CHAPTER ONE

SCHOLARS AT WORK:
AN OVERVIEW OF THE ACADEMIC PROFESSION

SCHOLARLY BEGINNINGS: THE DECISION-MAKING PROCESS TO BECOME A SCHOLAR IN A GIVEN FIELD

This is a process that many people find easier to describe when looking back upon it, rather than while going through it. There is no fixed timetable or clear set of prescriptions for making this decision. What we offer instead is a hypothetical sketch of the probable stages that one goes through in reaching the decision to become a scholar in a given field. As you recognize yourself in one or more of the stages in the hypothetical model, it may serve as a guide in helping you to interpret or clarify your own experiences as a student and emerging scholar.

Stage one:
It begins with a perception that there is a given subject or field of specialization which arouses interest and pleasure, and which you know you would like to pursue further. At this stage, there may be several competing fields — some of them closely related, others less so. The main point in this stage is that you already know that you enjoy work in a given field or fields.

Stage two:
The initial perception of special gratification from a given subject continues to grow. You find that the more you learn, the more you want to learn. There is a new intensity and focus to your interests in that field. You attach greater importance to your own ideas, as well as to those in the scholarly literature. You become increasingly interested in doing original research, formulating new questions, or going into other questions in greater depth. This is perhaps a stage of readiness to choose a potential area of specialization. Even at this more intense stage, however, there may still be rival fields competing for your interest.

Stage three:
You reach a point where you can contemplate leaving the wide range of college courses and devoting yourself almost completely to a single field, or perhaps an interdisciplinary field, which has increasingly dominated your interest and attention. The prospect of doing so, far from giving you a sense of confinement or limitation, creates a sense of excitement and of expanding possibilities. With this, you have reached the kind of motivation and love of field that is characteristic of a scholar. You now share that common bond.

WHAT DO SCHOLARS DO, AND WHERE DO THEY DO IT?

Academe encompasses a vast array of fields, each with its own distinctive qualities. The focus of the present discussion is not on the qualities that set the various disciplines apart from one another, but rather on the more general characteristics that apply across all fields.

The two most important components of an academic career are teaching and research. The balance between these will vary, depending on the nature of the institution. In large research universities, for example, greater weight will be given to research; in small colleges, on the other hand, there will be a greater emphasis on teaching. Almost all schools will be interested in both activities to some degree. Many research scholars indeed are committed teachers, and vice versa. The combination is found by many to be mutually beneficial.
Faculty members also serve as student advisors and have a number of administrative responsibilities: participating in decisions on curriculum development, admissions, fellowships, honors, faculty recruiting, and other committees primarily concerned with academic matters. In many institutions, faculty members — usually at the senior level — also take their turn as chairs of departments. In addition, many of them are engaged in professional activities in their field: serving on editorial boards of professional journals, or in administrative positions within professional associations.

Academic careers for PhD’s are pursued primarily in two types of institutions: a) four-year undergraduate colleges; and b) universities, which offer both undergraduate and graduate-level programs. Within universities, PhD’s usually teach on the faculty of arts and sciences, although in some fields they are employed in technological institutes or professional schools within universities. For example, PhD’s in some of the biological or medical sciences may be employed in medical schools; PhD’s in economics may hold positions in business schools; and PhD’s in the applied sciences may be hired by engineering schools or technological institutes. One other type of institution in higher education is the two-year community college, which also employs PhD’s.

Colleges and universities may be private or public institutions. In either category there is a comparable range of quality of schools. Scholars producing significant research and publications are working in a wide range of institutions.

Within institutions, the center of activity is usually the department. Most teaching is organized along departmental lines, as are the numerous administrative responsibilities cited above. In a number of fields, time will be divided between the department and a research center or laboratory. There are also a burgeoning number of interdisciplinary programs. In addition, faculty members serve on university-wide committees that deal with the overall governance of an institution, and may hold appointments in more than one school within a university.

Beyond the university, faculty members are often active in professional associations in their fields, participating in both scholarly and administrative activities. Professional conferences and meetings take place locally, nationally and internationally. Scholars in many fields also travel and go abroad in order to do research — ranging from brief trips during the academic year, to summer stays, to living abroad for an entire year on leave or sabbatical. Travel is often an integral part of an academic career. In addition, a number of scholars put their training and experience to use in nonacademic settings.

WHAT ARE SOME OF THE STEPS ON AN ACADEMIC LADDER?

Academic positions can be divided into two main categories: a) tenured appointments — i.e., appointments for life, and b) non-tenured appointments. People in the first group are often referred to as senior faculty, with title or rank varying among institutions. Below the tenured level are a variety of ranks and titles and job descriptions. People at these earlier stages are commonly referred to as junior faculty. A separate category is the postdoctoral fellowship position, typically held by science PhDs as the first step on the academic ladder, and increasingly attractive to candidates in the humanities and social sciences as well.
Non-tenured appointments
Within this category, the most important distinction is between appointments that are tenure-track — meaning that there is a tenure slot available for which the candidate can be reviewed after a specified number of years — and those that are not. In addition, some institutions, including several of the Ivy League schools, offer entry-level appointments for which there is a possibility of a tenure opening and review, rather than an available tenure slot.

For most of the above positions, the PhD degree normally is a requirement. Some hiring departments in recent years have been stipulating “PhD degree in hand”; most require at least strong evidence that the dissertation will be completed by starting date of appointment. In addition, as noted, people in the sciences typically take postdoctoral fellowships for one or more years before applying for entry-level teaching positions — a pattern which has increased in recent years.

In tenure-track positions, the number of years before tenure review varies among institutions. One standard pattern is a three-year appointment, renewable for another three years, and then a tenure review.

In non-tenure-track positions, there is an even wider range of contract possibilities — from one or two-year nonrenewable appointments, up to six years or more. In the sciences, most students take postdoctoral fellowship positions (for a period that can range from one year on the short side, to six years on the long side, or three years as a middle possibility), before taking a ladder position.

Almost all new academic vacancies and job descriptions are publicized — usually in the appropriate academic journals or employment bulletins put out by the various professional associations — in compliance with affirmative action requirements. The search for an academic job thus is highly structured, with announcements appearing early in the academic year, and with the job search basically confined to published listings. Unsolicited inquiries, if used at all, are helpful mainly for obtaining adjunct or part-time teaching positions or last-minute openings of a temporary nature. This path is particularly used by candidates with geographic restrictions or other needs. In academe, candidates apply for available vacancies, rather than seeking out the institutions or geographic areas of their choice. (A full discussion of the job application process occurs in Chapter Seven below; see also the separate discussion of applying for postdoctoral fellowships.)

The attainment of tenure
In some cases, a junior faculty member is offered tenure at the institution of his or her first employment, usually through a tenure review of a candidate in a tenure-track position. In other cases, the candidate moves one or more times before finding a school that makes a tenure offer. The tenure decision — whether it is in the original institution, or after one or more moves — normally gives consideration to both teaching and publications or other professional recognition, although the respective weight accorded to each will vary considerably among institutions. Academic service may also enter into the tenure decision.

The bottom line on the attainment of tenure is that normally it comes no earlier than six years after the commencement of a teaching career, with a common scenario of one or more moves in the period prior to tenure.

WHAT ARE SOME DISTINCTIVE FEATURES OF LIFE IN ACADEME?

Rather than approach this question in the abstract, we will share some answers provided by faculty members at Harvard in a panel discussion devoted to this question. One speaker was an economist, another in history of religion, and the third in marine biology. As rich and as varied as their responses were, they also contained some important common themes.
One theme was a concern with false stereotyping about academic life, especially the notion of a scholar as an isolated figure working in a rarified atmosphere, on nothing but narrow and esoteric subjects. To the contrary, each speaker felt a sense of connectedness with others, and each had diverse interests. The economist, for example, said that her motivation to do research on Jamaica had practical implications. She herself was from Jamaica, and wanted to help solve problems of poverty in that country. Her goal was to be qualified to be able to find solutions. She also had a combined interest in labor and international economic issues, rather than just a single focus.

The professor in history of religion said she had resisted specialization all the way through graduate school. Eventually, she wrote a dissertation that was of sufficiently broad interest to be published by a major nonacademic press. Her main point was that there is room in academe for people who do not have a life of scholarship as a single trajectory from the very beginning — there is a place for people who think of themselves as teachers and as generalists. She herself has continued to have strong interests in the world outside of academe, working as a consultant for the World Council of Churches.

The marine biologist described his connectedness with others as something that is built into the field. Biology is a very social enterprise. Team research is necessary — one cannot work in isolation. It requires people who enjoy working with others, people with a strong social dimension. Like the others, he came to the field of marine biology with very broad interests, including a fondness for California beaches. He started out as an undergraduate working in a lab in order to help pay his way through college. He soon discovered that the quality of the lab work offered a gratification of its own.

The speakers expressed similar views in regard to teaching. Their instruction is not just confined to specialized courses, and they all enjoyed teaching in the core curriculum. They stressed that although lectures have the greatest visibility, the bulk of teaching work is in preparing a course and designing the lectures. They also felt that having rapport with students was the most fun.

Academe was also discussed in terms of its pros and cons as a career choice. All of the speakers emphasized that they loved what they were doing — that they were in fact being paid to do something that gave them pleasure. They also felt positive about the flexibility and freedom that characterize academic work, although one speaker not yet in a tenured position said that the absence of structure had disadvantages as well. There is a pressure to publish, but no fixed short-term deadlines. It requires self-motivation and discipline, a need to be organized in the use of time. On the whole, she thought the pluses outweighed the minuses; having the opportunity to design her own work schedule and to formulate her own priorities was what really counted for her. She could organize her research according to her own needs and preferences, and had the flexibility to travel if work required it.

**WHAT ARE SOME THINGS YOU SHOULD KNOW ABOUT THE ACADEMIC JOB MARKET?**

From all of the considerations that have been discussed so far, it should be clear that the decision to pursue a scholarly career is a highly individual one and cannot be approached from a statistical point of view. It is nevertheless important to be aware of past trends and projections.

According to a number of studies of higher education, the 1990’’s promised to usher in a rise in demand for new PhDs. There were even projections of a total reversal of the trends of the 1980’s: Instead of a job shortage, there would be a shortage of PhD’s to fill new openings. The historical background for this set of expectations goes back to the 1960’s, when there was an expansion in higher education — primarily in response to the post World War II baby-boom generation that came of college age in that decade. Expansion was followed by a contraction in the 1970’s and 1980’s as the baby-boom generation completed their college education. The situation has varied according to field — with the humanities and
some of the social sciences feeling the earliest and greatest contraction in demand for new teachers, but with the sciences eventually experiencing a similar effect. The shortage has been most severe at the level of tenured positions, since the dramatic expansion of the 1960’s produced an abundance of tenured professors who were in their forties at the time. Many of these were expected to retire in the 1990’s, and the expectation was that a sizeable number of openings would emerge — mainly tenure or tenure-track positions.

Now that the 1990’s have passed, it appears that these projections, although based on substantial data and sound reasoning, have not materialized. Other factors influencing academic jobs were not foreseen or were overlooked — economic factors, for example, or the end of mandatory retirement, which now applies in academe (under the Age Discrimination in Employment Act). The present picture is considerably cloudier than anticipated.

What does this tell us about the future? A principal lesson learned by forecasters is that it is very hazardous to make predictions. However, in a study just completed by the Graduate School of Arts and Sciences in the fall of 2006, we examined what happens to Harvard PhDs after they have been out of school for three years. What we found is that the employment rate had improved dramatically over time: The overall employment rate, counting both academic and nonacademic employment, climbed from 53% to 92% in the humanities, from 64% to 95% in the social sciences, and from 30% to 62% in the natural sciences, where the norm of postdoctoral research at exit explains these lower employment levels.

These findings, although extremely encouraging, do not provide us with any safe conclusions about the future. In the absence of any definitive sign, it is perhaps best to close with one item of certainty: THERE WILL BE A NEED FOR A NEW GENERATION OF SCHOLARS.

FACULTY SALARIES

A recent survey of academic salaries conducted for the American Association of University Professors provides figures for the academic year 2008-2009 (reported in the Chronicle of Higher Education, Almanac Issue, August 28, 2009). The average annual salary for assistant professors is the following: $55,501 at Baccalaureate institutions, $59,645 at institutions offering Master’s degree, and $70,613 at institutions offering the PhD. For full professors at these same types of institutions it is the following: $87,639, $90,189, and $123,785, respectively. It should be noted that faculty salaries vary not only according to rank and type of institution, but also according to field. In computer science departments, for example, the salary of full professors is around 25% higher than that of their peers in English departments. (In addition, people in the applied sciences are often able to supplement their academic salaries by working as consultants.) While the above figures do not put academic salaries in the same class with professions such as law or business, the rewards in academe are weighed by those who enter the profession in terms that go beyond salary figures. They value the intrinsic satisfaction gained from teaching, the opportunity to make a contribution through original research, the freedom to set one’s own agenda, to travel, to seek a change of pace during the summer months, the built-in system of promotions usually accompanied by salary increases, and the eventual job security that comes with tenure. Many find that the end result is a satisfying lifestyle.

MINORITIES

Under-representation of minorities in academe, especially Blacks, Hispanics, and Native Americans, at both the graduate student and faculty level, has been and continues to be a problem. In a relatively recent report sponsored by six Federal agencies and conducted by the National Opinion Research Council (reported in the Chronicle of Higher Education, Almanac Issue, August 25, 2005), the earned doctorates for minorities showed some increase over the previous decade, but left considerable room for
improvement: Blacks received 6.6% of earned doctorates and Hispanics received 4.9%. Whites earned 81%. As for distribution by field, the report showed significant differences. Within the arts and sciences, the highest field for Blacks was in the social sciences at 6.4%, while the humanities were at 3.8%. Blacks were low in the physical sciences at 3.2, while in the life sciences they were at 3.6 percent, with engineering seeing a modest improvement to 3.7%. For Hispanics the largest field was also in the social sciences at 5.7%, followed by the humanities at 5.4%. Hispanics tied Blacks in the physical sciences at 3.2 percent, while life sciences were at 4%; engineering improved to 4.9%. Asians were lower in the social sciences, at 4%, but higher in the sciences: in the physical sciences, at 6.5%, in the life sciences, at 8.5%, and in engineering an exceptional high of 11.1%. It is difficult to make discipline-specific generalizations for Native Americans because of their small numbers (a mere 0.5% of doctorates went to American Indians and Alaskan Natives).

According to the most recent Survey of Earned Doctorates (SED): Doctorate Recipients from U.S. Universities, Summary Report 2007-2008 (National Science Foundation, December 2009), “the historical trend has been growth in the number of doctorates awarded to racial/ethnic minorities” throughout the 20-year period from 1998 to 2008, showing a 19% increase (p. 8). Within this trend, minority groups were most highly represented in 2008 in the fields of engineering (27% of U.S. citizens and permanent residents earning doctorates), education (26%) and other fields (26%). The lowest percentages of minorities were in humanities (18%) and physical sciences (20%). Asians were the largest contingent in engineering, physical sciences, and life sciences. Women were the majority doctorate recipients among the minority groups cited here.

The under-representation of minority groups among the earned doctorates has an enormous impact on higher education. Above all, since the under-representation carries through at the faculty level, it hampers the ability of colleges and universities to provide an encouraging learning environment for all of its students. Minority students often report feeling a lack of minority scholars as mentors. On still another front, there is a need for a diverse faculty in order to sustain and stimulate scholarly research on the diverse frontiers of knowledge, as well as in the traditional fields. Educational institutions increasingly have recognized these needs, and are taking active measures to attract more minorities into graduate school. Increased minority enrollment holds the key to a better learning and research environment for all.

WOMEN

The situation for women in academe tells another kind of story. According to the publication, In Pursuit of the PhD, by William G. Bowen and Neil L. Rudenstine (Princeton, 1992), the gender gap in doctoral education has closed significantly: Between 1966 and 1989 there was a steady and rapid rise in the overall percentage of doctorates awarded to women, starting from a low of around 10% and more than tripling during that period. Much of the growth occurred during the post-1970 period, but leveled off in the late 1970s. It should be noted that the scale and timing of increases have varied considerably by field, with the largest gains made in English, history and political science — and especially English (almost 60% in 1988). In mathematics, engineering and most of the physical sciences, however, the supply of women doctorates remains relatively low (in physics, which is the lowest, less than 10% of all doctorates awarded to U.S. residents in 1988 were received by women).

The more recent figures of earned doctorates (SED, Summary Report 2007-2008, National Science Foundation, December 2009), indicate significant increases for women over the last 30 years (p. 6). Their share of all doctorates earned in 2008 reached a high of 46%. This was the 13th consecutive year in which the representation of female doctorate recipients has surpassed 40%. While this growth has occurred in all fields, significant differences by field still persist. Women constituted over two thirds (67%) of all education doctorate recipients of 2008 and were the majority in social sciences (58%), life sciences (53%), and humanities (52%). In contrast, however, the representation of women among doctorate recipients in physical sciences and engineering for 2008 was 28% and 22%, respectively.
There is further cause for concern related to the timing of the expansion of doctorates earned by women. Bowen and Rudenstine note that the first wave of expansion took place “during precisely those years (since 1970) when graduate education in general was contracting.” They add that “these women entered graduate school and worked toward their PhDs during years (primarily the 1960s) when the women’s movement and other broad social and cultural forces were expanding opportunities for women. These developments took effect at a time when other forces (the weakening of the academic labor market, for instance) were pushing in the opposite direction . . . .” (p. 34). What this means is that while the presence of women in academe is much greater than it was before the expansion of women doctorates, the opportunities for women still have failed to live up to expectations. There is still a sizeable gender gap, especially at the associate and full professor levels, that persists in many fields.

**CITIZENSHIP**

The recent figures on citizenship for earned doctorates (*SED, Summary Report 2007-2008*, National Science Foundation, December 2009) show that of the 2008 doctorate recipients with known citizenship status, 67% were U.S. citizens or permanent residents, and 33% were non-U.S. citizen temporary visa holders (p. 10). The Report adds that “the growing numbers of doctorates awarded to foreign students on temporary visas has accounted for the majority of the overall growth in the number of doctorate recipients since 1978.” Engineering was “the most prevalent broad field of degree for those in the United States on temporary visas.” The next highest was the physical sciences (at 48%), and after that, considerably lower proportions in the social sciences, education, and humanities, as well as in the life sciences.