Introduction

I began this book with some large questions: what will sustain the life of the mind in the coming century? Is the university destined to remain the world’s sovereign intellectual institution? What can history tell us about its future? I pose these questions in part because the university where I teach and so many students study—meaning the modern research university in twenty-first century America—is, by some accounts, under serious threat. Skyrocketing tuition, neglect of undergraduate teaching, competition from athletic programs, corporate influence on research and administration, overspecialization in the disciplines, decreasing accessibility to minorities (or, alternatively, to deserving rural or even middle-class whites), and accusations of “political correctness” are all problems to have appeared on the public agenda over the last two decades. Underlying them all is a creeping incoherence of intellectual and moral mission. Ironically, this loss of focus has occurred at the very moment the United States, and particularly its system of higher education, assumes an unprecedented hegemony over global culture.

But while I want these present-day concerns to remain firmly in the minds of this book’s readers, my deeper purpose is both more historical and, I hope, more optimistic. Instead of worrying only about where academe is headed in the future, I want to recall the drama and dynamism surrounding the pursuit of knowledge in the past. Instead of chronicling the growth of an educational system about which many are all too complacent, I want to convey how different and exciting and even dangerous the life of the mind could be for those in similar circumstances, hundreds, even thousands, of years ago. Before the university became the comfortable, state-supported, bureaucratic, publicly esteemed but often privately scorned institution that it is today, scholars were pioneers and renegades and knowledge was a hard-won treasure. Every new thing they learned was in danger of being lost and forgotten, whether through the hostility of those who feared new ideas or, more insidiously, through simple neglect of those unwilling to organize and preserve our collective civilizational memory.

This story includes the early Christian monks who devised careful schemes to preserve knowledge as the Roman Empire crumbled around them, and the much later scholars who set up an international “Republic of Letters” to unify Europe even as it was being torn apart by Protestants and Catholics at war with each other. It includes Peter Abelard, the arrogant medieval logician who tangled with his masters, seduced his star pupil Heloise, and wound up both watching his books burn and suffering castration at the hands of his lover’s uncle. And it includes the public and private struggles of Marie Curie, one of the first women scientists, who literally poisoned herself to death with radiation to explore the structure of the atom.

One of the unlikeliest things to have resulted from the efforts of these men and women, and many others, is a unified academic culture, one that is common to all who live in the so-called Western world and, increasingly, to those elsewhere as well. Medieval theologians, like Abelard, and atomic physicists, like Curie, had very different reasons for pursuing knowledge—to know God, to unveil the secrets of nature—and yet both contributed to what is often deemed the “Western intellectual tradition” and thus to the story I have to tell in this book. I would argue that the “West” itself can only really be defined by its institutions for organizing knowledge, not as a set of cultural values or as a region on the globe. Think about a group that includes ancient Greek shepherds, Christian monks, French aristocrats, Soviet apparatchiks, Los Angeles commuters, and
even students at the western-style University of Malaya in Kuala Lumpur. These so-called “westerners” differ radically in language, ethnicity, and lifestyle. Historically, they may have been concentrated in Europe but have since spread to its colonies, and beyond, all over the world. Most now subscribe to the so-called Western values of democracy, secularism, science, and individualism—but others have endorsed their exact opposites. The only thing they share is having participated in building a common intellectual heritage. But how can that heritage be defined? If we can understand where it came from, we can make educated guesses about where it is going.

This book attempts precisely that. It traces the production, preservation, and transmission of academic knowledge in what has become the “West.” Academic knowledge comprises all the subjects debated in Plato’s Academy, as well as everything that has since been added to—and subtracted from—this list. This book is not a history of philosophy, though it engages with the philosophical ideas that animate our educational practices. Nor is it a history of education, though it argues that the way knowledge is conveyed from generation to generation is inseparable from the content of that knowledge. Most obviously, it hardly touches on non-academic knowledge, the type of knowledge one gets from reading a newspaper, building a motorcycle, or parenting a child. But it does aspire to encyclopedic completeness. It assumes nothing about the divisions between science and humanities, literature and scholarship, religious and secular wisdom, or knowledge of nature and knowledge of texts, at least until these distinctions hardened in academic practice.

This book is about the West, but it generates an understanding of this term by drawing comparisons with the world’s other great literate cultures. For the sake of this book we can reduce these to three: China, Islam, and India. China had the world’s longest-lived alternative tradition to the West: a parallel universe of scholarship and civilization that came to an end only in the twentieth century. Islam shared with the West both a common origin in Near Eastern monotheism and the absorption of Greek knowledge and philosophy. And India is a region with some of the world’s oldest homegrown (Sanskrit) knowledge traditions, but also the one that more than any other has been enmeshed in webs of influence involving the rest. In all four traditions, academic institutions grew up to solve universal problems of literate societies to which Western scholars simply developed particular solutions. These include how to produce knowledge (by converting oral philosophical traditions into written scholarship), how to preserve it (by copying manuscripts, establishing a canon of scriptures, and ensuring the meaning and sense of their language is maintained), and how to transmit it (by animating the dead letter in face-to-face discussion and debate). Periodic glances at alternative solutions to these problems highlight not the intrinsic superiority, but rather the historical specificity, of European and American variants.

This book is thus best described as a history of institutions: the seven institutions that have dominated Western intellectual life since ancient times. The chart below lists these, along with an eighth, whose institutional status remains ambiguous. These are the institutions that have safeguarded knowledge by striking a compromise between scholars and the rest of society. Each was formed to organize the totality of knowledge, each was driven by a specific ideology linking its mission to the outside world, and each bears the lasting stamp of the historical epoch in which it first coalesced. In times of stability, they carried the torch of learning; in times of upheaval, individuals and small communities reshaped the practices of learning by founding new institutions.
Chapter | Institution      | Ideology      | Era       
--- | -----------------|--------------|-----------
1   | The library      | Philosophy   | Antiquity |
2   | The monastery    | Christianity | 500-1100  |
3   | The university   | Scholasticism| 1100-1500 |
4   | The republic of letters | Humanism | 1500-1800 |
5   | The disciplines  | Idealism     | 1800-1900 |
6   | The laboratory   | Materialism  | same      |
7   | Big science      | Scientism    | 1900-2000 |
8   | The two cultures | Postmodernism| same      |

From the moment, about 2,300 years ago, that knowledge first expanded beyond the compass of one person’s mind—or the minds of a single community of scholars engaged in face-to-face debate, like Plato and Socrates—organizing knowledge became as important as knowledge itself. It is not enough to pile up all the great books in a room and assume that the thirst for knowledge will live on. As the founders of the first library well knew, one had somehow to categorize it (or there would be no way to grasp its meaning and relationship to other knowledges). As the founders of the first university knew, one still had to present it in lively face-to-face seminars and lectures (or it would become stale, lifeless, and increasingly irrelevant to the lived world). And as the founders of twentieth-century “big science” knew, one had to put it to practical work improving the human condition (or there would cease to be any rationale for its continued support amongst a multitude of pressing social needs).

A focus on institutions directs attention beyond individual personalities, ideas, schools of thought, and even disciplines and toward the ways seekers of knowledge have practiced their craft. Readers will recognize many of the names (Curie or St. Augustine) and ideas (heliocentrism or the subconscious) that appear in the pages below. Other, lesser-known figures, like Demetrius of Phaleron and Vannevar Bush, contributed more to the organization of institutions than to the progress of ideas, usually at transitional moments in history. Many of the “giants”—Darwin and Newton, for instance—are not found in this book because their contributions, however momentous, fit comfortably within existing institutions. The book in fact aims to avoid the usual “great men and big ideas” approach to intellectual history. It instead highlights shifts occurring, often without conscious direction, among entire communities of scholars pivotally situated in history. Thus Kant and Hegel, the famous German philosophers, make star appearances in the chapter on the disciplines, but more for their lecture styles than for their philosophical doctrines. Understanding how the Gothic-era university redeemed face-to-face learning after the Enlightenment made reading books the royal road to knowledge requires nothing less.

Ideas, great or small, can only communicate their effect through the institutions that organize them. Some of the most powerful ideas, in turn, are those with the capacity to reorganize the ways people pursue knowledge: who pursues it, where and how they pursue it, and how they judge themselves to have attained it. Certain fundamental questions need settling before seekers of knowledge in any age can even begin their quest. Do they debate their colleagues in verbal confrontations or write books for general audiences? Do they scrutinize nature as it is or trick it into doing the unexpected? Do they engage with their intellectual contemporaries or labor on behalf of scholars past and future? Do they close ranks to preserve embattled truths or spread learning for the benefit of all? These are but a few of the issues affecting how life of the mind has been constructed and reconstructed. The houses we build for the pursuit of knowledge may vary radically, but their common materials, speech and writing, words and things, and provisions to overcome the limits of space and the ravages of time count among the building blocks.
intellectuals share with institution-builders in other walks of life. So, too, do decisions surrounding the thorny issue of identity, inclusion, and exclusion, which I highlight in this book by examining the varying access women have had to the world of knowledge.

Institutions give meaning to those who live by their rules, as well as to those who rebel against them. This insight unlocks all the arcana of intellectual history to the layperson’s understanding. The most novel insights, the most fundamental discoveries, the most stupendous feats of academic genius exert their influence over us because their creators said, wrote, and did things that reorganized the activity of other, lesser minds in ways that are as easy to perceive from outside their world as they are difficult to explain from within it. Revolutions in the organization of knowledge, in short, follow from institutional innovations that anyone with the slightest vocation for learning can appreciate. This is not to suggest that the majesty of ideas can be reduced to the crude, material circumstances of their inception. The shift from stone to steel radically transformed architecture between the medieval cathedral and the contemporary skyscraper. And while this insight hardly suffices to explain the achievements of architects gothic or modern, it can nonetheless serve to illuminate their respective forms of genius. In a similar way, this book aims simply to demystify knowledge, to construct a skeleton narrative of its development, and to catalog the raw materials from which it is fashioned.

The ways we organize intellectual activity remain crucial to how we create new knowledge and draw on it for moral and practical guidance in daily life. In our own age, two important tensions in academia remain unresolved. One is the century-long rivalry between the “two cultures” of science and the humanities. The other is a longer-lived but rapidly diminishing split between the “West” and the “Rest.” Recently, we have witnessed the emergence of a new technology, the Internet, with a greater potential to transcend intellectual and geographic divides than any other before it. But innovation in science and technology does little, in itself, to guarantee the progress of knowledge as a whole. Nor, on the humanities side of the academic world, can English-speakers complacently assume the continued hegemony of their own culture in an age of globalization. Genuine dialogues across cultures are deceptively hard, moreso than scientific and technological exchange, and require more than adding the Qu’ran, the Bhagavad Gita, and a few Chinese classics to a canon of Great Books.

Certainly the contemporary university, however all-encompassing its claims to knowledge, is not the culmination or pinnacle of everything that has gone before it. The history of knowledge is a discontinuous one, full of paths not taken, and the current system may not be the best of all possible worlds. This book ends, then, by asking how else could we have ended up. What alternative ways of knowing, of learning, and of teaching have been lost or submerged beneath the many layers of history that underlie the present organization of knowledge? And how can we retrieve them from the historical record? For if the life of the mind is indeed undergoing a structural transformation, it is all the more important to reclaim those alternatives: to turn a potentially destabilizing situation into one that will revitalize the pursuit of knowledge in this, the global Internet Age, which represents both a threat to our old ways of learning and a tremendous opportunity to refurbish them for the next millennium.