1 GET READY TO PRACTICE

> The style of an author should be the image of his mind, but the choice and command of language is the fruit of exercise.
>
> —Edward Gibbon (1737–1794)[1]

The pressure to write and publish is stronger than ever in academia. And the sad news is: there appears to be no "ceiling" in sight, even though "half of all published papers are never read at all," according to Burbules (2020, p. 656).

The pressing forces urging you to write and publish more, and more… *and more…* are, for the most part, extrinsic and intractable, difficult to control or manage at a personal level. Among these forces, we find: (a) the academic reward system (for granting degrees, securing jobs, and obtaining promotions) which finds it easier to evaluate scholars in terms of how *much* they produce rather than how *well* they produce; (b) the proliferation of professional journals, which create an inexhaustible demand for new content; (c) the development of new techniques, tools, and technology that make the culling of information, as well as the production and publication processes, much faster and easier; and (d) the privileging of publications in English-language journals/venues (Burbules, 2020; Habibie & Hyland, 2019; Hyland, 2016; Soler, 2019).

As individual writers/academics, it is mighty difficult to change or control these forces. No doubt, we can certainly question and challenge them, and we should push for innovative solutions that are healthier and more reasonable. Yet we must not forget: some of what drives us toward writing and publishing is our own motivation to share what we know and have learned; our own desire to give shape to our thinking; our own need to challenge ourselves; and to shape our identity as scholars (Burbules, 2020). Therefore, we *have* to write to meet professional expectations, but we also *want* to write so others can hear our voice. Writing makes us who we are, even if for no other reason than writing's power to deepen our knowledge, clarify our thinking, and chronicle our growth (Darvin & Norton, 2019).

Therefore, we cannot control most of the external/structural factors driving our need to be writing a lot, but we *can* manage ourselves, vis-à-vis these factors. We *can choose* whether and how to respond to them, and we also can select the direction we will allow them to take us. We *can opt* to stay in academia or leave, for instance. But if we remain, we would be wise to equip ourselves adequately for surviving the "publish or perish" game. We can *choose* a healthy route, we can commit to a reasonable path for the journey, but it is a choice we need to make *intentionally*, knowing about the obstacles and the rewards that will lie in our way.

When probed for details regarding specific obstacles and struggles, lack of time, feeling isolated, and not knowing what to do are some of the most common problems (DeAngelo et al., 2009; Page-Adams et al., 1995). Faculty and students claim they have difficulty fitting large chunks of writing time into their extremely busy schedules. When time becomes available, not knowing how to manage a complex writing project, and lack of confidence in their abilities, makes them hesitate, procrastinate, or completely "block" themselves. As they (or should I say *we?*) systematically postpone a task we experience as difficult and uninteresting, finding time to write, to start, or to complete a project looms over our academic lives like a guillotine, ready to plunge at any second (Steel, 2011). This is how writing controls our lives: through fear, avoidance, and stress. *The more we avoid it, the more it controls us.*

THE POWER MODEL

This book describes a model for taking control of the academic writing process—the POWER model—and provides weekly exercises to improve this control. The model combines certain behavioral *principles* with specific *practices* to help you master and become comfortable with your writing. If you understand the principles and practice the exercises on a weekly basis, you will:

a. establish a *low-stress and sustainable writing habit* that will serve you throughout your academic career;

b. *increase your writing (and publishing) productivity* at a comfortable, consistent pace; and

c. *improve the quality* of your academic writing (in two words: *write better*).

This model also anchored a peer-led volunteer support service I started during a stint as Associate Dean in the (then) College of Education and Human Development at Texas A&M University: POWER Services. The word "POWER," when in the phrase "POWER Services" stood as an acronym: **P**romoting **O**utstanding **W**riting for **E**xcellence in **R**esearch. The services comprised a group of graduate students and junior faculty who, after training in the system/model offered in this book, felt compelled to share what they had learned, with their peers.

The POWER model described in this book represents my effort to organize available theory and research data into useful strategies anyone can use. Peter Elbow (1998), Robert Boice (1990), Joseph Moxley and Todd Taylor (1997), along with Michael Mayrath (2008) are a few of the scholars who developed the theory and conducted the research supporting these strategies. Moreover, the neuroscience and psychology literatures regarding the characteristics of elite performers, such as Olympic athletes, chess champions, and expert musicians, also anchor the exercises and suggestions contained in the model.

The Theory Behind POWER

The POWER model is grounded in Peter Elbow's (1998) theory of the writing process. Elbow refers to the notion of *writing with power* as encompassing two meanings. The first meaning alludes to powerful texts—the writing we see in poetry, religious documents, and political manifestos—the kind of writing that touches people's hearts, moves their souls, and fills them with courage (Rosenblatt, 2011).

Yet anchoring this book is the *other* meaning in the phrase *writing with power*: the idea that the writer has control and power over his/her writing. Writing with power, as Elbow (1998) defined it, "means getting *power over yourself and over the writing process:* knowing what you are doing as you write; being in charge; having control; not feeling stuck or helpless or intimidated" (p. viii; emphasis added).

Peter Elbow's theoretical approach to writing—in other words, his explanation for how good writing takes place (Goodson, 2010)—begins with the need to write badly, develops through the importance of sharing both early and late drafts, and results in gaining mastery over the writing, with the entire process becoming more pleasurable over time. According to Elbow (1998), when writers are comfortable generating initially messy texts, are eager to hear readers' reactions to what they wrote, and are motivated to rewrite their texts to incorporate these reactions, only *then* will they begin to enjoy the writing process and the power it engenders. In his words,

> Once people have the feel of producing *some* words that were a pleasure to write and that make a dent on readers, they do better at putting in the enormous work needed to produce more of them. For really, the central question in writing (as with any difficult skill) is this: How can I get myself to put in the daunting time and effort I need for more consistent good results? The answer, I think, is to cheat—to look for pleasure and shortcuts. (p. xxi)

The POWER model and the exercises in this book, then, build on this theoretical perspective, emphasizing the value of initially messy writing, the need for practice, and the importance of feedback. If the principles, as well as each of the 50 exercises, are put into practice, they will nudge you into developing consistent and healthy writing habits, becoming more productive in your writing/publishing, and gaining power over your writing. Along the way, you may even surprise yourself by finding the entire process a bit more pleasant!

The Research Behind POWER

The most informative data on faculty productivity were collected in the 1980s and 1990s. Despite its age, the research remains valid because little has changed over time. Data collected from faculty in science reveal that between 10% and 15% of authors are responsible for publishing 50% of everything read and cited in the field (Cole, 1981). Bolstering these dated findings, surveys continue to indicate that many academics, world-wide, publish less than one article or book per year (Belcher, 2009; Rørstad & Aksnes, 2015).

It will be interesting to observe how open access publishing might be changing these numbers. Yet, despite estimates that in the sciences "a new paper is now published roughly every 20 seconds" (Munroe et al., 2013, p. 58), it is still true that many academics are not publishing at expected rates and struggle with academic writing. What explains the low publication rates for many academics? Researchers such as Robert Boice (1989, 1990, 1997; Boice & Johnson, 1984) and Joseph Moxley and Todd Taylor (1997), among others, examined academic writers' low productivity systematically. What they found pointed to faculty who struggled with getting their writing done and did not wish, or did not know how, to ask for help. Robert Boice (1990) wrote:

> In my two decades of experience with professors as writers, I've consistently seen people whose inexperience in discussing their blocks exceeded their shyness for revealing almost anything else, even sexual dysfunctions. They often came for help believing themselves to be unique as problem writers. And they worried that asking for help was an admission of weakness. (p. 1)

Dedicated to understanding and providing solutions for these professors, Boice and other scholars dug deep into academic writers' psyches and work habits. They found many explanations for academic writers' low productivity, including their strong critical sense or censorship, fears of failing, strong tendencies to perfectionism, struggles with procrastination, and negative writing experiences in the past. Poor mental/emotional health, personality type, work habits, attitudes toward writing, and perceptions of busyness were also identified as culprits for low writing productivity among faculty (Boice, 1989, 1990).

RESEARCH SHOWS...

In a study of Early Career Award winners in the Educational Psychology field, investment in writing and practicing writing were factors these winners mentioned, consistently, as contributors to their success. Kiewra et al. (2021) conducted a qualitative, cross-case analysis of interviews with six academics who had received these awards. Study participants pointed to many factors present in the complex dynamic system I discuss in this chapter. Award winners mentioned the mindset(s) they embraced, the strategies they employed (including routines and schedules), as well as the support structures available to them (from family support and research mentors to writing groups and institutional resources). Kiewra et al. (2021) comment, on page 2013: "Collie [one of the study's participants] emphasized the critical role practice plays in improving her writing ... Similarly, Fiorella [another participant] stressed the importance of sustained practice. He said, 'It is really important to establish a writing habit, doing it at the same time and place day after day, where it's just what you do, and it feels like no big deal'."

While psychologists such as Boice and Moxley zoomed in on individual-level factors, sociologists examined the problem of faculty productivity using a wide-angle lens. The broad image revealed multiple-level as well as structural influences, including the socialization process that faculty undergo when entering a professional field, the reinforcement and reward systems in which they operate, the quality of the academic training received during their doctoral programs, and gender biases in the domain of publishing and grant-funding (Kleijn et al., 2020; Neumann & Finaly-Neumann, 1990).

Even though sociologists identified structural elements that significantly impact academic writing productivity, it fell to psychologists to offer solutions to the problem. So far, at a broader, systemic level, little has been done to change the socialization process or the reward systems in which academics are immersed. Furthermore, some scholars claim structural-level factors are increasingly harmful to both the development of knowledge and to individual authors (e.g., Casadevall & Fang, 2012). Meanwhile, focusing on individual-level factors, psychologists devised specific strategies that academics of all stripes can adopt to improve their writing productivity.

The principles and practices you will find in this book are grounded in that psychology literature. The strategies include making writing a priority within one's daily schedule, managing distractions, and changing nonproductive/maladaptive attitudes toward writing (Moxley & Taylor, 1997; Robison, 2013). These strategies address, even if indirectly, factors such as our identity as writers, writing anxiety, writing self-efficacy, self-awareness, and self-management—elements known to influence academics' writing productivity (Huerta et al., 2017). The exercises in this book also will teach you the importance of obtaining feedback and establishing a social support system for yourself and your writing. I admit this with sadness, but the exercises will do nothing to change the structure of academic settings and how they reward writing. Perhaps *you* might take on this particular challenge.

While I anchor this book's principles and practices in the research on faculty productivity, two other bodies of knowledge also support the POWER model: (a) the psychology literature regarding elite performers and talent development and (b) the neuroscience literature focusing on the neurological dimension of extraordinary achievements, talent, and performance.

Talent Development and Elite Performance: The Psychology Literature

The work developed by K. Anders Ericsson represents a portion of the psychology literature regarding elite performance (Ericsson et al., 2009, 2018; Ericsson & Pool, 2016). Ericsson engaged in extensive research and theoretical development regarding elite performers' characteristics. With his observations, experiments, and theoretical reasoning, he contributed significantly to the scientific debate surrounding the question "Is expert performance the result of innate talent (or genes), or of learned behavior (or practice)?"

Ericsson's (2007) conclusions point to the role of *deliberate practice* (sometimes also referred to as *deep practice*) as one vital element shaping expert performance:

My central thesis is that experts continually engage in *deliberate practice* activities … that lead to refinement and maintenance of the mediating mechanisms [such as mental representation, anticipation skills, and control of motor actions, among others]. In contrast, less-accomplished individuals do not engage in these activities once they have reached an acceptable level. Their performance is prematurely arrested in its effortless automated form. (p. 12)

Put simply, Ericsson's thesis is this: Elite performers differ from nonelite performers in one key element—*deliberate practice*. Nonelite performers will learn a certain task—playing golf, for example—and will practice just enough to become "competent players." Once they feel they've achieved a satisfactory level, they stop practicing. Elite performers, on the other hand, don't stop. Instead, they sustain practice in order to maintain and further refine the basic skills they achieved (see also Colvin, 2010, for more on deep practice).

Talent Development and Elite Performance: The Neuroscience Literature

Curiously, neuroscientists researching expert performers have come to the same conclusions about practice as those reached by psychologists: Deep practice or deliberate practice is one (if not *the one*) key element for developing extraordinary skills. In *The Talent Code*, Daniel Coyle (2009) proposes to find answers to the question "What explains exceptional talent?" Not surprisingly, one of the first answers he unveils is *deep practice*, and he offers this insight:

Deep practice is built on a paradox: struggling in certain targeted ways—operating at the edges of your ability, where you make mistakes—makes you smarter. Or to put it a slightly different way, experiences where you're forced to slow down, make errors, and correct them—as you would if you were walking up an ice-covered hill, slipping and stumbling as you go—end up making you swift and graceful without your realizing it. (p. 18)

Yet Coyle uncovered that practice, by itself, does not explain talent or expert performance. It's what happens to our brains *during* or as a *result of* deep practice that accounts for the expertise.

Coyle (2009) begins describing the importance of what happens during and after practice by first admitting the biases he brought to his investigation. Similar to what most of us understand about how human brains work, Coyle believed the most important element or portion of our brains was the neuron network. But while interviewing numerous neuroscientists to learn about expert talent and performance from their points of view, Coyle learned these neuroscientists were experiencing an important shift in their thinking: As important as the neurons and their synapses are for brain function, it appears that *myelin*—the substance insulating the axons (or nerve fiber extensions of our neurons)—might have an even more prominent role than the neurons themselves. Coyle describes this shift in thinking as a "Copernican-size revolution" and adds:

The revolution is built on three simple facts: (1) Every human movement, thought, or feeling is a precisely timed electrical signal traveling through a chain of neurons—a circuit of nerve fibers. (2) Myelin is the insulation that wraps these nerve fibers and increases signal strength, speed, and accuracy. (3) The more we fire a particular circuit, the more myelin optimizes that circuit, and the stronger, faster, and more fluent our movements and thoughts become. (p. 32)

Practice allows us to fire specific circuits in our brains repeatedly and to develop more myelin. In turn, more myelin leads to faster or more optimal firing of circuits and developing of skills. As Coyle (2009) recounts in his book, nearly all extraordinary talent can be explained by tremendous amounts of practice and consequent myelin production. One example he gives relates specifically to writing: the Brontë sisters, Charlotte, Emily, and Anne. Many literary scholars have labeled them "natural-born novelists" and poets because they wrote prolifically at very young ages (p. 56). Yet the facts suggest that instead of being naturally talented, they were born into a literary-nurturing environment, engaged in a significant amount of practice very early in their lives, and produced quite a lot of poor (yes: *poor!*) writing early on. Coyle writes,

> Deep practice and myelin [as opposed to "natural talent"] give us a better way to look at the Brontës. The unskilled quality of their early writing isn't a contradiction of the literary heights they eventually achieved—it's a prerequisite to it. They became great writers not *in spite of* the fact that they started out immature and imitative but *because* they were willing to spend vast amounts of time and energy being immature and imitative, building myelin in the confined, safe space of their little books. Their childhood writings were collaborative deep practice, where they developed storytelling muscles. (p. 57)

Granted, both the psychology and neuroscience literatures also list several other factors, alongside myelin, as playing roles in developing above-ordinary talent. These factors include exposure to skilled mentoring/teaching and skill acquisition at young ages. Yet the central, common element in all the research is *practice*, with its consequent *myelin building* (Long & Corfas, 2014).

PRACTICING ACADEMIC WRITING

So, what does all this mean for us academics? What does it mean for our writing productivity and writing quality? Simply put, it means this: If we commit to *practice our academic writing*—and obtain continual feedback—our writing and productivity will improve!

And how can we *practice* academic writing, besides by just … well, just *writing?* We can incorporate practice exercises designed to develop specific dimensions of our writing, much as we would do if we were attempting to strengthen and build specific muscles in our bodies through physical exercise.

This book will provide the opportunity to *practice* your writing on a regular basis. It is designed to give you a chance to repeat an exercise, make mistakes, correct them, and, with repetition and feedback, add to the myelin you already have, and improve (Sterner, 2012). As Ronald T. Kellogg and Alison P. Whiteford (2009) state in "Training Advanced Writing Skills: The Case for Deliberate Practice":

> The term *deliberate practice* refers to practice undertaken with a specific goal to improve. The learner mindfully engages in practice designed by an instructor, coach, mentor, or tutor, who further provides corrective feedback as encouragement to excel. (p. 251)

Please note that—as this quote emphasizes—an important element in this practice approach involves *obtaining feedback* so we can correct our mistakes and incorporate the corrections when rewriting. Therefore, you may want first to take a close look at Chapter 2 (where we practice creating a writing habit) and Chapter 5 (where we practice securing support and feedback). Making sure we develop a system for continually obtaining feedback will help our practice significantly.

I hope this brief incursion into psychology and neuroscience helps you see how this book is grounded in both theoretical and empirical platforms. I also hope that the evidence pointing to the value of gaining control over your writing, the importance of deliberate practice (with feedback), and the contributions a text such as this one can make to the process will motivate you even more to plunge into these exercises and improve your writing productivity.

POWER IN PRACTICE...

During my graduate studies, the POWER model and its scaffolding provided a solid foundation in the world of academic writing. Now as tenured faculty, I continue to apply these practices and skills in my own writing, but, more importantly, I share and use them with my undergraduate and graduate students, during instruction and in our writing groups. The POWER model provides a foundation that is particularly evident in this first chapter, where Dr. Goodson connects writing with deep or deliberate practice. As a former college athlete and Division I collegiate coach, the concept of daily practice resonates with my experience. In order to be successful during my competitive years, I had to practice daily and if I didn't practice, it would show. Similarly, you need to approach writing with the same mindset you would use to train for an athletic event. This mindset requires discipline, appropriate tools, and daily practice.

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NOTE TO THE THIRD EDITION

In the "Note to the Second Edition," I acknowledged how my theoretical thinking about academic writing was still evolving. I admitted, then, I ought to consider other factors as part of the POWER model, alongside the concepts of deep/deliberate practice and contingency management (managing ourselves and our distractions) coupled with support (feedback). At that time, the other factors I had in mind included the constructs of *identity* and *emotional intelligence*, with a focus on self-awareness and self-control.

When addressing *identity*, I offered a brief discussion about fixed and growth mindsets, borrowing from Carol Dweck's work (see Dweck, 2008, 2010). I encouraged readers to examine themselves and determine what was their mindset regarding writing. If they found themselves with a *fixed mindset* about their abilities, I mentioned the good news that, according to Yeager and Dweck's (2012) empirical research, people's mindsets can be changed [from a *fixed* to a *growth mindset*] and that doing so can promote resilience (p. 303).

In turn, when discussing *self-awareness* and *self-control* (both of these components of *emotional intelligence*, or EI), I reminded readers of something they know quite well already: "Any of us—for whom academic writing is integral to our professional lives—know that writing is a task demanding a substantial amount of self-control in the form of emotion regulation and management of delayed rewards" (Goodson, 2017, p. 12; Magen et al., 2013). I also highlighted how little research was available, at the time, connecting EI with academic writing productivity.

In that "Note to the Second Edition," I also touched on the work done by scholars researching *expressive writing*—a type of writing that captures deep feelings or strong emotions, with no concern for grammar, punctuation, or adequate choice of words. At the time, I shared how Pennebaker and his colleagues documented the multiple ways in which expressive writing could have a positive effect on physiological/biological systems, on the management of chronic illnesses or stress, and enhancement of academic performance (Pennebaker & Beall, 1986; Pennebaker & Evans, 2014).[2]

I concluded that "Note to the Second Edition" by saying I had not, yet, formally added these factors into the POWER model, but had begun to pay them closer attention. I did coauthor a paper reporting on a study of graduate students in the United States, their writing anxiety, self-efficacy, and emotional intelligence (Huerta et al., 2017). But I never incorporated these elements into the POWER model, formally, aside from mentioning them briefly.

I chose not to add or develop those elements any further, not because they were unimportant, but because my view of the POWER model began to change. I started to view academic writing in a somewhat different light, and to conceptualize it within a different frame.

A Renewed Way of Seeing

Over the years, my thinking regarding my own research agenda (population health and health behavior theories) evolved, matured, and began to influence my perspective of academic writing. I began to view academic writing as a phenomenon that requires the writer to become aware of, and adopt, a *complex dynamic system* approach, to be more effective and productive (Mays, 2017).

What do I mean?

Simply this: *complex tasks* require a *system* (and sometimes many embedded subsystems) to tackle them. An example: my needle-art hobby. Embroidery and lace-making are two art forms I love to practice and refine on my spare time, and I tend to like the *really difficult* projects, with the intricate, complicated patterns. After much trial-and-error (with a steroid-dose of error, each time), I realized that approaching a complex piece of needlework required a *system*. Knowing the different techniques is not enough to start a very large piece and finish it successfully. Knowing how to execute specific stitches is essential, but not enough. Embroiderers need to know how to make each stitch; yes, but they also need to have the appropriate tools as well as a method/strategy for placing the stitches correctly, for following specific paths in the pattern, and for starting and ending each thread. They also need to follow certain steps, in specific orders, each time. And… they will *thrive* in their difficult tasks when they have friends who also embroider and share the excitement of working on challenging projects.

I learned all this the *hard* way. When I began venturing into embroidering pieces that had a quarter or half a million stitches (yes!) and more than one hundred different colors in a single piece, I felt overwhelmed and stuck, even though I knew how to execute all the stitches, individually, and had completed many small pieces, quite expertly.

This notion of systems was further reinforced when I decided, during the COVID-19 pandemic lock-down, to pick up my classic guitar playing, after several decades of neglect. As I reengaged in establishing a routine practice, and found incredibly useful online resources, in 2022, I came across the book, *Cracking the Talent Code*. In that book, music teacher Gregg Goodhart (2022) claims the exact same notion, when it comes to mastering a musical instrument: we need a *system* for maximizing our learning and practice. When describing the various methods to develop one's ability, he acknowledges that some of them (e.g., practicing scales), "when used in isolation," can work quite well in improving one's skill." But he adds: "… if two or more of these techniques are used *together*, they will make each other even more effective. I call this the *ecosystem of learning music*" (emphasis mine; Goodhart, 2022, p. 3).

From my own experience with needle art, music, and writing, this *ecosystem of learning* also applies to academic writing. We know how to write words, sentences, and even how to connect a few sentences into a meaningful text. But tackling a journal article, thesis, dissertation, grant proposal, or book manuscript—well, those are very complex projects. And in the world of academia, it's not even enough to know how to write competently. We also must master the complexities inherent in the publication and dissemination processes. Here's how Mays (2017) refers to the issue:

Thinking of writing in terms of complexity theory reveals its radical interconnectivity at multiple levels of scale. Foregrounding this interconnectivity shows us the expansiveness of what is involved in how we write and what we write with and shows us how diverse assemblages of writing circulate and interact in a multitude of cultural, social, technological, disciplinary, and material networks. (p. 560)

Given the complexity inherent in both writing and publishing, therefore, to become efficient and prolific writers, we need to recognize how our writing is embedded in multiple interconnected systems at various levels, and we need to have a *system* with which to tackle our writing and publishing. I would add, also: we need not just *any* system… we need a *complex, dynamic system*.

Academic Writing and Complex Dynamic Systems

First, let's start with the notion of *system*.

The most basic definition is this: a system is a group/set of elements that work together for a specific purpose. As an example, take any machine or gadget, such as a bicycle. It has many different components, each of which performs a specific task in coordination with other components, with a specific purpose: to move and transport people/things from one point in space to another.

But what do, I, mean, by *complex dynamic system?*

A *complex dynamic system* is a group/set of elements that interact with each other, for a coordinated purpose, also, but these elements affect and change one another, over time. It's a system that is more "alive." One that is constantly adapting, moving, and changing; expanding or contracting, over time, but never static; never the same from moment to moment. One of the best examples of a complex, dynamic, and adaptive system is the human brain. Oftentimes, when through trauma or illness it loses certain functions, the brain can compensate for the loss by activating or creating new processes to handle the damage.

As I see it, academic writers need a *set of elements*—not merely a tip, or a suggestion, or a hack used in isolation— to successfully tackle their academic writing. And this set of elements is not static (because the writing and the writer are not static, either). This set is complex, dynamic, and comprises the following elements:

a. the writer

b. a set of strategies

c. a set of tools

d. a set of support(s)

Paradoxically, this is a *simple* complex system, but the tension (as Mays, 2017 acknowledges) is intentional: it is "simple" because if we were to closely scrutinize *all* elements forming the complex system in which academic writing resides, we would find it way too complex to be useful. Just briefly, consider: this mini-system I outlined leaves

out elements such as academic institutions' expectations, policies, politics, resources, and rewards. This simplified complex system does not include the forces shaping the culture of academic publications, the economic powers impinging upon professional journals, the unwritten rules that privilege certain types of research findings over others, the different norms in different fields regarding professional publications. All these elements/forces are, indeed, part of the comprehensive system shaping academic writing.

Aside from being acknowledged, however, they contribute little to helping master our skills and craft as writers. Organizational, social, cultural, political, and economic forces are much harder for us, as individual writers, to control or change. Because the POWER model is merely a tool to help academic writers develop a lower-stress and sustainable productivity habit, I will not include all possible elements in the model I'm proposing here. I've pared it down to the elements we can, indeed, control.

In addition to knowing its elements, it is important to understand that complex dynamic systems require a different *approach* to understanding and handling them. Not only do we need to build a system with specific elements, we also need a different set of "lenses" to "see" these elements and relate to them, as well as a new vocabulary to describe them (Mays, 2017). A *complex dynamic systems approach*, therefore, is something we should begin developing—something I have begun adopting for my own writing practice. Granted, I have only started, and am still learning its language. But here is what I have learned so far.

A Complex Dynamic Systems Approach to Academic Writing—What Is It?

Put simply, it is a way of relating to our writing that presupposes specific *non-linear* beliefs and expectations.

A linear view of academic writing goes like this: "If only I had more time, I would write more." Or: "If I read more, my writing will improve." Linear thinking believes that more of something will lead to more (or less) of something else—in a direct and proportionate correlation. This type of thinking is, often, misleading. The more we cling to it, the more frustrated we become because academic writing is mostly a *nonlinear* phenomenon. Quite often, we get *more* done when we have *less* time available (as when we are getting things done right before a trip), and *reading* more can, actually, lead to further procrastinating the writing or, in some instances, completely blocking us because we compare ourselves to our favorite authors (and come quite short of the mark, of course).

In contrast, a nonlinear way of approaching writing involves acknowledging that cause-and-effect are not always proportionate. Investing small amounts of time and energy in our writing, regularly—say, 30 minutes every day over a few weeks—may move our writing forward faster and more productively than writing feverishly for 10 hours a day, over 3 days, against a deadline.

Another manifestation of linear thinking goes somewhat like this, "All this paper needs is for each co-author to work on a section. Later, we'll combine all sections, and our paper will be finished." This view presupposes the total (the paper) is equal to

the sum of its parts (the sections in the paper put together). In contrast, a nonlinear approach recognizes that the total *transcends the sum* of the parts. In our example, the final paper is *more* than merely pasting together each of the sections. The message conveyed in the paper, the story told by the various authors, must work organically, in tandem, to communicate effectively and with a single voice. If not, the paper becomes disjointed, confusing, and will be rejected by its intended audience.

My point in highlighting these aspects of nonlinear thinking is this: we need to approach and deal with our academic writing in ways that take into account the *nonlinear, dynamic*, *and complex characteristics of both writing and scholarship*. This way of "seeing" our writing can help make things easier as we develop or adapt a system for ourselves. If you are interested in learning more about nonlinearity, there are many publications available for both scientists and the lay public, developing the theme.

With the POWER model and this book, I propose that academic writers, who wish to be prolific, productive, and sustain consistent publishing over many years, would do well to consider, address, learn, and master (at least) these four basic elements:

1. Themselves (their attitudes and behaviors as writers)

2. Specific Strategies (what to do, and when)

3. Tailored Tools (artifacts to facilitate writing, editing, and publishing)

4. Significant Support (particularly in the form of feedback)

The exercises in this book address these elements, throughout. Most exercises offer specific strategies for you to implement, but many of the chapters also address *you* as an academic writer (Chapters 1, 2, and 12), alongside referencing specific tools and resources (specified, also, in Appendix A). Chapter 5, "Get Feedback," speaks to the need for various types of support, of which feedback is a particularly important type, but not the only one.

So there you have it. This is, currently, the direction of my thinking about academic writing, and where my future explorations will take me: how to optimize this system in ways that are healthy and sustainable! I hope you feel intrigued enough to explore for yourself what "thinking in systems" can do—not only for your academic writing but, potentially, for your topic(s) of interest and field(s) of knowledge.

For now, let's get to the actual writing, shall we?

CHAPTER 1—MAIN POINTS IN ONE PAGE

1. The POWER model (Promoting Outstanding Writing for Excellence in Research) combines certain behavioral *principles* with specific *practices* to help you master (gain control over) and become comfortable with your writing.

2. The POWER model and the exercises in this book build on the theoretical perspective offered by Peter Elbow, emphasizing the value of initially messy writing, the need for practice, and the importance of feedback.

3. Evidence from three areas of knowledge anchors the principles and strategies in this book: (a) research on faculty productivity, (b) the psychology literature regarding elite performers and talent development, and (c) the neuroscience literature focusing on the neurological dimension of extraordinary achievements, talent, and performance.

4. Research evidence points to *deep* or *deliberate practice* as one (if not *the* one) key element for developing extraordinary skills. Therefore, if we commit to *practice our academic writing*—and obtain continual feedback—our writing and productivity levels will improve.

5. A useful way to approach academic writing is to consider it the outcome of a *complex dynamic system* of elements—you (the writer), specific strategies, tools, and support—that interact continually, and change over time.

NOTES

1. Quotations heading each of the chapters were chosen from a selection culled by Gregory Victor Babic (2008) and published in *Words to Inspire Writers*. All quotations are in the public domain.

2. As a side note: In 2021, one of my doctoral students examined whether expressive writing could help graduate students manage their writing anxiety, writing self-efficacy, and self-awareness. She examined this by replicating Pennebaker's basic research protocol for testing the effects of expressive writing. Her findings, based on a sample of 42 graduate students at a research-intensive university, indicated expressive writing has a strong potential to function as a tool for managing perceived academic stress and enhancing writing productivity (Ji, 2021).