant facets of our day and filter them out so our memories can be more organized.

In 2003, research conducted at the University of Wisconsin-Madison hypothesized that neurons and synapses essentially worked and proliferated in overload during the day, and were pruned back during sleep so only the important things made it into longer-term memory. This implied that we sleep to literally forget certain parts of our day and to have better-organized memory.

Sleep can serve many specific purposes on the brain and memory, but overall, the brain, like the body, needs rest and recovery. A team of researchers from the University of Rochester have also posited that sleep is like the brain's "waste removal system." When you can provide the systems responsible for memory a reprieve overnight, it is simply likely they will continue to work better for you in the coming days.

The final piece of the puzzle is exercise. It might be surprising to hear that physical exercise is just as good for your brain as it is for your muscles and bones, but it's been proven time and time again.

One particular study was conducted at Radboud University in the Netherlands. Male and female subjects took a memory test, and then one third of them exercised immediately after the test, one third of them exercised four hours after the test, and the remaining third did not exercise after the test. The subjects were collected two days later to repeat the same memory test, and the group who exercised four hours after the initial test performed the best without fail. It appeared that exercise was effective in helping the brain stabilize and store the memory.

Other studies take the physiological angle and point to the neurotransmitters and hormones that exercise releases and how they affect memory processes. Exercise is instrumental in the production of a brain protein called FNDC5, which eventually releases brain-derived neurotrophic factor (BDNF). BDNF has been shown to aid general brain functioning and memory processing by preserving existing brain cells, promoting new brain cells, and promoting overall brain growth. Human brains tend to shrink when we grow older, but exercise, which creates BDNF, can literally increase the size of your brain.

Your brain primarily uses glucose (what carbohydrates are converted into) for fuel, and when that is not available, it begins to use fat for fuel. It is when the brain starts to use fat for fuel that BDNF creation is triggered. This is possibly behind the

science of fasting and why low-carbohydrate diets have been shown to report high amounts of alertness and cognitive acuity as pleasant side effects (Fond, 2012).

Your brain has the highest oxygen requirement of any organ in your body, up to 20% of your entire body's usage. When you can exercise and improve your cardiovascular systems and ensure that blood is pumping better through your arteries, you will have greater access to oxygen. It's the same with water—the brain is, on average, 70% composed of water, and exercise makes you more aware of hydration.

Exercise does have its limits, however. The best types of exercise are those that increase blood flow and burn fat. If exercise becomes too strenuous and difficult, then you begin to create stress, and you've already read how detrimental stress can be on your mental faculties. Overall, it appears that the maxim of healthy body, healthy mind holds very true.

It's just another case of why we should have listened to our mothers more when we were young.

Sleep as much as possible, exercise often, and don't sweat the small things. When we can avoid the stressors in our life, we can devote more mental bandwidth to that which matters. You wouldn't be great at studying for a test if your dog was missing, would you? We can better comprehend and understand difficult material when we have a full night's sleep. Finally, exercise is not only invigorating and important for giving you a mental break, but it can cause chemical changes in the brain that benefit your memory processes. The brain is the engine of learning and expertise, and you have to be mindful of priming it for optimal performance.

Takeaways:

- Expertise can be achieved and thought of in many ways, but one of the big obstacles you may have to overcome

is the myth of innate talent and how it relates to the fixed and growth mindset.

- The myth of innate talent is that only certain people have enough talent to become experts—not true. This can be further supported by noting the differences between the fixed mindset (I can't improve) versus the growth mindset (I can improve).
- The biology of expertise is surprisingly simple. Think of the brain like a muscle, and it becomes clearer. Learning and expertise take hold largely because of an increase of myelin, a fatty acid that covers neurons and increases the speed and strength of electrical impulses —IE thoughts.
- Being flesh and blood, the brain has the same requirements as a bicep or hamstring. This means the presence of stress (both chronic and acute), the quality and amount of sleep, and the frequency of exercise have large effects on just how effectively you can learn.

Chapter 2. How to Find, Intake, and Understand Info Better and Faster

The first step in developing expertise always involves information. You're either searching for it, obtaining it, synthesizing it, or using it. Information is the currency of expertise! Fortunately, we live in times when information is almost ridiculously easy to find, thanks to the Internet. This ends up being a double-edged sword, however, as you'll inevitably find it difficult to discern what really matters in your quest for expertise.

Instead of devoting your time to learning, the quest sometimes becomes knowing what is important—you have to *find* that information among all the useless data you don't need. Imagine a detective looking for clues to a crime that happened in the middle of a small town, but using crime data for the entire country to get to the bottom of it. It would be a fruitless pursuit.

But it's not enough to just have a wealth of information at your disposal. To be of value, information has to be processed, analyzed, and fully comprehended. Just as learning a new skill takes repeated practice, taking in new knowledge requires exercising your mind.

This chapter will guide you through the practice of gathering and handling information, from knowing absolutely nothing to

being an educated expert. It's about how to deal with the most valuable resource experts can possess. Not only will you be able to process information more skillfully, you'll also do it more swiftly and efficiently. That's where we start with the first section.

Researching

The first step in building expertise in anything is research: the step-by-step process of reading and analyzing materials relevant to your chosen field of interest. But before we can understand and synthesize, we must find what we will be studying. It's a process that isn't inherently difficult, but many minefields exist that can derail your learning.

There is no shortage of information about almost everything, and we have better access to data and facts than we ever have before. But the sheer amount of information we have can make us forget about how to research effectively. Many of us simply equate having information handy with possessing intelligence. If the facts are within immediate reach, we sometimes figure that's all we need. But without *understanding* what the data means or having a good sense of the context, that data is of no value. This is not even mentioning that the facts you have might be biased, skewed, or flat-out inaccurate. How can we steer clear of questionable sources and make sure our research will bear fruit?

Research is a gradual process. It's methodical and investigative. More than just accumulating data and statistics, the successful research project makes one feel comfortable and assured in explaining the full story behind the topic one chooses. And even though it's systematic and can require patience, a solid research plan can help you build expertise much more quickly than you might think.

These five steps of research, if executed thoughtfully and correctly, will give you what you need to gain mental command over a new topic. It's important to hit all five steps without skipping any. You'll be able to understand a concept, issue, or problem from a variety of angles and approaches.

These steps are somewhat similar to the well-known scientific method (create hypothesis, question, collect data, test

topic with no expertise or common sense. And yes, some are "fake news."

Your goal here is to draw out the good sources and disregard the bad ones. A good source backs up its arguments and ideas with solid data, confirmable truth, and careful examination. A bad source is generally more interested in persuading through emotions and hyperbole and might rely on misleading or utterly wrong data to do so.

Don't confuse anecdote with evidence, even if there are multiple anecdotes. After all, that's how every single old wives' tale was started.

Good sources are also, generally, well-established with a solid track record in accuracy; bad sources are often fly-by-night operations that have no published credibility. A legitimate source is also likely to have an actual real name connected to it. With a few exceptions (like Deep Throat in the Watergate scandal), anonymous or cloaked identities are usually sketchy as authentic leads. Also consider how your sources are regarded by other sources, or if they are shunned or altogether ignored by other sources.

At this stage, you'll start noticing some divisions in the research you've collected. You'll see certain sources' tendencies and inclinations. You'll get a sense of which are the most popular or common outlooks (the majority), which are the rarer or more unusual viewpoints (the minority), and which ones are straight-up crazy ramblings from the minds of lunatics (the crackpots). You'll be able to divide up the sources and retain the ones that are most reliable and helpful.

3. *Look for Patterns and Overlap.* As you're viewing and reviewing all your source material, you'll begin to notice recurring topics, stances, and ideas. Certain points will crop up more frequently, and some will only appear once, seemingly randomly. You'll start getting a better idea of what the primary points, secondary points, and boundaries of the subject you're looking into. You'll also be able to build bridges between parallel ideas and points of overlap.

Here you'll be able to identify the major components of your topic, and the most prevalent thoughts and beliefs. Generally, the best sources will talk about the same things, so when that happens, you can safely assume they're the most important parts of your subject. You can see where the main points bump into each other, where they end, and where they rarely go. In this way, you can truly get a sense of the landscape and the different opinions and voices that exist to inform your own expertise.

When you see a point repeated by multiple sources, it's a good sign that you should consider it a major point or theme. Likewise, if you see things rarely mentioned by notable people in the field, or that don't fit into the prevalent views, you know it's probably not something that moves the needle, or is too new to be considered valuable.

This isn't to say less common or alternate points of view are necessarily wrong—they aren't. But use your better judgment. If only one isolated source is making a certain assertion, even if they have "disciples" who agree with all they say, there's a much higher chance that they're discussing something that's not really true, or at least not very important. Separate things on which you need to focus from elements that will ultimately bog down your work.

You should understand what the main points and arguments are (and why), as well as a few of the minor ones, by the end of this step. Getting through this stage alone may qualify you as an expert relative to others, and it's common that most people stop their journey and education here. But if you stop here, you risk falling prey to *confirmation bias* and not knowing what you don't know.

4. Seek dissenting opinions. By this point, you'll no doubt have a theory or opinion in mind. You'll also have whittled down your sources to support that. So, now's the time to look for sources that disagree with you. This is a hugely important step. Without knowing the full extent of opposing arguments, you won't have the complete picture that you need to understand the issue. No matter how convinced you are, try to find one.


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you'll decide whether you're interested enough to go more in-depth.

For example, let's say you're looking at a book on classical music. In your systematic skimming, you'd see the title and subtitle. You'd read the back flap, which says it's "an in-depth but gently irreverent study of classical composers." You'd read the table of contents—there are chapters entitled "Wagner in Drag," "Mozart's Cat Imitations," and "Beethoven's Love of Rats." At this point, you've probably ascertained that this is *not* a terribly serious work and not one that's likely to add to your expertise, although it may be entertaining.

Why should a budding expert go through this stage and not just skip to the next level? Even though it's not a deep dive, it gives you a lot of answers. You'll get a sense of the writer's approach: is it serious, comical, or satirical? Does it rely on real-life accounts or imaginary situations? Is it heavy on statistics? Does it quote a lot of outside sources? Are there pictures?

Having a good sense of the answers to those questions will help you frame the content and define your expectations, which—if you've decided to proceed with the book—will make the next level of reading more productive.

Analytical. The third level of reading is the deepest level for consuming a single book or volume of work—it's full digestion of, *and interaction with*, the material at hand. The challenge of analytical reading is simply: "If time's not an object, how thoroughly would you read this book?"

Analytical reading can be described as taking the book out of the author's hands and making it your own. You don't just read the text; you highlight or underline key points, and you make commentary or ask questions. In a way, you can use the marginalia to simulate an ongoing conversation with the writer.

The goal of analytical reading is to understand the material well enough so you can explain it to someone else without a lot of effort. You're able to describe the subject very concisely. You're able to list its parts in order and say how they connect with each other. You're able to understand and specify the issues the


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