

An Affable Guide to Leaving Classics

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1 To sever th' enchanted knot

ὦ ξένοι,
τίνες ποτ' ἐς γῆν τήνδε κάκ ποίας πάτρας
κατέσχετ' οὔτ' εὖορμον οὔτ' οἰκουμένην; (Sophocles, *Philoctetes*
219–221)

You went to grad school because you love the Classics. In persevering through part or all of a Ph.D. program, you have proven this love through a sacrifice and self-discipline known by few your age. But perhaps plans have not manifested the way you had hoped, and now you find yourself at a decision-making point between the ivory tower and the wastes your parents call the real world. Should you be inclined to leave the discipline, or are already one of those poor souls tossed to the wayside, this document is for you. It is not a map to pathways leading out of Classics, rather a collection of knowledge and strategies by which you may find your own way out. The disgruntled, the broke, the paralyzed, the passed-over – you the lost Classicist have my sympathy and encouragement!

Reasons for leaving vary from person to person. Maybe it is changing life priorities, alienation borne from specialization, or disaffection with the people. Some students have a vague but unmistakable feeling that they made a mistake in their pursuit, while others, true believers, have run the race to the end and come up empty. Whatever describes you, your decision to attend graduate school was not a trivial one, and it is only natural to

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feel some, even an overwhelming amount of, disappointment. There is a uniquely strong affinity that Classicists feel to that esoteric, millennia-old tradition. For some brief period you were part of it, but no longer.

You likely entered grad school in your early twenties, a time when your mind and personality were not fully formed, and you had a minimum of exposure to the greater world. Considering this, we should be more surprised when someone alights upon a perfectly suited career at such an age.

Leaving Classics is a mixed blessing, and I would like to share some suggestions how to help make it more blessing than not. I myself slogged through eight years of a Ph.D. program and experienced the highs and lows common to the experience. Somewhere in the middle of my time in grad school, I gave way to the sinking realization that a career in Classics simply was not for me. During my remaining years, though I benefited from advice of those around me, few knew how to help me secure good employment beyond academia. Since graduating five years ago, through trial and error, I have achieved some success as a software programmer and artificial intelligence researcher. At the suggestion of an accomplished professor and by the request of some current students thinking about opportunities on the outside, I am recording here my advice on how to leave Classics and thrive in the marketplace.

2 The academy is troubled

There is no shortage of those who will extol a life of the mind, so let it be acknowledged there are innumerable benefits of a career in the ivory tower. It is an honest profession and those who have secured tenured professorships have done so to great credit to themselves. Likewise, you do not need anyone to remind you of the downsides of academia, for you have lived alongside them for years.

But take into consideration whether you, for lack of contrasting experience, are liable to a generalization error: to incorrectly project aspects of a familiar environment upon of the wide, variegated world of employment. To make a fair reckoning of yourself and your future, it is important to be aware of the unique and intractable problems that have grown up around the university. While you were assiduously performing your scholarly duties, American culture has come to some consensus about the disappointing state into which colleges and universities have devolved. The student loan

crisis, campus safety culture, and ideological homogeneity would likely top the lists of your fellow citizens.¹ We could add to this some less widely observed problems unique to the humanities, such as low graduation rates from Ph.D.–granting programs (and nevertheless a relative overproduction of Ph.D.’s), overly long time–to–degree durations, a persistent increase of the “publish or perish” hiring model, decrease of tenured jobs, and an increased contingency for those jobs remaining.

Aside from problems plaguing universities and humanities departments, there are serious personal drawbacks of educating yourself into your late 20’s or early 30’s. One is the loss of critical wealth–building years. Unless you were so wise and so disciplined as to have invested a portion of a meager fellowship into retirement investments, you have utterly lost out on compound interest during the first quarter of your professional life. Over the course of your natural life, a decade in graduate school will translate into a loss of hundreds of thousands of dollars. And if debt has entered your life, you likely already know the burden this poses.

I’ll end my negativity in a moment, however before doing so let me extinguish one remaining ray of hope: refuge from your graduate school woes in obtaining the longed–for tenure track position. I suggest instead that your problems might only be amplified. Insecurity induced by your dissertation committee will be replaced by the scrutinizing eye of new departmental colleagues and a tenure committee; pressure to publish will be significantly higher and equaled only by your new workload; and financial pressures may remain onerous as you find yourself needing to move household, travel for conferences, and perhaps start a family. A career in Classics is a diamond in the rough; between you and that jewel are dozens (nay, hundreds) of desperadoes slugging it out. I, for one, do not look down upon you for taking a bow and turning to greener pastures.

1. Opinions of causes and solutions vary, of course, however the severity is recognized across the political spectrum. Student loan debt in the United States, at the end of 2016, totaled over \$1.3 trillion (source: the New York Fed’s “[Quarterly Report on Household Debt and Credit](#)”). On suppression of free speech, see Greg Lukianoff’s *Unlearning Liberty: Campus Censorship and the End of American Debate*. Since its publication in 2014, anti–speech partisans have only become more bold. On the academy’s intellectual monoculture, consider that across all departments Democrats outnumber Republicans by a ratio of 11.5:1 (“[Faculty Voter Registration in Economics, History, Journalism, Law, and Psychology](#)” by Mitchell Langbert, Anthony J. Quain, and Daniel B. Klein; 2016). In History, the ratio is 33.5:1!

3 The economy is vast

It touches one's sense of honor ... if just previous to putting your hand into the tar-pot, you have been lording it as a country schoolmaster, making the tallest boys stand in awe of you. The transition is a keen one, I assure you, from a schoolmaster to a sailor, and requires a strong decoction of Seneca and the Stoics to enable you to grin and bear it. But even this wears off in time. (Herman Melville, *Moby Dick*)

I presumptuously suggest that you know little of the free market economy. After only five years, I cannot claim any kind of mastery, though I do know much more than I did before leaving school. One of the first things to strike me was the scale of the work force and the diversity of opportunities within it. The professional discipline of Classics is very small and the economics of the university are artificial, at least in that they do not reflect the dynamism of the private sector.

Someone in your position must make a fundamental psychological transformation from a scarcity mentality to an abundance mentality.² An abundance mentality creates a belief that there are plenty of resources for all, while a scarcity mentality sees success as a zero-sum game. You have been acclimated to a professional world exceptionally bounded by limitations of opportunity: too few funding slots, journals, post-docs, etc.. I observe that most Classicists leaving the field are not aware of the severe degree to which the real scarcity of Classics has wrongfully impinged their ability to understand themselves and their possibilities. While the scarcity Classicist may be the norm among grad students and (tragically) faculty, the sooner you cure yourself of this mindset, the sooner you can think clearly about

2. I borrow Steven R. Covey's famous terms: "People with a Scarcity Mentality have a very difficult time sharing recognition and credit, power or profit – even with those who help in the production. They also have a very hard time being genuinely happy for the successes of other people ... Only so many people can be 'A' students; only one person can be 'number one.' To 'win' simply means to 'beat.'" He continues, "The Abundance Mentality, on the other hand, flows out of a deep inner sense of personal worth and security. It is the paradigm that there is plenty out there and enough to spare for everybody. It results in sharing of prestige, of recognition, of profits, of decision making. It opens possibilities, options, alternatives, and creativity" (Steven R. Covey, *The 7 Habits of Highly Effective People*).

your future.³

For me, the shift to an abundance mentality was a gradual one, yet it amounted to a personal revolution in how I understand the nature of opportunity. I insist that an open-handed abundance mentality is more likely to lead you to success and happiness in the non-academic economy. The giving and receiving of intellectual works, creating something from the gifts of others, can only flourish in a free and open marketplace of ideas. If you are like me, you in part stayed within grad school because you feared the larger economy and had poor imagination for what a “real” job looks like. Maybe you’re a quiet person who likes to work alone, spending long hours researching – there are good jobs out there for you. Or maybe you love the energy of the classroom – there are vibrant workplaces waiting for you, too. In Classics, there might be a few different types of jobs, whereas in the greater economy there are thousands of ways to earn a living. Whatever oddity of temperament took you down the path of Classical philology, I promise that your idiosyncrasy can be accommodated somewhere out there.

4 Be prepared

Regardless of what has led you to contemplate departure from graduate school, and even if you have already left, I have recommendations for actions you may take to ease your short-term transition into the work force and set yourself up long-term success.

More than anything, you must have a fallback plan to financially support yourself. This is the best advice I received before going to grad school and, to my regret, I did not follow it until my final years. Without a fallback,

3. Though abundance in aggregate creates wealth, specialists thrive off scarcity of supply for their own products. Read Bastiat (here quoting Montaigne) and ask yourself what the “secret wish” of entrenched Classics professionals must be: “We could make a survey of all industries, and we should always find that producers, as such, have antisocial attitudes. ‘The merchant,’ says Montaigne, ‘prosper only by the extravagance of youth; the farmer, by the high cost of grain; the architect, by the decay of houses; officers of justice, by men’s lawsuits and quarrels. Even the ministers of religion owe the honor and practice of their high calling to our death and our vices. No physician takes pleasure in the good health of even his friends; no soldier, in the peace of his country; and so it goes for the rest.’ It follows that, if the secret wishes of each producer were realized, the world would speedily retrogress toward barbarism” (Frédéric Bastiat, *Economic Sophisms*; Arthur Goddard, trans.).

you rely upon the beneficence (and budget) of people and systems out of your control. Not only is this advice practical, it will bring new spirit to your scholarship, as self-reliance begets courage that cannot be bestowed by a fellowship check.

4.1 Research new paths

Learn about industries or technical fields that have caught your interest in the past. For this research, I strongly recommend the time-honored *What Color is Your Parachute?*, a comprehensive guide to career change and job junting. It will hold your hand while teaching you how to discover companies, write a good resume, conduct yourself in interviews, negotiate salary, and so on.

Having taken a technological route, my advice is skewed towards the fields of programming, artificial intelligence, data science, and research. If programming does not seem like your path, I encourage you to reflect upon two points. First, I raise the conventionally accepted notion that linguists and programmers share “left brain” inclinations (along with mathematicians, musicians, etc.). If you have composed Demosthenic periods or plowed your way through a book of the *Pharsalia*, you no doubt have the precision and obstinance required to become a software developer. Second, I think you would be well advised to insinuate yourself somewhere into the information economy, which I would loosely characterize as the breadth of data-driven work that augments and automates traditionally white-collar labor.

If you do not have a particular industry in mind, start by assessing your strengths, both natural aptitudes and what brings satisfaction. Think not about *what* you studied/researched/taught but *how* you did these.⁴ Your grad school experience, the good and the miserable, contains clues by which you will increase the likelihood of success on the outside.⁵

4. Along these lines, *StrengthsFinder*, a book and personality survey that discovers what kind of day-to-day work you find most rewarding, is helpful.

5. I am loath to record here a list of specific industries, for several reasons. First, I want this document to lead students out of the field and not become a tool for rationalizing an advanced humanities degree. Second, hiring trends are liable to change. Finally, my knowledge is limited and constrained by my own experience. I am confident that this exercise of identifying what kind of work one likes to do, performed by many talented Classicists, will reveal wonderful avenues of employment of which I am not aware.

4.2 Align research

Immediately begin to shape your current academic work with a mind to your possible future directions. This shaping has two aspects: method and subject matter. For example, if you see yourself going in the direction of programming, make all of your projects code-first. Each term paper now becomes an excuse to learn and apply a new tool, methodology, or knowledge base. If you want to learn to program, take that upcoming essay on assault in Terence as your chance to try your hand at pattern matching with regular expressions. Or if you want to go into teaching, then by hook or by crook turn all of your work into “pedagogy in _____.” Maybe it is geospatial analysis that catches your fancy; take this as your chance to learn GIS by mapping Odysseus’ return home.

Some professors bristle at such “outside” approaches, so should you encounter resistance, do not fight them, but reverse the presentation of your technique: Pose your project in its hackneyed philological form, then answer it using data you have generated with your new (and now perhaps obfuscated) method. If you meet with truly willful resistance to integrating your new interests into scholarship, avoid such professors at all costs, for they simply do not understand, nor care about, your best interests.

4.3 Learning to program

Should you want to program, your language will be decided by what kind of problems you want to solve. I will simplify what is liable to become a contentious conversation: If you want to do natural language processing, data science, or machine learning, Python is the best place to start.⁶ If you aspire to make web apps, then perhaps start with JavaScript, but in addition, be sure to learn a popular framework (Angular or React) too. If you do not know where to start, but only know you want to program, then choose Python. Remember that you do not need to become an expert overnight, for knowing how to code, even just a bit, can be of tremendous value in non-programming roles: I have seen colleagues with even rudimentary skills exponentially increase their productivity through scripts automating daily tasks.

6. R is a good language for data science, however it is awkward for collecting and pre-processing data (often the bulk the effort).

4.4 Make your projects public

As I will explain further below (section 5.3), the greatest hurdle you will face while interviewing is potential employers' (reasonable) perception that your academic background has no relevance to their needs. It is distressing that after all your hard work, the "M.A." or "Ph.D." after your name may do more harm than good. In an effort at relevance to the marketplace, make your projects publicly available, that you may point to them as examples of your skills and work ethic.

Put some scholarly artifacts (e.g., dissertation and lecture slides) online on places like GitHub, a personal website, and LinkedIn. For budding programmers, your choice is easy: Post your code on GitHub, along with a thorough README that includes a plain-language description, explanation of the code or algorithm, precise installation steps, and all the commands one would need to run the software. This extra effort you take to contextualize your work shows you care about your audience, and thus would make a conscientious colleague.

I recommend you work on a "passion project," which could be a blog, portfolio, or software library. This will act as a motivation to grow your skills, make you stand out among the competition, and give you something interesting to talk about. Plus, there is nothing like public scrutiny to improve your product!

You have a choice to make between starting your own project and joining in that of others. I began my open source project, the Classical Language Toolkit, as a portfolio piece. To my delight, others had similar thoughts and we all began to grow the project collaboratively. One of the beauties of open source programming is that it requires us to think beyond tight-fisted humanism and embrace some of the collaboration our scientist colleagues take for granted. If a software project does not readily come to mind, take a step back and think about the greatest mysteries, or most contentious subjects, you have encountered in Classics. Ask yourself what data and technology you would need in order to answer them. Is that feasible? If not entirely, can you tackle at least a sub-task? Should you not know where to start, know that most open source groups are grateful for help and will walk you through the process of creating professional code.⁷

7. The CLTK is always open to assisting students of ancient languages, so do not be shy if you are inclined toward NLP or web development.

4.5 Natural language processing

To all Classicists, whether or not they plan to exit the discipline, I recommend natural language processing (NLP), a field within artificial intelligence that combines linguistics and programming. Note the familiar heritage: Linguistics is a continuation of philology by means of the science of language; NLP is an extension of linguistics by means of computer science. Its purpose, in a nutshell, is to use human language, analyzed with computers, to replicate human decision-making. Once automated, this interpretation can be done at a scale and with a complexity far beyond the capacity of any individual's mind.⁸ Like philology, NLP is a quantitative pursuit of meaning in complex human texts. Both fields are multi-disciplinary, too, pairing language with other types of data to answer questions. Unlike Classics, NLP has a thriving job market.

4.6 Freelance

For two reasons, I recommend starting your own company, if even just a sole proprietorship, under the name of which you do freelance work. First, you will be well served by a continuous employment history once you leave school. It could take some time before you land something full-time, and you will want to avoid the prejudice that hiring managers have toward gaps in an employment timeline. Second, you will develop a track record of experience in the industry into which you want to move. If you need to develop your skills and do not feel ready to charge money, look for people you can help *pro bono* – friends, relatives, non-profits, religious groups, and so on. In doing this, you will acquire skills, a portfolio, and references. If you are ready to get paid and expand your repertoire, Upwork, a website that connects clients with freelancers, is a fine place to start. Begin with small, easy jobs and you'll build a reputation and your confidence.⁹

8. For a somewhat dated but gentle introduction to NLP, start with [online lectures from Dan Jurafsky and Chris Manning](#). The [Natural Language Toolkit's online book](#) is a convenient place to start and provides a lot of examples and problem sets appropriate for newcomers to coding.

9. If lacking ideas of how to begin an independent work history, remember that you are well qualified to tutor students of all ages in languages, writing, study habits, etc..

5 The first lowering

Everything recommended above is a rough sketch of ideas you must think through for yourself. They may or may not apply to your situation, so I do not want to press too hard on any particular point. What follow are practical suggestions. While I cannot insist that every soon-to-be-former Classicist must follow them exactly, you ignore them at your peril.

5.1 Structuring your resume

Resume writing is overwhelming for those without a strong definition of who they are and what they want to be in the marketplace. Starting out, this is a natural stumbling block.

There are two kinds of resumes: position-based and skill-based. Both have catches for you as a recent grad student. Position-based is probably most common, where you enumerate the jobs you have had. But because you likely do not have a long line of white-collar employment, think about how you can break out your various grad school positions. You have had multiples roles, overlapping in time, such as fellowship researcher, teaching assistant, and research assistant. Beneath each of these roles you can enumerate your duties and accomplishments. Thus, you convey that you have had steady employment and have been more than just a student. Of course, if you have been doing freelance work, you should include that, too. A skill-based resume primarily organizes what you know how to do and then says in what capacities you have used such skills. It is especially useful for entry-level technical positions, for teams looking for an “individual contributor” ready to start with a minimum of training. As your workforce accomplishments grow, potential employers will be less concerned with your exact skills, as they will be inferred from your experience. To hedge your bets, I recommend making two sections, one for your skills and another for work history.

Here is a suggested outline of the constituent elements and order of your resume:

1. Name, including your credentials (“M.A.” or “Ph.D.”)
2. City of residence, email, and phone number
3. URLs to home page, LinkedIn, and/or GitHub

4. Know-how: Here you can list your skills, including software used. If you are not a programmer, you should still have plenty to say, including: technical writing (this is what scholarship entails, after all), proofreading, research, multilingual abilities, and events planning and marketing (in case you helped to organize a conference). While I consider your teaching experience real work, be thoughtful how much you say with regards to this, taking care you do not induce the very impression you are trying to get away from, that you do not have skills beyond the education sector.
5. Experience: This is a listing of jobs in reverse chronological order. Divide university teaching and research under separate headings (say, “Researcher” and “Instructor”). As you become more senior in the work world, place this Experience before Know-how.
6. Education: Similarly to not belaboring your teaching, do not overdo your education. Just put down your undergraduate and graduate programs, along with degree and dates. If you have a stellar G.P.A., maybe add that, too.

The above are strongly recommended. The following might be appropriate if you are pursuing a research role where your superiors and colleagues work in a research capacity: Invited lectures, Publications, Academic awards, and Service (professional volunteer work).

Minimize the variations of your resume. First, maintaining two high-quality resumes will lead to inconsistencies and errors. Second, and more importantly, your resume is a wonderful chance to consciously forge a new identity. When you tell different stories, by means of multiple resumes, you split this new identity before it has fully emerged, and you thus lose a valuable opportunity to explain you to yourself. Still, if you are applying to very different types of roles, some customization may be necessary; if so try to leave this customization to the cover letter.

5.2 Online profile

You need some kind of online presence, so you ought to make it good. A personal website is a great way to present yourself, especially if you have

thoughts to share in a blog.¹⁰ A LinkedIn profile is essential, with GitHub, too, being imperative if you code. For your LinkedIn profile, complete and continually refine it. Link to your projects, join groups, and ask for endorsements and recommendations. Put up a nice photo of yourself, too. And it goes without saying that you should clean up any social media residue from your less polished days.

5.3 Tell a good story

Online and in person you will need to succinctly explain who you are and what you are about. Only through experience will you learn what messages work and for which audiences. Peter Thiel asks interviewees, “What important truth do very few people agree with you on?” He doesn’t mean idealistic platitudes, but contrarian statements that indicate the direction, unappreciated by others, you see the future taking. To illustrate, I will share mine: I think NLP is the most important of all the AI disciplines because language is our best proxy for understanding, and thus reproducing, the human mind. When one hears me say this, whether or not they agree, I leave them with an impression of being an informed professional with conviction. This exercise is a terrific way to find your voice.¹¹

Throughout I have touched upon how to make yourself understandable to professionals in your new field. When a potential employer is evaluating you and your resume, keep in mind that you will likely look odd – and how can you blame them! Your experience is a double-edged sword. The best strategy for these encounters is to be proactive in explaining the relevance of your background for the job at hand. Discussing your past without tailoring to your new context is liable to make you seem out-of-place or even bizarre. If you do not believe me, when asked about work ethic in your next interview, bring up *Works and Days* and let me know how it goes.

I recommend imagining your career’s trajectory as a straight line intersecting three points (past, present, and future), as illustrated on the graph

10. If you can code a little and do not know where to start, make a free one through [GitHub Pages](#).

11. “This question sounds easy because it’s straightforward. Actually, it’s very hard to answer. It’s intellectually difficult because the knowledge that everyone is taught in school is by definition agreed upon. And it’s psychologically difficult because anyone trying to answer must say something she knows to be unpopular. Brilliant thinking is rare, but courage is in even shorter supply than genius” (*Zero to One*).

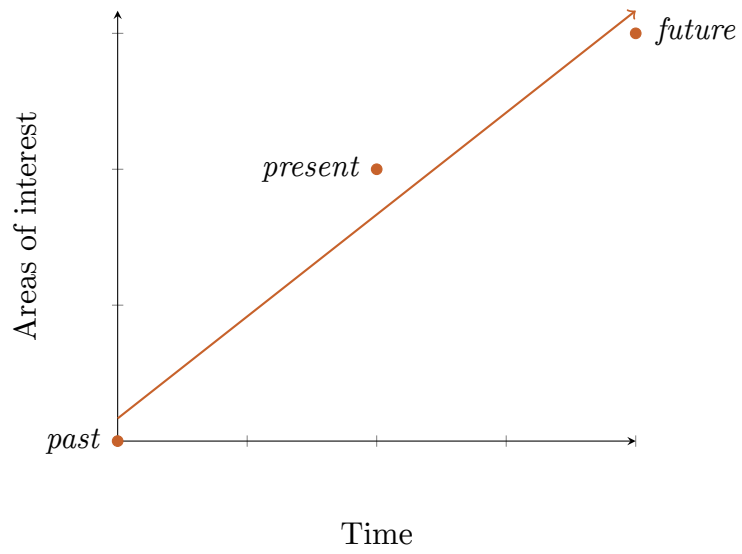


Figure 1: Approximately connect your past, present, and future (nodes) with an intelligible story (edge).

in Figure 1. Start by considering where you want to go (the future), then think about what you are doing now in order to get there (the present), and finally reflect on which of your past research and work “line up” with the other two plot points. To use myself as an example, at the time of graduation, my goal was to work in NLP (future); at the time I was learning to program (present), while previously I had been studying literature with simple corpus linguistics tools (past). While I did not have formal training in NLP, I could honestly tell a compelling story about my background and how it was naturally leading me to my goal of becoming an NLP specialist.

Telling a good story comes down to selling yourself. It may strike you as mercantile, however the persuasive art of sales permeates human experience.¹² Once, during an interview, about a year after graduating, I was asked a pointed question: A startup founder said he knew I was smart and had some skills, however he contended that my experience was irrelevant to his business. I replied that in scholarship too there is competition. For instance, I said, academics fight it out in the marketplace of ideas, and that this act of persuasion shares with sales the need to successfully communicate facts, logic, value, and aspiration. The idiom “I don’t buy it” signifies the failure of another’s argument. (It worked, I was offered the job.)

5.4 Job hunting

The expression “job hunting” is apt, since good employment will not come to you. Nor will it be passively gathered, but seized only found after long hours stalking. While I am not able teach how to do this, I can point you in the direction of those who can.

As mentioned above, start with *What Color Is Your Parachute?*. Buy it immediately, read, and internalize. Submit to its process and do the exercises, despite any internal resistance. This book is praised by everyone I have known who has used it.

Second, use job search websites. Since you will have a LinkedIn profile, begin with that. There are other popular sites, of course, which you’ll discover in the course of your hunt. Sign up for daily email alerts for new positions matching your criteria. Read the postings, submit applications, and contact internal recruiters affiliated with a position. External recruiters

12. Karen Kelsky’s *The Professor is In* (2016) comes recommended by a friend on this subject.

can be helpful, however do not surrender responsibility for your search to them, nor need you trust everything they say (their economic interest in you is only short term).

Third, keep your eyes peeled for hiring events on campus. Spend time around your university's career center, but take its staff's advice with a grain of salt. Their target client is an undergraduate with a practical degree, and they may not have any suitable advice or connections for somebody in your position. Computer Science departments are good places to look, too, as they often have companies beating down the door for access to their students.

Finally, I recommend you get out into the larger community. Attending technical or industry-specific "meetups" and lectures are a great way to connect with like-minded people who will help you improve your knowledge and make connections within organizations. A Ph.D. is not special within academia by dint of its prevalence, however in industry, your degree will make you, at least, a curiosity, being a foundation upon which to build.

6 Now for us there rests another mark

οὐδ' ἄρα Λωτοφάγοι μῆδονθ' ἐτάροισιν ὄλεθρον
ἡμετέροις, ἀλλὰ σφι δόσαν λωτοῖο πάσασθαι.
τῶν δ' ὅς τις λωτοῖο φάγοι μελιηδέα καρπὸν,
οὐκέτ' ἀπαγγεῖλαι πάλιν ἤθελεν οὐδὲ νέεσθαι,
ἀλλ' αὐτοῦ βούλοντο μετ' ἀνδράσι Λωτοφάγοισι
λωτὸν ἐρεπτόμενοι μενέμεν νόστου τε λαθέσθαι.
(Homer, *Odyssey* 9.92–97)

Embarrassing though it is to say, leaving the confines of the university was one of the scariest things I have ever done. As my student years progressed, the non-academic world grew only more mysterious to me. Thrown into it, I slowly came to realize that it was I whose vision had become increasingly hazy under the influence of a life of the mind. It is not likely that you are as lost as I, which hopefully makes this document commonsensical.

If you have the clarity of mind to intentionally change careers, despite your investment in philology, you possess courage that many of your colleagues lack. A prosperous life awaits if you know how to make the leap.

While I have argued that the “Ph.D.” after your name may initially be a liability in transitioning to the job market, over the course of your career, such credentials will open doors. Your doctorate is something many will greet with great respect for the intelligence, sacrifice, and learning it represents. It is up to you whether you will live up to those expectations.¹³

7 Suggested reading

- *What Color Is Your Parachute?*, Richard N. Bolles: A comprehensive guide to looking for work and changing careers.
- *StrengthsFinder*, Tom Rath: Includes a thorough questionnaire that identifies modes of working most suited to your personality traits. Great for clarifying the most important needs you have of a job. This book will not help you find what job to get, but what kind of work will be most rewarding.
- *The 7 Habits of Highly Effective People*, Steven R. Covey: A monumental work on developing strong interpersonal relationships. Valuable for an individualistic student moving into more complex work environments.
- *Linchpin: Are You Indispensable?*, Seth Godin: On transitioning to the information economy. Especially powerful on escaping educational conditioning intended to create factory workers and paper-pushers.
- *The First 90 Days*, Michael D. Watkins: Practical guide for starting a new job, to minimize the time to grow from a trainee to contributor.
- *Zero to One*, Peter Thiel: A modern classic about entrepreneurial thinking in today’s best startups.

13. Credentials, and those who swoon over them, threaten to trip you up, too. William James presciently warned against an ever-rising bar of the Ph.D, and the deleterious effect this has upon college education and the character of grad students. “Is individuality with us also going to count for nothing unless stamped and licensed and authenticated by some title-giving machine? Let us pray that our ancient national genius may long preserve vitality enough to guard us from a future so unmanly and so unbeautiful!” (“The Ph.D. Octopus,” *The Harvard Monthly*, March 1903). The entire essay is worth a read.

- *Lean Startup*, Eric Ries: If you are thinking about working in startups or technology, I strongly recommend this as an introduction to the philosophy behind agile methodology. Understanding iterative product development is critical for newly transitioned students, as project timelines will be much shorter than you are used to. I have seen former university researchers frustrate their colleagues by not perceiving the need to execute well-defined projects with short turnaround.
- *Learn Python the Hard Way*, Zed Shaw: A free online course with optional paid-for supplementary materials. Highly opinionated and with very careful instruction, both important for beginners.
- *Cracking the Coding Interview*, Gayle Laakmann McDowell: For all programmers. Unless you have a formal computer science background, coding challenges during the interview process will be challenging. As important as the knowledge, you need to understand the format of programming interviews. If you can work through at least the easier examples of each chapter, you will be fairly well prepared for the kind of thinking you are expected to demonstrate in a live coding interview.