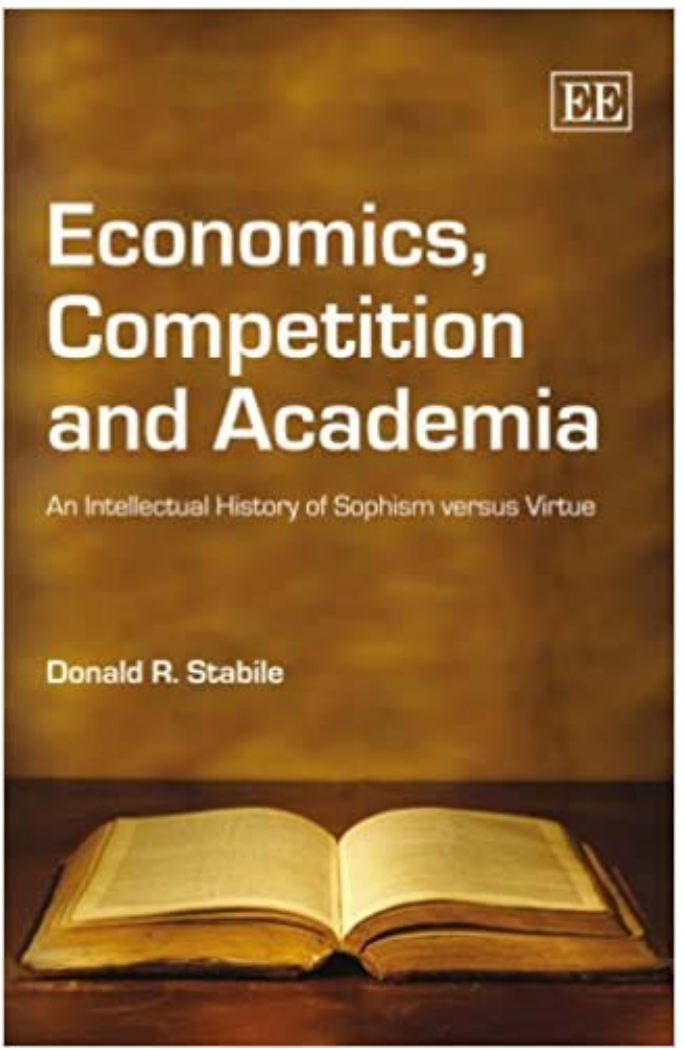
Economics, Competition and Academia

An Intellectual History of Sophism versus Virtue

Donald R. Stabile



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Preface

Many books have a link to the author's background and this one is no exception. In my case these links are related to my experiences in academia.

First, I completed my undergraduate education at the University of Florida during the 'golden age' of expansion in higher education in the 1960s. At that time, I recall, the cost of attending the university was so low it was not called tuition, but a registration fee; it was definitely not a market price. My entire life has been due to the public version of what I call in this book the endowment model of academia and I am grateful for it. Second, I started my education as an engineering major and halfway through my undergraduate days switched to majoring in business—two disciplines I would categorize as 'sophism,' to use the term employed in this book to designate practical studies. As a business major I was required to take economics and have been taking economics ever since. Hence, although I describe a free-market for requirements in this book, I recognize that required courses can be beneficial to students. Third, my graduate education at the University of Massachusetts/Amherst was also completed at a very low cost to me. In addition, it gave me a very sceptical attitude toward the ideology of the free-market. Since my career derived from a non-market education and my studies made me doubtful of free-market approaches to academia, one might readily suspect me of taking the side of what I call 'virtue' in this book. To some degree I do.

Still, an astute reader will also find me being sympathetic toward 'sophism.' For the last 26 years I have been a faculty member at St. Mary's College of Maryland, a public liberal arts college. During that time I have always been amazed by faculty members who deplore or downright resent efforts by the college to use market techniques to add to its revenues, but who still want increased resources for their programs. Moreover they request those resources for themselves as being the right thing for the college to do, that is, on the basis of 'virtue.' Hence my own interest in 'sophism' derives directly from too many years of a surfeit of 'virtue,' and any support for 'sophism' that might be inferred from this book is really indicative of the ambivalence I now have toward the use of markets in academia.

There are at least two sides to every issue, we will see Protagoras reminding us in this book, and I have tried to tell both sides of sophism and virtue as accurately as I can. The truth of the issue, Aristotle might have added, is

the mean between the two sides. In the case of academia the mean entails drawing the line between where markets are needed and where they are not. I have not tried to draw that line in this book. Rather my goal has been to make clear that it is a line that must be drawn.

D.R.S.

1. Introduction: markets, competition, and higher education

In 1860 institutions of higher education in the US enrolled 20 000 students, nearly all of them majoring in the traditional liberal arts (Burke 1982: 216). By 2000, over 20 million students in the US were attending a college or university. While we do not know what they had as majors, there is information regarding the majors of those earning a bachelor's degree. Of 1 237 875 bachelor's degrees conferred in 2000, 36 104 were awarded to students majoring in the liberal arts and humanities; if we add in the subjects that were part of the liberal arts education of 1860, the total of degrees awarded in the liberal arts rises to 185 960, a tremendous growth in numbers in 140 years (IPEDS, Table 248).

Growth is only part of the story, for higher education also experienced a significant transformation between 1860 and 2000. While the number of liberal arts majors greatly exceeds that of 1860, it is only 15 percent of all degrees conferred. In 2000 many students earned degrees in areas that rarely existed in 1860, including 108 168 in education (9 percent), 72 555 in engineering (6 percent), 78 458 in health professions (6 percent), and 257 709 in business (21 percent) (IPEDS, Table 250).

These numbers tell us that the history of higher education in the US has been one of a revolution in both size and diversity of study. Economists might readily interpret the transformation of higher education indicated by these numbers as a case of colleges and universities responding to the marketplace. Through competition with other institutions to attract students, colleges and universities changed the curriculum and programs they offered. The idea that colleges and universities compete with each other would surely have resonance among economists (Goldin and Katz 2001: 1; Raines and Leathers 2003: 2; Geiger 2004). In opposition many members of academia worry over the commercialization of higher education and abhor the idea that markets and competition should influence academia (Bok 2003; Slaughter and Rhoades 2004; Washburn 2005).

This book will describe how the current concern regarding the commercialization of academia continues a long-standing dispute that was begun in ancient Greece over the extent to which market economics could be applied to

higher education. The two sides to that dispute were Plato and Aristotle on one side and the sophists on the other. As will be described in Chapter 2, the sophists were a group of immigrants who came to Athens and became professional teachers of higher education for a fee. Three sophists, Protagoras, Hippias and Isocrates, were the innovators of fee-based higher education. Plato and Aristotle did not like the fee-based approach to higher education. They believed that commercial activities were a negative influence on Greek society, including the use of them in higher education. The sophists defended their market behaviour of teaching for fees. Their defence of market techniques to develop a system of higher education in Athens encountered criticism from Plato and Aristotle and set off a dispute over the role of markets in higher education that continues today.

The reason the dispute has been so longstanding is that academia does not respond to competition in the same way that a business would. As non-profit organizations, colleges and universities have no bottom line of profits as a business does to guide its decisions as to whether they need a new program; they must make decisions based on consistency with the mission they have set for themselves. Determination of how well new programs match up with the mission of a college is arguable, however. Decisions and the discussions used to reach them regarding academia's responses to the competitive demands of the market for education are ideological not economic.

SOPHISM AND VIRTUE

Nevertheless economic arguments will always play a part in academic decisions. For much of its history, discussions within and outside of academia about the way it should respond to the marketplace have been couched in the terms of two competing ideologies, sophism and virtue. These two ideologies arose with the origins of academia in ancient Greece. Among early innovators of higher education, as will be described in Chapter 2, the sophists held that it should focus on practical subjects that could enable them to earn fees from teaching, while Plato and Aristotle believed that education should aim at virtue. We will see that in the historical course of discussion over academia's mission, virtue meant doing what was right in terms of what subjects students needed to study, with right being defined by the persons arguing for virtue as a mission. What I will call sophism referred to doing what sold by stressing practical subjects, with practical being defined in response to the marketplace of students.

To be sure sophism and virtue are not mutually exclusive. One can do what is right and be practical at the same time, and no proponent of a mission of sophism will be against virtue. Using the terminology of economics, virtue

and sophism can be interpreted as complementary goods that go well with each other. The issue is one of stress of sophism or virtue, however, and of importance to an economist, it is also an issue of holding a favourable or unfavourable attitude toward the competitive market as a social tool. With due respect toward the virtuous persons who earn a living through market activities, such as the ancient sophists did, in this book I will use virtue as tantamount to a non-market approach to the mission of academia and sophism as synonymous with a market approach to the mission of academia.

Moreover we will see in this book that these two concepts of the mission of academia were linked to two methods of funding it, what I will call the endowment model with a non-market approach and the tuition-driven model with a market approach (see p. 16). As a historian of economic thought I will be paying attention to the relationships among markets, competition and academia associated with the tuition-driven model and with how persons concerned with the mission of academia perceived them. Consequently this book will be an intellectual history of how academics and economists understood the potential of markets and competition to influence higher education. From its earliest days academia has seen advocates of employing a competitive market approach to academia by stressing monetary gain as an incentive, and their story is a large part of what this book has to offer. Because those advocates used economic theory as it existed for them as part of their arguments, I will be looking at how economists analysed academia. Ultimately this book is a study of how the structure and the ideology of free-market competition have been used to define the terms under which discussions over the mission of academia have taken place in higher education, with a focus in the US during the period from 1630 to 1930.

Before making that study, however, we need to understand the social benefits of the market approach as seen from the perspective of modern economics. Accordingly I will first describe the economic model of competition and explain how it applies to academia.

MARKETS AND ACADEMIA

The starting point in understanding the arguments of proponents of a market approach is the economic model of competition. The central assumption of modern economics is that scarcity is a fundamental human problem. To economists scarcity means that we do not have sufficient resources to produce everything human beings would like to have. Because resources are scarce in relationship to human wants, individuals, organizations and societies must make choices as to how to use the resources that are available to them.

Given this central assumption of scarcity, the prevailing view in economics

is that the market system is a superior way for making choices about what to produce with our limited resources. If priorities must be set, what better way to set them than using economic incentives and letting each individual's or organization's willingness and ability to buy or sell determine those priorities? Let each person decide how best to earn a living through productive activities sold in a competitive market and then use the income from those activities to purchase goods and services from others in the market. In this way, the market system uses monetary incentives and competition to organize and order the social priorities of what to produce, how to produce it and who gets it.

As an underlying philosophy, economics holds that human beings respond to incentives. Individuals will vary as to what motivates them, and so an approach that brings about a wide array of types of incentives will contain something to motivate nearly every person. Markets are exceptional in creating this wide array of incentives.

Under the market system, if individuals want something and are willing to pay a high enough price, someone will produce it and sell it to them. To be sure producers can create wants in the sense that they offer consumers something they had never imagined – many new and innovative products do just that. Nevertheless it remains difficult to sell consumers something they do not want. Build it and they will come only works if the 'it' is something consumers want. In this sense the competitive market system weeds out products no one wants by punishing their producers with low prices and low or negative gains. The quest for success in making money carries an incentive to do the right thing as defined by competition in the marketplace.

In addition, competition in the marketplace has another important function. If a business produces a new product at a high price to make high profits, competitors will enter the market, bring prices down and restore profits to normal levels. Under competition, successful enterprises are the ones that attract customers and attract competitors. Competition will keep prices at the level needed to supply the market at an acceptable price.

Let me describe how a market approach would apply to academia by looking at a basic problem of scarcity in higher education. Given the time, typically four years, which students spend in getting an undergraduate education, they can only take a limited number of courses. Which courses should they take and how should they choose them? That is the basic dilemma of scarcity.

A market approach would say that students should choose whichever courses give them the most benefit. Since no one can read their mind and know what gives them the most benefit, they should be free to choose on their own. When all students make similar choices, a college would then have a clear incentive to offer the courses students want. Courses that do not attract students in sufficient numbers to cover their costs would not be offered very often if at all. Courses that had high enrolments and excess revenue would be

offered with greater frequency. Institutions of higher learning that offered the mix of courses students wanted would succeed in the marketplace, and competition would settle the mission of academia. Colleges might even change their pricing system to charge by the course instead of by the semester, allowing them to charge higher prices for popular courses. This market approach is the essence of sophism.

In contrast, a non-market approach might say that higher learning should be operated to enable students to fulfil their basic human need for knowledge of what it means to be a good person. As a result higher education should be based on knowledge that students may not be expert enough to appreciate. They thus cannot be free to choose whatever courses they want to take, for they might miss filling their basic need for education. As experts on the knowledge of what it means to be a good person, academicians should define mission of education. This approach captures the spirit of virtue.

To see how well the economic model of competition applies to academia we must first look at its underlying assumptions. In its best form the model assumes pure competition with the following characteristics: there must be a large number of profit maximizing firms selling a standard product in a market with no barriers to entry; the firms and their customers must all have perfect knowledge about market conditions of price, production technology and product quality of all firms. Given these conditions, the only type of competition that is feasible is price competition. If all firms have the same product in terms of quality and consumers know that, the only way to gain customers is with a reduced price. This situation of pure price competition is what we usually mean by the process of turning products into generic commodities where the only quality that matters is price.

Economists agree that pure competition never exists in its ideal form. The purpose of the model is to look at a real situation to see which of the model's assumptions are violated and to examine what difference that makes in terms of the level of competition and the resulting price structure. In academia, for example, the suppliers are not profit-maximizing firms, and the quality of their products differs greatly in terms of prestige of institution, location, surrounding facilities and support services. There are barriers to entry by new institutions. It is not clear if students and their parents have sufficient information to make correct choices as to what college and what courses a student should attend. Because it does not face the conditions of pure competition, higher education has not turned into a generic commodity, and colleges and universities do not compete directly by price-cutting, although they may use scholarships to offer some students an incentive to attend in what is now called tuition discounting. Still there are enough colleges and universities in any particular market segment and geographic area to give prospective students a range of choices and produce a reasonable amount of

competition. The question then becomes what type of competition characterizes academia.

In economic terms the model that best applies to academia is monopolistic competition (Paulsen 2001). Under this model business firms try to attain a competitive edge by competing not based on price but on quality differences or the perceptions of quality differences. The advantages are short-lived, however, because other firms can copy the quality differences and the initiator loses its competitive edge. In academia this model translates into the type of competition whereby individual institutions continually add programs or facilities in what is referred to as an 'academic arms race,' only to see other institutions follow suit.

In considering the type of competition academia faces we must bear in mind that it must concern itself with money even when its mission is virtue, because at a minimum it must gain the resources it needs to function. It has options as to how to get those resources, and to explore those options and show how they determine the nature of competition in academia I will use two models of how a college might handle its funding, the endowment model and the tuition-driven model. Although the models are general, the particulars reflect the system of higher education of the US, the subject of much of this book.

THE ENDOWMENT MODEL

The endowed college secures its funding from patronage, that is, wealthy benefactors, foundations or the government. For the purposes of this book, I will make no distinction between a private endowment that generates income and a public subsidy. In economic terms, annual funds from a government are equivalent to the income from an invested endowment and just as variable. Regardless of their source or effective functioning the funds the endowed college collects from its patrons would have to be ample enough to pay for buildings, equipment, libraries, books, operating expenses, faculty salaries and so on. If patrons were sufficiently generous, there would be no need to charge students tuition for attendance. The college would be able to accept the best students regardless of their economic status; it could also set the number of students at a low level, enhancing student-faculty interaction. Faculty would be free to teach those subjects they deemed most worthy. They would be under no competitive pressure to respond to the market as represented by students' wants.

The problem for the endowed college is that instead of responding to the market, it might have to respond to the desires of its patron. While the patrons might not give direct orders, they could try to influence how colleges use their money, including conditions on what they teach, who teaches it, and what

students are to be taught. Yale University, for example, experienced difficulty in the mid-1990s with a $20 million gift tied to the study of 'Western civilization.' Yale eventually returned the gift and placed itself in jeopardy of losing even larger gifts from the donor's family. To be autonomous the endowed college would need the support of a philosopher-patron wise enough to fund the best education; we will see in Chapter 2 that Plato and Aristotle followed this approach. The second best alternative would be the condition of having a large, diversified body of patrons, with no single patron able to exercise influence. Then the college could focus on its own definition of virtue.

From an economist's perspective the endowment model poses problems related to the incentives it provides the members of academia. First, if the endowed college wanted to expand its size or the diversity of its programs, it would have to find more funds from existing patrons or find more patrons. It must do the same to gain funds to increase faculty salaries. Finding more funds from patrons is not easy, however, and the persons who were adept at it might be in a position to influence the way the endowed college is run. Administrative leaders may be chosen for their ability to work with wealthy individuals, corporate donors or with government officials instead of being selected for their appreciation of the value of higher education. To influence potential patrons they may tilt the way they use existing funds to present a better image of the college or university to these patrons in an effort to raise even greater sums. They may also promote academic programs they believe patrons will support. The funds expended in pursuit of patronage might be better used in the process of teaching and learning, but they are instead spent in the process of competing for endowment funds. The endowment college does not eliminate competition; it must compete with other endowed colleges for the support of patrons.

Second, the idea that an endowed college enables professors to teach what they want and how they want gives them a great deal of freedom. The question is how they will use that freedom. There is a possibility that professors will take advantage of their freedom to do a minimal amount of work, since their income does not depend on how hard they work or how much they accomplish. I make no judgment on the validity of this potential problem, but indicate here that it forms a part of the discourse this book examines. State legislators in the US are coming to hold this potential problem as a real one and are trying to get colleges and universities to assess the outcomes they produce as a way of demonstrating what they have accomplished to justify their funding at the expense of taxpayers (Berdahl and McConnell 1999: 82). In addition, to ensure that faculty do not admit a small number of students to make their life easier, state governments usually impose enrolment targets on institutions of public higher education or base funding on the number of students. They also mandate that students be required to take specific courses. Patrons may seek accountability from the institutions they endow.

A third problem raised by the endowment model is its impact on students. If tuition is free or low, there will be an excess demand in terms of the space available at the endowed college. In this case prices will be below costs and will not be effective in sending signals as to how best to allocate resources. Prices will also not function well as a rationing device that acts to price some students out of the market. A selection process must be used to allot those spaces. Because they pay little or no tuition, students may not have an incentive to concern themselves with the quality of the education they are receiving. Students must experience the education at a particular school to assess its value but may not be in a strong position to judge that education and may not be concerned to find out. If all colleges are endowed with free or low tuition, they may compete based on quality to attract better students, but they have no clear incentive to do so.

The point of all these problems with the endowment college is that its tilting toward a non-market approach requires a virtuous attitude among its stakeholders – patrons, administrators, faculty and students. Whether they have that attitude then becomes the issue. Values matter when virtue is used as a guide.

THE TUITION-DRIVEN MODEL

To look at the tuition-driven model let us begin with a simple educational scheme. A group of professors joins forces to create a college. The teaching process is the professor at one end of a log and students at the other end. (We will see in Chapter 2 that the sophists started out this way.) Suppose the college has 100 professors and 1000 students paying $10 000 a year, then each professor could earn $100 000 per year and enjoy the excellent relations inherent to a low student/faculty ratio of ten to one.

The economics underlying decisions at this college are quite simple. Do professors want an increase in pay? Then they must increase tuition or teach more students (increase the number of students or decrease the number of professors). Does the college want to build classrooms and a library? They must apply the same approach of higher tuition, more students or fewer faculty as a source of funds, along with the possibility that professors take a cut in pay. Does the college need non-teaching administrators or teacher-administrators with reduced teaching schedules? The same approach applies. Does it want to offer scholarships? Then it must use higher tuition from one group of students to subsidize another group of students. The only way to pay for additional resources is to shift the costs of securing them to students through higher tuition or to professors by more work or less pay. The tuition-driven model means that colleges have to pay attention to the market approach, that is, it must adopt sophism.

If the college existed in isolation, it could expand its programs and facilities by pursuing the approaches most palatable to professors, such as increased tuition, reduced pay or increased teaching load. Faculty members can offer a curriculum that they think is best, as long as enough students pay to take it so all the bills can be paid. However, colleges do not exist in isolation and tuition-driven colleges compete with each other to gain the favour of students. To attract them the tuition-driven college may offer students better quality programs or amenities such as social organizations and sports teams. These methods involve increased costs and can counter the hoped for gain from more students or higher tuition. Moreover competition might lead to lower tuition for students (or at least tuition discounting), which is one reason academia does not like competition. When all tuition-driven colleges try to expand in this competitive process, moreover, they may eventually have to attract students who will not be interested in the curriculum they offer. This then results in pressure to make compromises by offering those students at least some of the courses and programs they want.

But tuition-driven colleges need not offer every course students want. After all, even though the tuition-driven college must pay attention to the market, it does not operate to produce a profit. While it must try to see that the new programs it offers do not cost more than the gain they will get from more students and higher tuition, it does not have to worry about whether its academic programs produce gains. Popular programs that attract students can coexist along with less popular programs, as long as there are enough students to pay all the bills. Faculty members may earn differential pay based on those differences in program popularity, but only if that is what is needed to attract professors. The tuition-driven college must respect the market, but not cave in to it. It may be business-like in some aspects of its operations, but it is not a business in pursuit of profit and the accumulation of wealth.

Because the tuition-driven college does not aim at a profit, professors may face the same motivation problem that the endowment model has. Unless individual faculty pay is directly tied to student tuition, professors will have no incentive to worry about whether students take their courses, that is, their pay will not be dependent on their individual enrolments. If the tuition-driven college endeavours to expand the number of students it takes in to bring in more revenue, faculty will have no direct incentive to cooperate in this effort. Only if faculty are rewarded for doing what is needed to attract students will they willingly do so. Sophism requires reliance on economic incentives.

The big problem facing the tuition-driven college is finding enough students with the ability to pay for the courses it offers. Since students may not be knowledgeable consumers, the tuition-driven college may try to attract them with non-price and non-education qualities. These cost money, however, and as tuition-driven colleges use them to attract students they create ‘wasteful’

competition whereby all colleges spend money on non-essential (for education purposes) items, such as programs of athletic competition. This approach can cause tuition to rise to pay for those items, and it becomes a possibility that tuition-driven colleges may be placed in a bind. If they try to compete by reducing prices (offering scholarships), they may be spending money on amenities while taking in less money from tuition. Competition can lead to ruin for tuition-driven colleges at worst or continuing financial difficulty at the least.

In addition this type of competition can have detrimental effects on students. Some of them may become priced out of the market by rising tuition; and students most in need of education may be least able to afford it. Students who can afford it may come to act like consumers who feel they can take what they like of what they buy and ignore what they dislike. They may also see faculty as service workers there to see to their wants. Finally, they might feel that if they are paying high tuition to attend college, they will need to earn high incomes to recoup their spending (or pay off their student loans). High tuition may lead students to view education as an investment, for which they must attain an adequate return by majoring in disciplines likely to yield high future earnings. They may feel compelled to sacrifice virtue for sophism.

As a tentative conclusion of this discussion of the tuition-driven model, we may say that the tuition-driven model will have a tendency to tilt its mission toward sophism in order to attract students. From the previous discussion of the endowment model we can see that in contrast it has greater latitude for a mission of virtue, depending on the wishes of patron. Of greater salience for the theme of this book few institutions of higher learning apply either model in its pure form. Rather they function under aspects of both models, resulting in a combined model, to which we now turn.

THE COMBINED MODEL

For much of its history, as well as in its current state, academia has exhibited features of both models. Many colleges and universities have endowments that they use to support their programs; public colleges and universities and some private colleges receive government funds that enable them to function without being completely tuition-driven. This enables them to maintain a balance between virtue and sophism, between offering an education aimed at creating the good person and one aimed at making that person productive to society.

While it can meliorate the different problems of the endowment model and the tuition-driven model, the combined model has its own problems in that it has the benefits and difficulties of both models. To the extent that institutions of academia have an endowment, they are protected from the competitive

pressures of the marketplace, but must put up with the desires of patrons. They are able to offer their education to students at a tuition that is below cost, which should ensure them of a steady stream of enrolments. At the same time they may increase their costs to attract better students by offering a wider range of courses than their market can consume at cost-effective levels. Their strategy may depend on shifting those increased costs to someone else such as the government or wealthy donors. When patronage declines they may need to raise tuition and then face all the problems of the tuition-driven model.

The combined model shows that academic institutions are not businesses seeking a profit. The endowment model focuses on doing the right thing, as defined by the endower. The tuition-driven model has to attract students who can pay their fees, but only enough of them to pay the bills. Nevertheless colleges and universities, like businesses, are in competition with each other and must respond to the marketplace. They must compete for donations and for tuition paying students. They do not, however, need to compete under the terms of a business system where they need to worry about earning a profit and accumulating wealth to expand operations.

This method carries over into the areas of academia where a more direct market approach exists. Colleges and universities operate a variety of 'auxiliary enterprises' that function as economic enterprises such as bookstores, dining facilities, hospitals and residence halls, and they may generate surplus revenue. Major research universities now engage in a variety of research programs with an aim of making money for themselves or for the professors who undertake the research, selling intellectual property to private sector corporations. However they do not aim at making a profit; because they rarely take the surpluses they earn from these activities and use them to expand their activities to gain further surpluses. More likely those surpluses are used to subsidize the academic functions of the college or university, that is, they are best considered as part of the overall resource structure of the institution. Regardless of how they are considered, for the remainder of this book, I will be concerned primarily with the application of competition to the strictly academic part of higher education, to its mission of teaching and learning.

There is one other issue that needs to be addressed in any discussion of the economics of academia, the demand for higher education. Students have three interests in college studies. A small percentage wants to learn something. Not all of those seeking knowledge are seeking virtue, as they may study practical areas such as engineering, pharmacy, medicine, or even business. A large percentage of students are anxious to get documentation necessary for a job. The remaining group is looking for the entertainment afforded by campus life, football, basketball, social contacts, and so on. This book will not address the issue of why students choose to attend college, except to the extent that the intellectuals surveyed in it imputed motivation to students.

OVERVIEW

Overall this book is about intellectual discourse over the mission of higher education and the effect markets and competition might have on it. Following this introductory chapter, Chapter 2 will present a survey of higher education among the Greeks; it will start with the dispute in Athens between the sophists and Socrates, Plato and Aristotle over the nature of education and the role fees should play in it. Chapter 3 will look at the medieval period to eighteenth-century England and will highlight Adam Smith's sophism as evinced in his proposing monetary incentives in academia. Subsequent chapters will shift the focus to the US. Chapter 4 begins with a discussion of academia at a time when colleges remained small and under the endowment model and will show cases where sophism began appearing; Chapter 4 will also include the utilitarian ideas of Jeremy Bentham on how to improve academia as a portent of the growth of large universities from the endowment model. Chapter 5 will consider how John Stuart Mill argued for public higher education as a competitive force for private universities and will describe the growth of universities in the US in the late nineteenth-century through expansion of the curriculum. Chapter 6 will start with discussion of how Alfred Marshall's marginalist economics offered new lessons for academia and will investigate the extent to which academia followed the pattern set by business in the US in the early twentieth-century, using the ideas of Thorstein Veblen as a benchmark of what it meant for academia to act in a business-like fashion. Chapter 7 will offer a brief survey of the rise of collegiate schools of business as a case study of an academic response to the market. In Chapter 8, I will offer some conclusions and speculate on the future of academia as it may be influenced by the beginnings of for-profit universities dominated by sophism.

Regarding the economists included in this book, one of the problems in the history of economic thought is in determining just how influential any particular economist was. In the case of Adam Smith, for example, we will see that his ideas regarding academia were repeated in the US. Evidence of similar influence in the US by other economists in this book has not been as easy to find, but all of the economists reviewed in this book have been prominent figures in the history of economic thought. The other thinkers whose ideas form a part of this book have been picked because their ideas relating to academia have been preserved and made readily accessible to scholars. Many of them were socially influential in one way or another, but we will see that their ideas regarding the discourse of this book were not always as influential as they were.

CONCLUSION

The purpose of this book is to examine the historical expression of ideas over the role of competition in academia. In writing it my purpose is not to determine the right or wrong side of the argument. Rather I am hoping to shed light on current discussion over academia and the marketplace by looking for insights from an earlier time that are still relevant today. Specifically I believe that much of the debate over academia and the marketplace confuses getting resources to facilitate the production of education with the profit-making attitude of business.

Because academia's response to changing economic conditions has not been nearly as direct as a business's response would be, the historical record of academia and the marketplace has been neglected. Consumer preferences change, however, and in the case of academia, consumer preferences have been moulded by the economic system of capitalism that has arisen in the US since 1860. The expansion and transformation in academia in this period has been an accommodation to the needs of a capitalist system that did not exist when institutions of higher education were first formed. The question then became whether academia would enter into the competitive arena that is intrinsic to capitalism.

2. Sophism, academia, and Greek economics

Historians of economic thought have traditionally questioned whether the ancient Greek philosophers comprehended the workings of the market (Blaug 1991; Petrochilos 2002: 600). As S. Todd Lowry has written, 'The most fundamental question of substance in this material is the failure of the ancient Greeks even to advance a theory of general market price' (Lowry 1969: 65). To be sure historians can give examples of indications of market ideas, such as the writings of Democritus, who produced a treatise on economics that did not survive intact, or Xenophon, who had a rudimentary understanding of how the market fostered the division of labour but did not elaborate on it (Roll 1956: 28; Lowry 1987: 45–79). There is also the case of an early poet, Hesiod, who showed an understanding of the basic problem of scarcity and the need to make choices as a result (Gordon 1963: 147–51).

One explanation for the lack of a systematic study of market economics by the Greeks, as Karl Polanyi has pointed out, is that the use of market exchanges based in profits was new to Athens during the period of classic Greek philosophy (Polanyi 1971: 67). While there was a growing commercial sector with a related class of merchants, political and social power was held by aristocratic landowners. These landowners used slavery as the basis of their output and wealth, which minimized their use of exchange. Another explanation is that the trade in Greece involved the unique products of artisans and thus was handled as individualized exchanges (Lowry 1969: 65). Consequently even though the Greeks knew about athletic competition from their Olympics, they did not recognize the nature of economic competition.

These explanations do not account for the one group of thinkers from early Greece, the sophists, who did have an understanding of economic competition, however. They gained their knowledge of competition first hand, because they engaged directly in market activities by teaching for fees. Their use of market techniques to develop a system of higher education in Athens was innovative and, as happens to innovators, they experienced criticism, in their case from Plato and Aristotle, who disliked their fee-based approach to higher education.

This chapter will present the dispute between Plato and Aristotle and the sophists by giving three sophists, Protagoras, Hippias and Isocrates, their due

as economic thinkers. It will do so by first describing their experiences as practitioners of a fee-based education offered in the market and will consider what their experiences taught them about competition. Then it will place the economic ideas of Plato and Aristotle in the context of the dispute they had with the sophists over the merits of a fee-based education. Finally it will describe the education Plato and Aristotle devised as an antidote to sophism.

THE SOPHISTS AND FEE-BASED EDUCATION

Most persons in the ancient world of the Middle East and Europe were self-sufficient agrarians, individually or in small groups, with little need for trade or money. Still cities existed in the early Middle Eastern cradles of civilization, and cities cannot exist without government, specialization and some method for distributing the resources urbanites need to survive. This distribution may have taken place through market exchanges using barter or money or it may have depended on some form of government administration (Lowry 1987: 20–1). Any system of distribution required that records be kept, and early education aimed at training scribes. Scribes held a privileged place in these early societies, and with them, we see the first notion of education as a way to achieve social and economic success (Marrou 1982: xv).

When cities developed there came with them the need for the art of warfare, and education added military subjects. In early Greece education instilled in students the Homeric tradition of noble soldiers such as Achilles and Ulysses. As the need for larger armies proceeded, however, military education focused on the duties of citizen-soldiers and binding their allegiance to the city-state. For this reason Sparta regulated education tightly and mandated physical education as the priority. At this time education took place through a system of tutors developing close relationships with individual students in order to understand how to instruct them (Marrou 1982: 4–12, 15–16, 19–20, and 30).

With the rise of Athens and its democracy, however, education changed from being concerned with military matters and aimed at making students effective in politics. In the period from 450 to 350 BC, the Greeks developed a system of education that we still follow today, with elementary and secondary schools and teachers who specialized in each. The curriculum of these schools was intended to fit the student for being a member of the community, and included physical training, music, writing and grammar, mythology, arithmetic and geometry, and geography (Beck 1964: 72, 80–1, and 111).

In the second half of the fifth century BC, a group of immigrants came to Athens and became professional teachers of higher education, that is, education that went beyond the material taught in Greek schools. They were called sophists, because, at the time, the term sophist referred to men who were

'professionals of the intelligence,' and it applied to a wide range of thinkers. It was Socrates and Plato, the opponents of the sophists, who denigrated the meaning of the term to one of contempt as caught in the word, sophistry (de Romilly 1992: 1).

To earn a living the sophists charged fees for their instruction. Protagoras was the innovator of the system of teaching advanced subjects for fees (Marrou 1982: 49), and other sophists adopted his fee-based system. Their need to attract students who could pay their fees required them to find ways to promote their services; they travelled from place to place offering sample lectures to demonstrate what would be available to those who paid their fees. They were itinerant teachers, who would meet with a group of students in public places throughout Greece. The training they offered in logic, rhetoric and oratory aimed at preparing students for success in careers of public service in the government.

When the sophists began teaching, Greek education still emphasized physical training and the espousal of traditional values. The sophists emphasized the training of the mind, and the type of training they emphasized took aim at traditional values and offered a new approach to the search for the truth.

Protagoras, perhaps the greatest of the sophists, based his teaching on the idea that there were at least two sides to every issue. He would teach his students how to argue both sides, as a way of gaining a better understanding of the issue. His relativism countered the notion that education was a search for ideas that were the truth. If one could argue the opposite of a traditional idea with great rhetoric, one might, Protagoras maintained, become a better person. He expected that his students would not only see the other side of an argument, but that they would carry on internal debates in their own minds and reach a better understanding of the issue. More importantly, by seeing both sides, they would be led to better decision-making (Waterfield 2000: 205–6). The idea that men could be taught to make better decisions went against the traditionalist view that virtue was either innate – a gift of the gods – or the sign of a good upbringing in an elite family. Against this view Protagoras insisted that 'when good education is ploughed into young persons, its effect lives and burgeons throughout their lives' (Guthrie 1971: 25 and 168).

His relativism came from his underlying belief, 'Man is the measure of all things' (Guthrie 1971: 183). By this statement he meant that men's perceptions guided their actions and that each person had his own perception of what constituted proper behaviour. This relativism did not lead him to the idea that one man's perceptions were as good as another's, however, for he believed that education could improve the quality of a person's perceptions and lead him to better ideas. Still Protagoras' version of relativism included a system of hedonistic calculations that forms the basis of utilitarian economics, with the idea that each individual must calculate for himself what gives him utility (Lowry 1987: 32–7; Petrochilos 2002: 602).

In his dialogue, *Protagoras*, Plato described Protagoras as stating his aim as follows: 'What I teach is the proper management of one's own affairs, how best to run one's household, and the management of public affairs, how to make the most effective contributions to the affairs of the city, both by word and action' (Plato 1976: 11). This inclusion of household management (*oikonomia*) in the curriculum of the sophists is noteworthy. Since the household to be managed by the wealthy students of the sophists was a large estate or an urban business, that meant training in commerce.

In return for his teaching Protagoras reputedly charged high fees which enabled him to become wealthy. Here we must acknowledge a problem in analysing the ideas and experiences of Protagoras and other sophists: the main historical sources for their ideas and experiences come from their critic, Plato, and he may have misrepresented them. Accordingly let us say that Plato has Protagoras defend himself, his fees, and his apparent wealth by arguing that his training was worth the fees he charged and that the students could pay either his fee or pay what they thought the instruction was worth to them by swearing an oath to that effect (Plato 1976: p. 20). Even here, however, there is evidence of Protagoras' economic thinking. The value of his teaching in relationship to the fees he collected was to be based on individual cost/benefit calculations by his students. While this approach could be evidence of individualized exchange, we might also reasonably infer that it indicated a practice of price discrimination. Protagoras charged each student the most he was willing to pay, as long as he believed the student's oath that he was revealing his preferences honestly. On this interpretation, he would be the earliest known practitioner of tuition discounting.

A second prominent sophist about whom we have some data is Hippias, whose activities are recorded in another of Plato's dialogues, *Hippias Major*. Socrates begins the dialogue by ironically complimenting Hippias for being 'able to make a lot of money from young people (and to give still greater benefits to those from whom you take it).' The older philosophers, he goes on, never 'thought fit to charge a monetary fee . . . They were so simple they did not understand the great value of money.' Ignoring the irony, Hippias responds, 'If you knew how much money I've made, you would be amazed.' On a trip to Sicily he made more money than Protagoras, more than any two sophists. Socrates then asks Hippias in which city he made the most money, suggesting Sparta. Hippias admits he made no money in Sparta, not because the Spartans were less interested in education than the Sicilians were, but because in Sparta it is illegal to teach 'contrary to established customs.' Still, he knows he could do well in Sparta because he has given many popular lectures there on traditional topics (Plato 1982: 1–5).

Hippias' account of his success gives us further insight into Greek economics. First he had somehow gained a competitive advantage over the other

sophists and he might have explained how he had done it if Socrates had asked him. He did know that he was engaged in competition with them and had to find ways to offer a better product (or lower price). Second he understood that market conditions varied from place to place and he had to adjust his product and price when the regulation of the marketplace by the Spartans limited what he could teach. Third the dialogue reminds us to be wary about the data Plato presents regarding the sophists. The tone of the dialogue in the part dealing with Hippias' economics is one of mockery, which the translator calls 'more consistently scathing than in any other of Plato's works' (Plato 1982: 35). For example, Socrates sarcastically interprets Hippias' success as testimony to his wisdom, noting, 'The mark of being wise, I see, is when someone makes the most money' (Plato 1982: 1). His ironic compliment that Hippias conferred greater benefits than the money he made indicates Socrates' dismissal of utilitarian calculations. Our understanding of Greek economics would be much better if Socrates and Plato had asked Protagoras and Hippias more questions about their economic activities.

Once Protagoras, Hippias and other sophists had made teaching for a fee acceptable, a second innovation in higher education in Greece took place with the school of Isocrates, a fee-based institution in a building he established in 393 BC. He had studied with Gorgias, another leading sophist, and then started his teaching career in the sophist tradition of moving around in search of students. Eventually he opened his school in a private building, perhaps his own home, and John Patrick Lynch accords him the honour of being the first prominent teacher to establish a permanent institution of higher learning in Athens (Lynch 1972: 51–3). Isocrates taught up to one hundred students at a time in his school (Marrou 1982: 82).

Compared to Protagoras and Hippias, Isocrates offers a better subject for study, because some of his writings have survived. From them we can learn that Isocrates was unabashed about charging fees. He saw them as a measure of his excellent teaching, putting his case as follows, 'All men are aware that a sophist reaps his finest and his largest reward when his pupils prove to be honourable and intelligent and highly esteemed by their fellow-citizens, since pupils of this sort inspire many with a desire to enjoy his teaching' (Isocrates 1982: 309). In using this measure he understood that the demand for his teaching derived from the demand for the persons with the skills he taught. He also followed Protagoras' approach of relating his fees to the benefits students and society gained from his teaching, coming close to the idea that those fees equalled the value he added.

He exploited the notion that fees equated to value added when he developed his own approach to advertising. Instead of giving public samples of his education as the earlier sophists had, he used printed materials to promote his school. One example of his promotional material that has survived, *Against*

the Sophists, uses the technique of criticizing the claims of his competition as a way of making his approach look better than theirs. To be sure the sophists Isocrates criticizes are not Protagoras and Gorgias. More likely he is aiming at minor followers of Socrates who taught for fees while claiming to follow Socrates in disdaining money (Isocrates 1982: 162n). They were his competitors.

In terms of the competition they offered, Isocrates thought their fees were low. To answer the competitive price they presented him in the market for higher education, he used those low fees as a way of deflating the value of what they taught. He wrote,

> Although they set themselves up as masters and dispensers of goods so precious, they are not ashamed of asking for them a price of three or four minae! Why if they were to sell any other commodity for so trifling a fraction of its worth they would not deny their folly. (Isocrates 1982: 165)

Implicit in this argument is recognition that competition has had an effect on the level of fees sophists could charge. As for his own fees Isocrates is somewhat circumspect in his writings about their level. In his advertising material he says that regarding the market for education he 'had the least share in its profits' (Isocrates 1982: 171–2). The existing copy of his advertising material is incomplete, however, and lacks the sections where he might have described his methods and fees. The tone of his sales pitch was that he offered a reasonable education at a reasonable fee and that his higher fees meant his education added more value than that of his competitors.

In a later writing, *Antidosis*, where he is defending himself from a series of charges, including his supposed wealth, he insisted that he was not wealthy and that 'no one of the so-called sophists has accumulated a great amount of money.' Some of them were poor and others lived in moderate circumstances much as he claimed for himself. The sophist he had studied with, Gorgias, had not earned nearly as much money as his reputation indicated. Moreover Gorgias and other sophists had earned their moderate fees as their ability to attract students from around the world and satisfy their needs attested (Isocrates 1982: 273, 311, and 319).

THE SOPHISTS AND COMPETITION

Protagoras, Hippias, Isocrates and their competitors represent a case for competitive measures of excellence in education, which means that elements of Greek society had an understanding of how a market can be used in social decision-making. They recognized that their ability to teach their students well, as measured by a willingness to pay fees, meant their education was filling a social

need. Isocrates was keenly aware that competition among the sophists of his time had reduced the fees he was able to charge. H.I. Marrou describes the market conditions Isocrates faced as follows, 'Prices, it is known, had gone down considerably since the time of Protagoras, and were always in danger of going down further as a result of competition' (Marrou 1982: 82). Isocrates knew first hand that high fees were not sustainable, and he made up for lowered fees by expanding the volume of the students he taught through his innovation of a settled school. In this way he used the idea of economies of scale to reduce the costs of his education enabling him to get by with lower fees. While he did not write about how he paid for his school building, it is probable that he invested his own savings from his fees in it.

From these accounts of the economics of the fee-based approach of Protagoras, Hippias and Isocrates, we can see ingredients of a theory of competition. First they offered education in exchange for fees with the idea that the fees equated to the economic value of what they taught, which indicates an understanding of how income can be an incentive to produce a product for sale in the marketplace. Second they would have argued that the value of the education they offered was apparent from their ability to charge those fees, that is, parents were willing to pay the fees because the education met their need. Third as the innovator of the fee system, Protagoras might have earned high fees, but competition in the form of additional entrants into the education market reduced those high fees to the lower levels earned by the later sophists. As long as competition existed, any high fees that the sophists earned were not sustainable. Consequently we can infer a practical knowledge of the effect of competition on prices from their experiences with the fee-based approach.

Had they written a treatise on economics, Protagoras, Hippias and Isocrates might have been able to offer more complete information about the economics of their system of education. We might then know more than the scanty information we have about how much competition they faced and whether it truly reduced their incomes as Isocrates claimed. Moreover the information we do have relies heavily on the writings of Plato and Aristotle. They were critical of the sophists and thus remain a biased source.

PLATO DOWNPLAYS THE MARKET

Plato clearly disliked the competition of the marketplace and the persons who used it to make profits. Rather, he was concerned that the pursuit of wealth was inimical to creating an effective society and espoused policies such as communal property for political leaders and public control over prices and the quality of goods (Spiegel 1983: 16–21; Lowry 1987: 84–93). As part of his

anti-market stance, Plato disliked the fee-based system of education that he thought had made Protagoras wealthy.

Plato offers ample evidence of his disliking of those fees. In his dialogue, *Protagoras*, he has Socrates chide Protagoras as follows:

> You are both good yourself and capable of making others good, and have such self-confidence that, whereas others make a secret of this profession, you give yourself the name of sophist and proclaim yourself openly to the whole of Greece as a teacher of culture and excellence, and have been the first to ask a fee for this. (Plato 1976: 42)

Socrates would never have thought of charging a person a fee for having a conversation with him (de Romilly 1992: 34). Plato did not care for the sophists' use of what we would now call advertising methods (Marrou 1982: 48–9).

When another leading sophist, Gorgias, tells Socrates that he teaches rhetoric, the art of persuasion, Socrates answers that his preference is to be 'the type of person who engages in conversation purely because he wants to understand the topic under discussion' (Plato 1994: 13). Socrates further argues that rhetoric was a 'knack' that could not be taught and that application of it by Gorgias' students did not aim to educate public officials, only to influence them (Plato 1994: 17, and 29). In the same vein Plato thought the sophists 'taught nothing but the beliefs of the people.' They offered only superficial, commonplace knowledge and did not go behind what everyone believed to get to the absolute truth (Guthrie 1971: 21, 39, and 256).

Plato did not put much faith in the sophists' facility for teaching, because they were too involved with making money. He thought that persons involved in moneymaking were more attached to money than the rest of society. Money was their product and they loved it as a poet loved his verse. As a result, he believed, 'they are willing to praise nothing but wealth' (Plato 1991: 6). To him persons of virtue would not serve the community for money. They would not want to take a wage and be listed among the 'hirelings' or make a profit and be called 'thieves' (Plato 1991: 25).

To counter the relativism of Protagoras, who might argue that one's attitude toward money was a personal value, Plato divided humanity into three types, the lover of money, the lover of honour and the lover of learning. Each type would say that his love was the best. On Plato's account the lover of learning was capable of knowledge of all three loves while the other two only knew of their own love. This knowledge meant that the lover of learning – the true philosopher – was the best judge of why his love was the highest (Plato 1991: 25, and 262–3).

Let us stop and think about Plato's argument for a bit, because it set in place a hostile attitude toward making money that persists unchallenged in intellectual

circles even today. It contains three important and hidden assumptions: philosophers can understand moneymaking, moneymaking is easy and moneymaking does not lead to virtue. Virtue must be based on philosophical thinking and money makers are incapable of it.

The point I am making here is that, as Protagoras said, there are at least two sides to every issue and Plato has not done well by the money maker's side of life. He was aware of being vulnerable to this sort of criticism, however. In the dialogues over Gorgias' teaching, he has one of Gorgias' defenders, Callicles, make a similar point by having him declaim,

> In actual fact, philosophers don't understand their community's legal system, or how to address either political or private meetings, or what kind of things people enjoy and desire. In short, they are completely out of touch with human nature. When they turn to practical activity, then, in either a private or public capacity, they make ridiculous fools of themselves – just as, I imagine, politicians make fools of themselves when they are faced with your lot's discussions and ideas. (Plato 1994: 67)

Plato puts this speech into the dialogue because he has an answer to the criticism, and Socrates responds with a long detailed argument of why only philosophers have the knowledge and discipline to live a life of virtue.

The argument between Callicles and Socrates relates to politics and the use of rhetoric to pander to a crowd, but a 'money maker' could also insist that philosophers do not understand their country's economic system. Most likely Plato had no direct experience with what was to him a new way of doing things, economic competition, and he did not bother to find out what it meant. The skills needed for continuous success in making money are more varied and arcane than philosophers have ever imagined (Collins 2001). Whether those skills include virtue is arguable, but to an economist there is a presumption that honest dealing is the best approach for it builds something now called 'social capital.'

Regardless, from his perspective, Plato could easily categorize the sophists as lovers of money, which would indicate to him that they were unqualified as judges of what constituted a good education. Not surprisingly he has Socrates compare them to retailers of food since they offered food for the soul 'for sale retail,' adding that there was 'much more risk in buying learning than in buying food' (Plato 1976: 6). Plato especially disliked retail trade for adding to the human propensity for greed (Amemiya 2004: 70).

In his later dialogue, *Sophist*, he left no doubt about his view of the sophist's supposed love of money. The two participants in the dialogue struggle to answer the question, what is a sophist? They proceed by looking at the types of activities a sophist undertook. This method enables them to conclude, 'The acquisitive art . . . that is wage earning, that is paid in cash, that provides

education in opinion, and is a hunting of wealthy and prominent youth must be referred to as the sophistic art.' Itinerant sophists are then compared to travelling salesman, while settled ones are considered merchants (Plato 1990: 47–50), practitioners of two occupations he held in disdain. Here in blunt terms Plato sets forth his dislike of sophists and retailers, the latter for seeking worldly success and the former for seeking worldly success by teaching about worldly success.

In assessing Plato's disdain for the sophists, it is important to note his own economic status. He was born into a wealthy landowning family that traced its lineage back to the ancient kings of Athens. As part of that lineage, Plato owned slaves along with land and even though he spent a portion of his life in slavery, Plato's writings are ambiguous at best on the merits of slavery. As was the case with most slave owners, Plato would have had limited experience with how markets worked. A society based on slavery has little experience with labour markets, and persons working for fees, such as the sophists and Isocrates, would appear to have been an aberration.

ARISTOTLE AND THE ECONOMICS OF MODERATION

Compared to Plato, Aristotle had a more benign view of the marketplace. To some extent his view owed to his being of a later date than Plato and more under the influence of the sophists. As Lowry notes Aristotle's writings evince 'both Platonic and sophistic perspectives' (Lowry 1987: 176). The point here is that he saw less need for social control of economic activities than Plato did and defended private property on the basis that humans needed incentives to care for property (Aristotle 1972: 114). To explain how property could be beneficial to human existence, he divided his study of economics into household management and the art of acquisition.

Household management involved the allocation of family resources among the members of the household and stayed within the communal system of sharing, because a person would not use buying and selling as a way to settle the individual needs of family members (Aristotle 1972: 82). The art of acquisition was more complicated, for it required consideration of exchange transactions.

It is important to note that Aristotle's analysis of exchange transactions is scattered in his writings, is complicated, and has been controversial in the history of economic thought (Soudek 1952; Kauder 1953; Spengler 1955; Gordon 1964; Lowry 1969; Finley 1970; Lewis 1978; Meikle 1979; Lowry 1987). Part of the controversy revolved on the extent to which he was trying to explain market behaviour or to investigate the justice of exchange. In general Aristotle argued that for an exchange to take place, the exchange rate

had to equate both the skills that each trader employed to produce the items being traded and the utility each trader would get from the item he would gain from the trade, in a context where utility was subjective and might lead to conspicuous consumption. He did not like this subjectivity, especially because it included the idea that 'the more conspicuous good is more desirable than the less conspicuous.' To him that meant, 'wealth may be regarded as a greater good if its existence is known to others' (Spengler 1955: 376–7). Aristotle did not care for the pursuit of conspicuous wealth, much less the display of it, as we can see from his concepts of unnatural acquisition and moderation.

According to Aristotle there were natural arts of acquisition used to meet basic needs and unnatural ones that led to the accumulation of money for its own sake to meet excessive desires. Here Aristotle has avoided the issue of subjective utility by arguing that there are basic physical needs and 'external needs' (Lowry 1987: 218–9). Household management contributed to a person's efforts to live the good life of virtue that Aristotle deemed important. He recognized the obvious notion that neither life nor the good life were possible without a minimal amount of necessities. The best way to satisfy those natural needs was to earn a living by natural productive labour that did not depend on exchange or trade for a food supply. In a non-exchange society property could be accumulated to help store up the necessities of life, but there were limits as to the amount. This sort of property was natural (Aristotle 1972: 64, and 78–9).

As society expanded trade became necessary, however, and a second unnatural form of property accumulation appeared. Every piece of property had two functions. For example, Aristotle went on, a shoe can be put on one's foot (value in use) or it can be exchanged (value in exchange). Nevertheless a shoe was not expressly made for the purpose of exchange. The primary function of a commodity, its value in use, was to satisfy natural needs. Exchange only took place when someone had a surplus supply of a particular property in excess of his personal needs; he might then find another person with a deficiency of that item and exchange for an item that person had in surplus. Larger social units such as cities or nations might also use exchanges in order to satisfy the needs of their members, but the objective of such exchanges was 'to reestablish nature's own equilibrium of self-sufficiency' (Aristotle 1972: 81–3). The purpose of trade was to allow members of society to exist and live the good life of virtue.

From this approach Aristotle argued that buying or selling to meet natural needs was acceptable, but that buying or selling to make a profit to satisfy unnatural needs was unacceptable. This argument meant that he did not accept the idea that all commerce was bad. To establish when commerce was bad he argued that trade to satisfy natural needs became international and required the use of money to make exchanges. Money could facilitate trade by serving as

a means of exchange, and it led to an expansion of trade. This expansion of trade through cash transaction, however, led to a situation where 'a necessary exchange became trade' and 'men became more experienced at discovering where and how the greatest profits might be made out of the exchange.' As the story of Midas indicated, wealth then became a pile of money and a corrupting influence, especially when it came at the expense of others, making its accumulation unnatural. Persons engaged in the pursuit of wealth were eager for an affluent life but not for the good life of virtue. They learned the skills of acquisition and made wealth, and not the good life, an end of their existence (Aristotle 1972: 83).

When the pursuit of wealth became an end in itself Aristotle branded it as unnatural, for he made it clear that the quest for the good life was the key to virtue. To him there were three general approaches to life that humans could evince in their behaviour: excess, deficiency and the mean between the two. The first two were vices and the mean between them was virtue. Wealth was useful if it was employed properly in following the mean between excessive extravagance and deficient stinginess. One must strike the right balance in how one spent wealth (Aristotle 1975: 9, 48, and 84). Moderation meant that natural needs were limited, which implied that Aristotle did not approve of the modern economist's definition of scarcity, that is, unlimited wants in relation to limited resources.

In making this argument Aristotle could thus draw a distinction between moneymaking that was acceptable (natural) because its goal was to meet basic needs and achieve virtue, and moneymaking that was not acceptable (unnatural) because its goal was profit and wealth. At the time he wrote that only 'low class persons' or 'hucksters' engaged in trade for profit, that is, unnatural acquisition. But higher-level citizens of Athens were joining in the practice (Polanyi 1971: 83), unnatural acquisition was becoming socially acceptable, and Aristotle did not like it.

Would Aristotle have placed the sophists and their fee-based approach to education in the category of unnatural exchange? Perhaps because he had been positively influence by their ideas (Lowry 1987: 178), Aristotle did not criticize the sophists as extensively as Plato did. Still from Aristotle's perspective, one could argue that as long as the sophists taught in order to earn a living that would satisfy their natural needs, their fees were natural. If they taught to become wealthy and enjoy the benefits of conspicuous consumption, then their fees were unnatural. It is not clear which view Aristotle would have applied to the sophists.

There is an inkling of his view, however. In his discussion of virtue and human behaviour Aristotle found that a person who boasted of qualities greater than he had with no ulterior motive was vile but not wicked. However, he added, 'If his motive is money or something that will get him money, he

shows a greater lack of propriety.' Among 'those who boast for profit,' he included scholars who pretended to have qualities that they did not have (Aristotle 1975: 106). Did his condemnation of scholars who boasted to enhance their personal profit apply to sophists in general or perhaps just to Hippias? Well, Aristotle did indicate that sophists wanted to have their success in argumentation 'bring them a reputation for being clever' (Aristotle 1975: 178), and clever was not a complimentary term with him. Boasting in pursuit of profit, especially boasting of academic skills that Aristotle did not think they had, implied that he saw the sophists as pursuers of unnatural acquisition. He also included 'service for hire' as an unnatural exchange (Ashley 1895: 338) and this category fits the sophists.

As with Plato and other Greeks, Aristotle's economic thinking was constrained by slavery. There is no evidence that he owned slaves, but he did have a concept of 'natural slavery.' He might have had more experience with market arrangements than Plato if his medical family had earned fees as physicians, and he thus might have accepted the fees of sophists as long as they were natural. Whether the accumulation of wealth in the form of slaves was unnatural to him is not clear. Wealthy slave owners often leased out their slaves but Aristotle did not characterize these transactions as unnatural, perhaps because he saw slavery as natural.

Regardless, Aristotle's implicit characterization of the sophists as practitioners of unnatural exchange added to Plato's portrayal of them as only being interested in moneymaking. For both of them competition for money was antithetical to virtue and thus the sophists had no virtue. When Plato and Aristotle set up their schools, they had something different from sophism in mind.

PLATO, THE ACADEMY AND VIRTUE

For a long time accounts of Plato's approach to higher education were based on the ideal form of it he presented in his writings, especially *The Republic* (Cherniss 1945: 67). In that work he viewed education as a method for selecting which person should perform the many duties society needed to have fulfilled. Those with little capacity for education would be farmers, shopkeepers, and artisans; persons who could learn to fight would be soldiers; the few who could learn what philosophers had to teach them would be the advisors to the rulers if not the rulers themselves. For Plato education would thus serve as a method for making an economic decision of how to allocate human resources to the jobs society needed to have done (Plato 1991).

When it came to the practice of education Plato had a smaller goal. Plato founded the Academy in 387 BC. It was innovative in bringing together a group of scholars in a set place, a small garden in a public grove named for a Greek

hero, Academeus. Plato's intent was completely different from that of the sophists or Isocrates. As Harold Cherniss has pointed out, 'The Academy was not a school in which an orthodox metaphysical doctrine was taught' (Cherniss 1945: 81). Rather it was a place where a group of learned men gathered and discussed philosophical issues for an extremely long period, perhaps for all of their lives. Aristotle, for example, remained at the Academy for 20 years. Plato performed the function of being the person to set the agenda for the topics to be considered, but the members of the Academy used their own minds to study those topics. He may have given lectures, but not in the sense of regular, systematic expositions on set topics (Cherniss 1945: 11–13, and 65).

Consequently the Academy might be better characterized as an early version of a modern day think tank where bright, educated persons worked through dialogue with each other to create new knowledge on a specific range of issues. To be sure new persons might join the Academy and learn from the scholars already there. What they might learn would be the basic knowledge of mathematics that was essential to disciplined thinking. The entrance to the Academy carried the notice, 'Let no one destitute of geometry enter my doors' (Livio 2002: 63). In this sense it was somewhat like a small graduate program with a background in mathematics as the entrance requirement.

Records about the Academy's organization are limited, but they do indicate that the head of the Academy was usually elected by majority vote of its members. Strong bonds of friendship united the members of the Academy, and the arrangements were more communal than commercial. Admission to the Academy was open to anyone who wished to learn. No fees were charged, but the members had to provide for their expenses of daily living. Plato was clearly in charge, having been duly elected. Again he was not the educational leader in the sense of being the director of a seminar; his leadership was more moral than personal or scholarly (Lynch 1972: 55–6).

He was also an economic leader of sorts. Given his wealthy background he was not concerned with fees for his livelihood as were the sophists. Moreover he used his wealth to ensure that the Academy would be permanent. Although the Academy was on public land that could not be purchased, Plato bought a nearby estate. In this way members had a place to live and work that was convenient to the public space where the Academy also housed their efforts (Lynch 1972: 61) Consequently we can categorize Plato as the innovator of the endowment model of education in the sense of his Academy being supported by public funds that kept the garden available for his use and its being self-endowed through the estate Plato made a part of its facilities with his personal wealth. Given these endowed facilities, and members of the Academy who could support themselves for a life of study, the Academy could focus on virtue and eschew the sophism that came with the market.

ARISTOTLE'S LYCEUM AND THE ENDOWMENT MODEL

Aristotle was born into a family of physicians who had served the kings of Macedonia for several generations. His father sent him to Athens where he studied at Plato's Academy for 20 years and was considered his brightest student. When Plato died in 347 BC, however, Aristotle was not elected as his successor in charge of the Academy and the job went to a much older man. Aristotle left Athens and eventually became the tutor of Alexander the Great in 342 BC. When Alexander conquered Greece, Aristotle returned to Athens and formed his own school, the Lyceum, in 334 BC.

The Lyceum was a public building near the garden where the Academy was located. In it Aristotle founded an institution with similarities to the Academy, but with important differences. Like the Academy it was a community of scholars with a leader who was elected as part of a participatory democracy. Administrative work was rotated among the members. New members could join freely, as long as they could support themselves, and there were no fees. Unlike Plato, however, Aristotle lectured often both to members of the Lyceum and to the public. He believed that the members should cooperate more and discuss less on intellectual projects as a way of producing knowledge. He was much more interested in written works than Plato and adopted a more scientific approach to knowledge and to writing, perhaps due to the medical interests of his family (Lynch 1972: 72–91).

The evidence for how Aristotle funded the Lyceum is limited. He did not charge fees, but he did accept gifts. He might have acquired funds from Alexander to support the school or was just handsomely reward for his tutoring services to Alexander. Regardless Aristotle came from a wealthy family – no surprise considering he was able to spend 20 years at the Academy – and he died wealthy. This wealth was the most likely source of funds for the Lyceum, allowing us to classify it as following the endowment model (Lynch 1972: 83). His funding approach was the same as Plato's, self-endowment from personal wealth, and it followed that he offered an education based on his perception of virtue.

VIRTUE OR SOPHISM IN GREEK EDUCATION

By making virtue an objective superior to the accumulation of wealth (sophism), Aristotle and Plato presumed that they could answer for others what virtue should be. In this way they attempted to place philosophers, that is, teachers and intellectuals, in a privileged position that transcended mere moneymaking. Aristotle believed that education should be aimed at virtue, and while it might include some useful knowledge, it should not be aimed at utility

in the form of 'mechanical' knowledge that led to 'work that is paid for.' Such work made the 'mind preoccupied and unable to rise above lowly things' and contemplate virtue (Aristotle 1972: 454). Having looked at life from both sides, that is, from the love of money (sophism) and from the love of knowledge (virtue), Plato and Aristotle knew the pursuit of knowledge was more virtuous than the pursuit of wealth.

Here is a case where Plato and Aristotle would appear to be disagreeing strongly with Protagoras' view that men's perceptions guided their actions and that each person had his own perception of what constituted virtue. Still the relativism of Protagoras did imply that one man's unnatural desires might be another man's natural needs. Students schooled in the rhetorical methods of the sophists would be able to argue both sides of whether or not something contributed to virtue or sophism, however defined. They could also argue that moneymaking was as important as living the good life. Modern economics follows this version of relativism to a very large degree by arguing that each individual must decide for themselves what their needs are, what their attitude toward moneymaking is, and how they define virtue.

Had they written a treatise on economics the sophists might have argued that the marketplace, by offering a variety of goods and services for sale, allowed each person to pick what lifestyle they deemed conducive to virtue, including the type of education. From this perspective, with every person having a different concept of virtue, value in use, in terms of usefulness for living the good life that lead to virtue, had little meaning. The sophists' students were justified in seeking practical results from the training the sophists offered if it led to the virtuous life as those students defined it. Their education might change their perception of the virtuous life for the better, but it would remain their perception.

Given their understanding of the relationship between competition and the level of their fees, the sophists would have viewed those fees as the reward for producing something of value as defined by the marketplace. A high fee represented the production of an education that added greatly to society, but competition would keep the level of fees in check. It would keep the teacher's wealth at a moderate level and qualify it as being natural under Aristotle's approach.

Here we have the dispute over the market and education at its beginning. Plato and Aristotle could argue that they were engaged in an education that aimed at virtue, while the sophists were interested in offering an education with a goal of making money. Since the sophists used their teaching and fees to become wealthy, at least according to Plato, they engaged in unnatural acts of acquisition. To keep fees low as Plato and Aristotle desired, however, the pay of teachers must be low as well or the teacher had to be as wealthy as they were. In this regard the Platonic ideal of teaching included service to society along with a vow of poverty. Aristotle went further and espoused the cause of

public education, at least at the elementary and secondary level as a way of keeping its fees low, an innovative idea at the time (Curren 2000: 11, and 120).

This perspective leads directly to the endowment model, and Plato and Aristotle used gifts, public land and buildings and personal wealth in support of that model. While this model has examples in the ancient world, the tuition-driven model became the paradigm of higher education for the next millennium. It was Isocrates who set the standard for how education would be funded. For the next several centuries higher education in Greece followed Isocrates in offering an education that was tuition-driven and practical. It became of more public concern, however, and municipal governments began regulating it more closely. Public funding was rare, with governments soliciting funds from wealthy benefactors to create 'foundation schools.' Private schools on the tuition-driven model remained the norm (Marrou 1982: 112–14, and 191–3).

CONCLUSION

Higher education in Europe began in Greece in a conflict between a tuition-driven model of the sophists and the endowment model championed by Plato and Aristotle. The sophists justified their use of fees with arguments consistent with modern economics and its adherence to a utility approach. The fees the sophists earned reflected the market demand for what they offered and further reflected, they could argue, a high value to their students. They had to use promotional activities to attract their students, because they were creating a new market.

Contrary to the sophists Plato and Aristotle adhered to a non-market approach to life and to education. To be sure the market to Aristotle was a good way to satisfy basic human needs. But it also pandered to unnatural desires for luxuries and the ultimate unnatural desire, the accumulation of wealth. To them the sophists also pandered to their students' unnatural desire for worldly success. The mission of education should be virtue.

The dispute between the sophists and Socrates, Plato and Aristotle continues to be an enduring one. In essence it is a two-part debate: what is the mission of higher education and can a fee-based education facilitate the attainment of that mission without corrupting it? Regardless of the merits of both sides of the dispute, for the rest of the period of the Greek and Roman Empires, the tuition-driven model and the idea that fees could facilitate the production of higher education held sway.

3. Adam Smith and sophism: reaction to the endowment model

That Adam Smith had a high knowledge of Greek philosophy is well-known (Lowry 1979: 66; Lowry 1987: 5–6; Petrochilos 2002: 600), but the extent to which he drew upon Aristotle is arguable (Soudek 1952: 29; Gordon 1964: 116). In *The Wealth of Nations* there is evidence that Smith aimed at refining some of Aristotle's ideas. More important to the theme of this book there is also evidence that he recognized the value of the sophists as thinkers. For example, Smith believed that competition channelled self-interest to produce good for society, an idea that has parallels with the ideas of Protagoras and Isocrates. While these parallels indicate only a possibility of influence, this chapter will demonstrate that the sophists had a direct influence on Smith's thinking by showing how he approved of the fee-based system of the sophists when he investigated the economics of higher education.

Before doing so, however, we must look at the state of economics as it existed in the medieval period that marked the beginning of the development of higher education in Europe. The economic ideas of St. Thomas Aquinas on the just price were indicative of the stress on virtue that informed market activities at the time. Then we will see how academia followed that thinking as it developed the endowment model, with a focus on Oxford University. Smith attended Oxford and he had it in mind when he wrote on the economics of higher education.

ST. THOMAS AQUINAS AND THE ECONOMICS OF VIRTUE

With the end of the Roman Empire European economics and culture settled into a quiet period where the big story was the spread of Christianity. The decline of the centralized system of Rome brought about a socioeconomic system that was very dispersed, even though we now refer to it under the generic name of feudalism. Few of the economic elements of feudal society survive today, and we would characterize the era as dormant in terms of its economic development. In education, however, the era was innovative

because the Church founded universities most of which remain in existence today.

The Church formed monastic schools to provide for the study of its religious documents as early as the second century AD. By the fourth century the Christian schools took the form that would continue into the medieval period (Marrou 1982: 321–37). These schools began in the form of priests and monks reading and copying scripture as a way of seeking to improve their souls and the souls of their flocks. This type of education existed under a system of charity and giving, as religiously minded men and women made an obligation to serve the church in return for an education. It is doubtful any fees changed hands in this system of education. The Church thus had an obligation to support those universities as part of the ethos of Christianity, and laypersons who donated money to their endowments were contributing to the Church as much as to academia. As a result they developed the endowment model of higher education.

In France, the rulers had established 'palace schools' to teach the manners of the court and the art of war. These schools were not higher learning in the sense used in the book. When Charlemagne came into power in 768, he reformed those schools by bringing in abler teachers and adding more advanced subjects to the curriculum. The resulting institution was not a settled school, however, as it followed the king and his court as it travelled. It did have an influence on the teaching that took place in church schools.

As trade and commerce revived, around the eleventh century, religious leaders began allowing the teaching of laypersons in cathedral schools and encouraged the study of the ancient philosophers and the new sciences. Cathedral schools evolved into universities in the form of settled places where faculty and students could meet to pursue their joint interest in learning; a well-known lecturer could draw students from throughout Europe. Faculty members began specializing in distinct areas of knowledge and the university subdivided into an arts faculty for teaching the traditional subjects of the *trivium* (grammar, rhetoric and logic) and the *quadrivium* (arithmetic, geometry, astronomy and music) and faculties of law, medicine and theology. As the feudal period ended, about 80 universities at fixed locations had been started, all charging varying levels of fees.

This idea of charging fees for education was a new one to medieval life and caused negative comments. In addition to church schools itinerant scholars had offered education in exchange for fees, and their contemporaries compared them to prostitutes. There was also concern that the charging of fees would have a detrimental affect on students, who, John of Salisbury lamented, would come to 'consider that riches only are the fruit of wisdom' (Little 1978: 27, and 33). One might interpret this concern as a feeling that a shift to an exchange approach to education meant that if students had to pay a fee they

might feel the need to earn large incomes to make the fee worthwhile. To avoid this fuelling of unnatural acquisition fees had to be consistent with the concept of a just price, a concept to which St. Thomas Aquinas gave much thought.

While commerce was becoming important at this time, most economic thinking remained based on Holy Scripture. An exception was the adaptation of the economic thought of Aristotle as to the nature of prices in medieval commerce as we can see in the writings of St. Thomas Aquinas (1224 or 1225–1274). Aquinas' educational career also tells us a bit about academia at this time. He was born in Naples. When he was five years old his parents placed him in a monastery to be educated. He continued his education at what would become the University of Naples and studied further in Paris and Cologne. Eventually he completed a degree at the University of Paris, where he became a professor. His contribution to teaching and learning was to produce the most thorough integration of the texts of Christianity with the ideas of the Greeks, especially Aristotle, thereby fusing the life of the spirit with the life of the mind. Here I am principally concerned with his economic thinking and the Greek influence on it.

Aquinas' thoughts on economics can be found scattered in his *Summa Theologica*. There he started from the proposition that it was morally proper for humans to seek material possessions to provide for their sustenance. The support of life was necessary to make possible the attainment of the higher human goal of 'spiritual possessions.' His views on this notion of subsistence and higher goals presumably reflects his study of Aristotle, as it follows his concept of natural acquisition as satisfying basic needs to enable humans to achieve spiritual growth and virtue.

In a money-based society to be sure that all members of society had access to material necessities, Aquinas argued that prices charged for them had to be just. He found it acceptable to use the market price as the just price as long as it was set in the absence of monopoly power. It also had to cover the costs of producing the product, so that producers would be ensured a livelihood.

To assure that transactions were just, Aquinas argued, both buyers and sellers in the marketplace should follow the Gospel in doing unto others as you would have them do unto you. Both buyer and seller had to be informed about each other's needs and had to be virtuous. Moreover since each had to have sufficient food, clothing and shelter in order to be virtuous, the just price was a part of the process of creating virtue. A wage rate, for example, that pushed a worker below a subsistence level eroded his chances for being virtuous and was therefore unjust. The wage had to ensure that a worker's needs were met in order that he might find salvation (Aquinas 1968: 124–5 and Aquinas 1953: 145).

St. Thomas's economic writings aimed at practical affairs as they were then defined. In his case it was a very practical matter to determine what humans

should do to save their souls. Economic activity that enabled the individual to rise above pure self-preservation and seek after the higher goals of the spirit was acceptable. We can see the influence of Aristotle's economic thinking on him here. The value in use of material goods was their contribution to salvation; their price had to be just in order to ensure that every person had a chance to reach salvation. The just price was consistent with natural acquisition.

When we look for ways that Aquinas applied his economic thinking to higher education, we find he has little to offer. As John W. Donohue has pointed out, Aquinas added nothing to the philosophy of education or the organization of educational institutions (Donohue 1968: 6–8, and 29). As a mendicant Aquinas had no concern for whether or not he earned a just wage from his teaching or whether his students paid a just price for their tuition. In academia we can translate his notion of the just price into a system where the 'sellers' of education took into account the needs of the 'buyers' (students) in determining the level of fees and whether the fees charged students covered the costs of producing the education. It also meant that faculty had to be paid enough to sustain themselves. This translation of the just price into academia would lead educators to develop the endowment model as can be seen from a brief history of Oxford University.

THE ENDOWMENT MODEL AT OXFORD

By the time Oxford University was established scholars in Europe had developed a model whereby they settled down into universities. Leaders of the university were elected, often for short terms of office, to manage its affairs. Because of their religious nature, universities were free of the organizational structure of the towns in which they were located. In England, for example, the universities of Oxford and Cambridge had their own charters, which placed the faculty at the centre of university governance.

Student fees were an important element in the finances of universities, but as time passed they became less important than endowment. For a long time, however, these endowments had ecclesiastical connections, and universities had to conform to the desires of the church leaders; they operated under charters granted by the Pope. Oxford University, founded by the middle of the twelfth century, ran its affairs with ecclesiastical power. The university, and its faculty and students were exempt from the secular authorities of the town of Oxford due to their being accorded clerical status, even if they were not taking holy orders. One of Oxford's earliest charters, the Legatine Ordnance of 1214, enabled university officials to fix the rent students had to pay local landlords for housing, ensuring that students paid a just price for housing. It also levied an annual fine on the town to support poor students, establishing the first part

of a university endowment of 52 shillings a year. This money was placed in a chest, held at St. Frideswide's Priory, and was used to offer interest free loans to students (Mallet 1924 vol. I: 32–4).

In the ensuing centuries several other chests were created, and the university enhanced its endowment through a series of gifts and bequests from wealthy benefactors. As a result the university came to own houses and land in the surrounding area and in London. By the fourteenth and fifteenth centuries, both Oxford and Cambridge had endowed residential halls and colleges. Eventually each college would have its own faculty and endowment. While ecclesiastical funds were important, many of these endowments came from the crown, as the names King's College and Queen's College would attest. Many benefactors included restrictions on their gifts, such as preference for their kin in admission and scholarship decisions, and Henry VI chose Cambridge over Oxford in making an endowment because Cambridge was more orthodox in religious matters (Cobban 1999: 10–15, 121, and 126–31).

Despite these religious and royal connections students at the English universities came mainly from the middle classes, as the nobility saw no need to educate its sons at university. Once they had been accepted students paid fees, especially for receiving their degrees; the fees for a Masters degree were high, but were adjusted to help poorer students afford them (Cobban 1999: 7–8, 24, and 41–2). Graduate students continued their studies with an eye towards a non-academic career, and for good reason. They did not receive tenure or a fixed salary as is done today. Often times their teaching was part of their duties as advanced students, that is, they were graduate teaching assistants in today's terms. On receiving their degrees they might teach for a time as a master and earn a living by collecting fees from students. In 1422 faculty at Oxford began to combine those fees into a pool and divided them equally among the masters. This ensured that every faculty member would gain a just wage.

The first endowed faculty position in England came into being at Cambridge by 1480, and it established a system of salaried professors that expanded over the next two centuries. Professors operated with a great deal of independence in terms of teaching and curriculum, although it is doubtful that many of them challenged directly the religious precepts of the time. Their independence derived from their control over the university. Faculty formed a guild that elected its leadership (Cobban 1999: 55–8, 64, 213, 217, and 234; Mallet 1924 vol. I: 100–1, 122, 196–7, 199, and 262).

We can categorize Oxford and Cambridge as paradigms of the combined model of academia, with an emphasis on the endowment model. Student fees were important especially in the early years, but faculty found a way to minimize the competitive nature of fees by pooling them and dividing them up. More important they were able to secure endowments to produce fixed salaries

for many of themselves and to fund buildings. Cambridge and Oxford were able to retain independence from market pressure in terms of how and what they taught.

Universities in England could follow this pattern because their endowments grew even as their funding changed from church to crown support. The Scottish universities, however, never attained the level of endowment found at Oxford and Cambridge and had to rely on student fees as an important source of funding; the fees varied from course to course and faculty had to support themselves by holding positions in the church (Raines and Leathers 2003: 30–3). At Oxford, endowments continued to grow and in some periods were added to by the accumulation of a surplus of income over expenditures (Mallet 1924 vol. I: 320, 323, 366–7, 372, and 391; Mallet 1924 vol. II: 10, and 22).

By the sixteenth century, at the latest, the system of feudalism had given way to an economic system more reliant on commerce in many parts of Western Europe. This rise in commerce went hand-in-hand with changes in the intellectual climate that came to be known as the Enlightenment. The goal of the Enlightenment was to use scientific principles based on reason to understand the world and use the knowledge gained to have social organization based on rational thinking instead of personal opinions. The Enlightenment did not arise from academia to any large extent, but it eventually did have an influence on higher education. Starting with Oxford University, by the seventeenth century universities in England expanded the study of the humanities and added science into the curriculum. At the same time once the advantages of university education for government careers became established in England by the sixteenth century, the nobility became more interested in its benefits for their sons. Advancement in the courts of the royalty of Europe required wide knowledge and courtly manners. This need changed the nature of the university for students, who sought to use a university education to either certify their social status or to rise to a higher social status. It also brought about a decline in the quality of education that lasted for several centuries, at least until the nineteenth century. In England, for example, faculty members at Oxford and Cambridge had become inattentive to the needs of their students. The wealthy began using private tutors for their sons and sending them on tours of Europe as a finishing touch to their education (Lucas 1994: 77–8, 81, 88, 94, and 97). We can see the problems that developed in higher education in England through consideration of the experiences of Adam Smith.

ADAM SMITH: MARKETS AND NATURAL ACQUISITION

Once trade established the market economy on a solid footing in England, learned men began to investigate its impact on society. Among them we find

Adam Smith (1723–1790). His classic book on economics, *The Wealth of Nations* (Smith 1976b), is a statement of how markets channel the self-interest of individuals, as if an invisible hand led them, to produce benefits for society.

To describe how markets worked Smith began with the Aristotelian distinction between value in use and value in exchange. His purpose was to determine the rules for value in exchange and to show when value in exchange was natural in Aristotle's sense. His analysis, however, did not extend as far as Aristotle's idea that exchanges had to equate each person's skill and utility to be in proportion for both traders. His purpose was not to establish the conditions for justice in exchange, but to determine the rules for exchange and to show when exchange was natural in Aristotle's sense.

To do so he started with a labour theory of value, that is, the real price of a commodity was the labour that went into it. He began as Aristotle did with an early society under a barter system. In that system two hunters, one of deer and the other of beaver, have surplus deer and beaver to trade. They would barter their extra game based on how much time they spent to hunt the animal they had compared to how much time they would have spent to hunt the animal they wanted. Consequently items would exchange in proportion to the labour time it took to produce them. Although he left out Aristotle's need to consider the skills and utility of each trader, Smith argued that barter based on labour time in this early society equated to a natural exchange (Smith 1976b vol. I: 32–6).

In the more complex economy of Smith's day the exchange ratio of commodities might not work out precisely in proportion to the labour it took to produce them, because profits on capital, rent on land, and different wages based on skill levels had to be included in the price of each commodity. Still, he insisted 'the haggling and bargaining of the market' would produce an approximate equality 'sufficient for carrying the business of common life' (Smith 1976b vol. I: 32–6). In the marketplace competition would bring prices to their 'natural rate,' at which point business owners would earn a natural profit that was moderate and workers would be earning a natural wage in accordance with the labour time they put into production (Stabile 1997: 301–5). This natural price also meant that market exchanges were natural in Aristotle's sense.

As described in Chapter 2, Aristotle had thought of the accumulation of wealth as unnatural when it became an end of life. As a Greek scholar Smith would have read Aristotle and may have used the terminology of 'natural price' to show that competition among producers would result in a natural rate of profit consistent with Aristotle's definition of natural acquisition. There is a clear line from Aquinas to Smith on the subject of natural prices (Stabile 1997: 296–8) and Aquinas' ideas were based on Aristotle. Smith saw competition as

assuring that no one would accumulate 'unnatural' wealth. The desire for unnatural acquisition of wealth by all traders was self-defeating. The marketplace allowed individuals to act on clear monetary incentives to follow their own interests. To prosper individuals picked the occupation or business that provided them with the most income. In doing so they chose a field that added the most to total production and thereby increased the wealth of the nation. Competition, however, left traders with a natural level of wealth.

Adam Smith and Virtue

The idea that competition reduced income to a natural level bears a strong resemblance to the ideas of Protagoras and Isocrates, and there is evidence that they influenced Smith. We can see this first through consideration of his earlier book, *The Theory of Moral Sentiments* (Smith: 1976a). In that book Smith wrote, 'How selfish soever man may be supposed, there are evidently some principles in his nature, which interest him in the fortunes of others, and render their happiness necessary to him, though he derives nothing from it except the pleasure of seeing it' (Smith 1976a: 9). Self-interest to Smith never meant that humans could not care about other members of their community. He characterized this caring attitude as sympathy, an idea that Protagoras had already established (Lowry 1987: 99).

In *The Theory of Moral Sentiments* Smith was concerned with how humans make moral judgments. Self-interest may tell us what we want to do, but it does not tell us whether we ought to do it. There must be standards of behaviour a society should expect of its members. While self-interest led humans to pursue every activity imaginable, sympathy would restrict them to doing what they ought to do. Smith established sympathy as checking self-interest and leading to virtue. Humans endowed with sympathy acted virtuously even when no one was present to approve. Such a well-formed mind was capable of virtue (Smith 1976a: 117).

Smith understood that at a low level of existence self-interest and self-preservation were often joined together as the same force. If wealth made self-preservation irrelevant, then it might be possible for sympathy to control self-interest in the pursuit of virtue. He thus argued that commerce and the wealth it produced were necessary antecedents to more virtuous behaviour. Through the invisible hand self-interest increased the wealth of the nation thereby making it possible for more virtuous behaviour to take place. Affluent societies have the wherewithal to cultivate more well-formed minds that aim at virtue than poor ones (Stabile 1997: 300).

One does not have to have Smith's astuteness to recognize that Plato and Aristotle were able to spend their time thinking about virtue because they were wealthy, while the sophists had to sell the practicality of their education to

survive. Aristotle himself admitted to this when he set forth his natural level of wealth. One should accumulate wealth up to the point where basic needs could be met, at which point it was time to worry about virtue. Smith likely agreed with this view, and his genius was in seeing that competition would limit the self-interested pursuit of individual wealth to that natural level while raising the wealth of the nation, making it possible for the concomitant increasing of virtue through increased affluence.

Adam Smith: Sophism and Higher Education

Despite holding this optimistic outlook Smith recognized a dilemma in his argument. The increase of virtue in society required the growth of wealth. Wealth sprang from the division of labour. But the division of labour had the potential to reduce human values, for individual workers became stupefied by spending all their time in simple, specialized tasks (Smith 1976a vol. II: 302–3). Smith's solution to this problem was government-financed education directed at ordinary workers. 'An instructed and intelligent people,' he wrote, 'are always more decent and orderly than an ignorant and stupid one' (Smith 1976b vol. II: 309). In short, education for the poor had social benefits that warranted government spending to support it.

Smith's espousal of the social benefits of publicly funded education for the poor was well in advance of his time. Nevertheless he did not believe in public funding of higher education. His experiences with higher education, especially at Oxford where he spent six years on scholarship, did not impress him. Indeed, he devoted about 20 pages of *The Wealth of Nations* to an account of higher education and his explanations for its failings.

Smith noted that in Europe universities were endowed by funds set aside by the government or from private donors. In assessing the effectiveness of the endowment model he posed a set of fundamental questions that we still should ponder: 'Have these public endowments contributed in general to promote the end of their institutions? Have they contributed to encourage the diligence, and to improve the abilities of the teachers? Have they directed the course of education towards objects more useful both to the individual and to the public?' (Smith 1976b vol. II: 282).

Smith answered these questions with a resounding no. He found two problems with the English universities, poor teaching and an antiquated curriculum, and attributed these to the self-interest of the faculty that was misdirected by a poorly designed incentive system. The incentive system was essentially nonexistent as universities were funded by endowments. As a result faculty members received salaries that were 'independent of their success and reputation in their particular profession.' In universities where faculty pay came from the fees of students, such as Glasgow and Edinburgh where he had taught,

teachers applied themselves more diligently to their work (Smith 1976b vol. II: 283).

The lack of any monetary incentives for faculty also had an impact on the curriculum. Smith presented a brief history of academia from Greece to his day. Since the universities in Europe of his day were formed as religious organizations for teaching theology, they had insisted on Latin and Greek as ways for clerics to read and interpret scripture. They had also taught philosophy in its various branches as prerequisites for theology. University faculty contributed few of the advances in philosophy that had taken place during the Enlightenment. Instead universities were 'the sanctuaries in which exploded systems and obsolete prejudices found shelter and protection.' This approach may have served clerics tolerably well, but the world was changing (Smith 1976b vol. II: 285–9). Academia, however, was not adjusting to that changing world. Instead universities were merely holding places for men seeking careers in that changing world. Universities took on the mission of educating a diverse student body, including the wealthy, but most of what universities taught did little to prepare them for life. Smith especially believed that the universities neglected the teaching of modern science which was then revolutionizing the world (Smith 1976b vol. II: 295).

The monopoly universities had on granting degrees further exacerbated the two problems of poor teaching and an antiquated curriculum. Students were forced to reside a fixed number of years at the university in order to earn a degree. This made their experiences no different from the 'statutes of apprenticeships' which forced apprentices to work for a master for a fixed number of years before they could work on their own. Scholarships that tied a student to a university added to the monopoly element of higher education. The English system that assigned students to a tutor with no choice or opportunity for change also added to the low quality of education (Smith 1976b vol. II: 285–6). Because there was no competition in academia, universities offered substandard educations.

What about the possibility that because of their secure income faculty would have well-formed minds that made them aspire to high levels of excellence in teaching and curricular development? Smith admitted that a teacher with a higher order of sensitivity might feel uncomfortable giving lectures that were 'nonsense.' This teacher might also find it disagreeable to see students skipping his lectures. These motives might 'dispose him to take some pains to give tolerably good' lectures. This process of self-reflection might improve the quality of education. Still, Smith noted, a teacher might also copy his lectures from books, make attendance mandatory or have students give oral presentations. The overarching problem was that the 'discipline of colleges and universities' was not 'for the benefit of the students' but for 'the ease of the masters.' It further assumed 'perfect wisdom and virtue'

on the part of professors and weakness and foolishness on the part of students (Smith 1976b vol. II: 286–7).

For a solution to the poor state of academia he looked to Greece (and Rome) where an education marketplace had produced teachers of any subject for which there was a demand. He accepted the idea that the fees of Greek teachers were high. In support of this acceptance he cited the passage from Isocrates, in his discourse against the sophists quoted in Chapter 2, where Isocrates reproaches the teachers of his time for charging low fees of four or five minae. Smith estimated that those fees were equivalent to £13 to £17 in his own day, a high level, and that Isocrates earned double that amount. Add to this that he taught around one hundred students, and Smith concluded that Isocrates was well paid indeed. Other teachers, such as Gorgias and Protagoras, had lifestyles that were 'represented by Plato as splendid even to ostentation. Plato himself is said to have lived with a good deal of magnificence' (Smith 1976b vol. I: 148–9).

Smith had no objection to the wealth he thought the Greek teachers had earned from their fees. He attributed the itinerant methods of Protagoras, Hippias and Gorgias to the initial low demand for the education they offered. They were creating a new market. As the demand for higher education increased, the later sophists and Plato were able to establish settled schools. The important point for Smith was that the typical Greek teacher had received no public support, but lived from the 'fees of his scholars' (Smith 1976b vol. II: 298–9).

This was important because it meant that the Greek teachers had offered courses the public wanted, which was why their fees were justified. This approach gave free play to competition, which Smith described as follows: 'The demand for such instruction produced, what it always produces, the talent for giving it: and the emulation to which an unrestrained competition never fails to excite, appears to have brought that talent to a very high degree of perfection.' Smith thought so highly of the Greek system of teaching for fees that he concluded that Greek teachers were 'superior to any modern teachers' in the qualities that made for good teaching (Smith 1976b vol. II: 300). In reaching this conclusion he came closer to accepting the ideas of the sophists than he knew (he seemed to include Plato and Aristotle as practitioners of fee-based teaching), including their idea that competition would improve the quality and content of higher education.

The Greek system would not work in England, however, as long as the universities had their privileged position. Schools offering education for fees could not compete with the endowed universities on cost. If the government began funding higher education, it would further stifle competition from fee-based schools. Although Smith favoured public funding for lower level schools for the children of labourers, he did not favour public funding of

higher education (Smith 1976b vol. II: 302). He believed that public funding would make professors less responsive to the needs of students.

In holding this belief he was highly optimistic regarding the ability of students to choose wisely in regards to the professors whose courses they decided to attend. He did not seem concerned that instead of taking their courses from the 'best' professors, students might choose the easiest, most amusing or laxest professors. By not looking at what motivated students Smith did not see that his fee-based incentive system might have the perverse effects of faculty using the wrong methods to attract fees. Still his belief that faculty at endowed universities with fixed incomes would not necessarily be internally motivated to teach well and improve their curriculum became influential.

As I have argued elsewhere (Stabile 1998: 74–6, 124, 131, and 174–6), Smith's writings were very popular in the US, especially during the years between the Revolutionary War and the Civil War. His general ideas in economics as well as his writings on higher education would have a direct effect on higher education in the US, as we will see in subsequent chapters. That influence fuelled sophism, not surprising since Smith viewed the sophists more favourably than he did Aristotle. Like them, he never imagined that a university would permit students to decide what they would be taught under some utilitarian premise that consumers knew best what they needed. Smith's model of the market aimed at giving consumers more choice and better prices for items of subsistence and not an array of consumer products that exist today. His proposal for academia meant that students would have more choice and better courses, but he could not have imagined a system where students decided what courses were taught.

In his history of Oxford University, Mallet credits Smith for making valid criticisms of the university and offers evidence in support of those criticisms. He points out that faculty had no impetus to reconsider the teaching methods and subjects of the past at Oxford and that it lagged behind in its introduction of science. The reputation of Oxford was that a dunce could get a degree as readily as the greatest genius. This view of Oxford in the eighteenth century was taken as a given by Cardinal Newman, when he wrote of it in 1852. It was not until the nineteenth century that Oxford began to reform by imposing stiffer examinations and adopting a more modern curriculum (Mallet 1924 vol. III: 124, 127, 163–7, and 215; Newman 1960: 1).

CONCLUSION

During feudal times Christian schools began emerging with church support and followed the endowment model more closely than the Greeks and Romans had. In England, Oxford and then Cambridge followed the endowment model

to a large degree. Following the feudal tradition they established traditional rights for themselves and their faculties. Supported by endowments they functioned in a manner reminiscent of guilds complete with apprenticeships and a dividing up of student fees in an egalitarian manner. Thus they retained autonomy from political and market pressures that kept them intact as feudal carryovers into an era that was changing.

By the end of the eighteenth century an observer as astute as Adam Smith could see the benefits of education to elevate the thinking of all members of society. As society became more secular in its values – a product of the Enlightenment to which Smith contributed – education could supplement the moral training of religion. His call for state-funded mass education for the poor was very much in advance of his days.

The reforms of higher education he promoted were also very unusual for his time. The issue Smith worried over regarding the motivation of faculty is what economists now call the agency problem. When large organizations arise and workers act as agents for those in control of the organization, they might not see a direct link between income and effort and not work as hard as they could. In higher education this problem meant that professors might not be effective teachers and universities might not offer the best curriculum in terms of what students needed. His idea that universities be funded and professors paid from student fees marked his stress on the tuition-drive model.

Deirdre McCloskey has argued that Smith was a sophist. She bases her argument on his recognizing the role of rhetoric in economic thinking and for being able to change his mind in a way consistent with the view of Protagoras that ‘man is the measure of all things’ and that increased knowledge can change that measure (McCloskey 1996: 232–3). This chapter has shown that Smith agreed with the sophists regarding the benefits of having professors’ pay depend on student fees. Whether their rhetoric about the competition they faced in finding students and maintaining their fees had an impact on his economic thinking is unclear. Still he was more sympathetic to their ideas than he was to those of Plato and Aristotle. His writing would revive an interest in the use of competition in education in the US.

4. Virtue and early academia in the US

At the time Adam Smith published *The Wealth of Nations* in 1776 with its use of sophism to criticize English universities, the English colonies in America had been established on a sound economic basis. Moreover unlike England where capitalism as an economic system had to change the social and ethical world view of religion into a world view more in tune with a commercial society (Tawney 1998 and Weber 1958), early settlers in the colonies drew their motivation from economic gain as well as from religious freedom. Consequently when Christian and commercially minded men formed colleges, they started with a mission of virtue in terms of the maintenance of a religious worldview.

This chapter will describe the rise of academia in the US during the period 1630 to 1860, when Christianity reigned supreme in educational circles. We will see that early colleges, using the endowment model of both public and private funds, offered an education that had the mission of teaching students what it meant to live a life of virtue as defined by Christians. We will also see, however, that during this early period civic and educational leaders followed Adam Smith and became advocates for sophism in academia. Even as they were using Smith's sophism to argue for adding more competition to academia, economics was changing. In England Jeremy Bentham was setting forth a new model of competition based on utilitarianism. His model had links to sophism but when he applied it to education, he retained the endowment model.

EARLY COLLEGES, VIRTUE AND THE ENDOWMENT MODEL

English settlers came to America for a variety of reasons, including the search for religious freedom as well as from an economic motivation. When early settlers recognized how difficult it would be to sustain themselves from agriculture in New England, with its short growing season and rocky soil, many of them turned to trade. Boston's population soon included wealthy merchants, artisans, seamen and common labourers. With this urban population came the services associated with urban life. Education was among the first to appear.

The Puritans who settled in the Massachusetts area were firm believers in education as a way for humans to understand sin and avoid it. They especially valued the influence a well-educated ministry could have on the beliefs of sinners. Consequently the General Court established a college in 1636 with a grant of £400 and it began operation in 1638 (Massachusetts General Court, 1633: 5). It was named Harvard College after John Harvard, a young minister who was convinced to leave half his estate to the College. When he died suddenly in 1638 the College inherited his books, which formed the beginning of its library, and about £780 in cash. Thus Harvard started out with the endowment model, part public and part private. The public part was a bit less than the private part, and it is not clear how much of the original £400 pledged by the General Court was paid. In those early years the finances of the colony were very limited and £400 was a sizable portion of its tax receipts (Foster 1962: 1–2, and 6).

In her account of the economics of Harvard in its early years, Margery Somers Foster paints a picture of a college that existed partly from individual donations, partly from public funds and partly from student fees. The General Court gave Harvard the tolls from the Charles River ferry, and several towns in New England contributed to it in a system of grants (Foster 1962: 25, 27, 28, and 88–90). Student fees were also a source of revenue for Harvard. In addition to tuition students paid fines for misbehaving, commencement fees that were high in comparison to tuition, and room and board that were very high compared to tuition. Enrolments fluctuated, however, and student fees fluctuated with them. Student fees were not nearly enough to cover the total operating costs of Harvard, and government aid and gifts and endowments were an important part of the College's finances. Officials of Harvard made successful fund-raising trips to England. Figures for sources of money during Harvard's first half century, as presented by Foster, indicate that, excluding food and lodging, government aid accounted for about 30 percent of Harvard's budget, gifts accounted for about 25 percent, endowment income for about 20 percent and student fees for about 20 percent (Foster 1962: 19, 65–73, 77, 83, 103–4, 107, 121–3, and 127). We can thus conclude with some confidence that Harvard was not a tuition-driven college in its early years.

Other colonies also founded colleges for the training of clergyman. Virginia established the College of William and Mary in 1693 under the direction of the Anglican Church. The colonial government of Virginia supported the College through a tobacco tax and land fees (Rudolph 1962: 14). In Connecticut, Yale was chartered in 1701 and received government funds for a good portion of its early history. In New Jersey, Presbyterians formed the College of New Jersey (later Princeton) in 1746, while in New York the Anglican King's College (later Columbia) started in 1754. The Baptists created Rhode Island College

(later Brown) in 1764, and the Dutch Reformed Church established Queens College (later Rutgers) in 1766.

The only non-church college, the College of Philadelphia (later the University of Pennsylvania), opened its doors in 1756 thanks in part to the aid of Benjamin Franklin. Franklin had argued that students should 'be taught everything that is useful and everything that is ornamental.' Given that 'art is long' and the students' 'time is short,' academia should offer courses that were 'most useful and most ornamental' (quoted in Hagstrom 2000: 21–2). In following his advice the College of Philadelphia offered a classical track and a second track for mechanics, with both tracks taught only in English and including courses in science, surveying, agriculture, writing, speech and contemporary politics (Westmeyer 1997: 11–14). The inclusion of these practical subjects and the use of English as the sole language of education meant a tilt toward sophism.

We can see another variation of this emerging pattern of sophism in the early development of Columbia University. On 6 December, 1746, the New York state assembly passed a law to use a public lottery to raise funds to start King's College. The new King's College had a mixed financial backing. In addition to approving a lottery to raise funds for the college, the state provided public funds to pay faculty. Private donors, mainly from the New York City religious, merchant and legal establishments also contributed to starting the college. Donors gave money for a building, and Trinity Church provided the land. The governing board consisted of political leaders and church leaders. These church leaders gave a religious flavour to King's College, and while it was purportedly Anglican, its governing board made it non-sectarian in effect (Humphrey 1976: 3, 11–13, 16, 46, 52–3, 69, and 77).

The governing board, while non-sectarian, held to sophism by focusing on students with the money and ability to be part of its program. Tuition was high, the highest in the colonies, and King's did not believe in aiding poorer students (Humphrey 1976: 81–5). This approach resembles the sophist perspective of charging fees and offering an education that enabled students to go on to successful careers – in this case in law and commerce before aspiring to political leadership. Still, by the 1760s King's had the largest endowment of any college in the colonies (Humphrey 1976: 92, and 132). As a result the college functioned along the lines of the combined model with the endowment supporting the buildings and an emergency fund and tuition paying the operating costs including faculty salaries. In 1787 King's was rechartered as Columbia. It also implemented a policy of reducing tuition over the objection of faculty who thought their salaries would be limited as a result. Still the reductions led to increased enrolments (Humphrey 1976: 278, and 284).

BENJAMIN RUSH AND SOPHISM

When the colonists made their break with England, starting in 1776, they had no national identity. After the war was won state-centric policies and rivalries plagued the efforts to secure a functional national government. Many leaders grew disenchanted with the weak powers of the national government. They met in Philadelphia in 1787 to establish a new national government under the Constitution. They succeeded in getting the Constitution ratified by the states, but they worried over the need for national symbols to unify the country. Alexander Hamilton, as secretary of treasury in the administration of George Washington, insisted on the new government taking over all of the wartime debt of the old government and the states to create a 'national debt' as a symbol of unity (Stabile 1998: 91–4).

In this same spirit Benjamin Rush proposed in 1788 that the new government establish a Federal University. Congress should establish this university as part of the district it was going to create for itself as its capital. At the new university, faculty would teach only subjects that prepared students for civic life or careers of public service.

Rush had good qualifications to argue for this Federal University. He was born near Philadelphia in 1745. After graduating from Princeton in 1760 he studied medicine at the College of Philadelphia and at Edinburgh University. During his time in the British Isles he became a life-long friend with Benjamin Franklin, joined an intellectual circle that included David Hume and Samuel Johnson, and met with the French economic thinkers, the physiocrats. In academia, he was a professor of chemistry at the College of Philadelphia, published the first chemistry textbook in the US in 1770, and helped to establish Dickinson College. He was a signer of the Declaration of Independence, a prolific writer of political articles in newspapers and magazines, a member of the Continental Congress, and a surgeon-general in the revolutionary army. George Washington, John Adams and Thomas Jefferson all spoke highly of him and considered him a friend. Rush was thus well known and his opinions on education would gain a respectful hearing in the US at the time (Brodsky 2004: 51, 67, 73, 89, 246–7, 281, and 348–56; Hofstadter and Smith 1961: 151–2).

His proposal outlined an extensive curriculum. It included the study of government in general and the US Constitution in particular, ancient and modern history, science and chemistry, mathematics, natural history, rhetoric and English, modern French and German, and agriculture. His curriculum also included some new subjects such as 'the principles and practices of manufactures' and 'the history, principles, objects and channels of commerce.' In addition, mathematics would offer applications in 'finance' and science and chemistry would stress applications to 'agriculture, manufactures, commerce and war' (Rush 1788: 152).

Rush's proposal also reflected the tuition-driven approach of the sophists as revived by Adam Smith (Rush's attendance at Edinburgh and his associations with David Hume and Benjamin Franklin surely acquainted him with Smith, in name if not in person). The Federal University, he thought, should pay professors a modest salary and have them depend on students' fees to make up for any deficiency in their living standard their modest salaries caused. Student fees would cover much of the costs of the Federal University (Rush 1788: 156).

Rush later expanded on what branches of knowledge he meant to form the core of what he called a republican education. The new form of government in the US called for a new set of responsibilities on the part of its citizens, which necessitated that they adopt new habits of thinking. These new habits could not be learned in the older universities of Europe. Still an important part of the older education, Christian religion, had to be part of higher education in the US, for a Christian could not help but to be a republican, no matter what branch of the religion he adhered to. Newer parts of the education should teach the benefits of a republican government.

Of more importance to the theme of this book Rush considered economics to be a key ingredient of a college education. He wrote,

> I wish likewise to see the numerous facts that relate to the origin and present state of commerce, together with the nature and principles of Money, reduced to such a system, as to be intelligible and agreeable to a young man. If we consider the commerce of our metropolis only as the avenue of the wealth of the state, the study of it merits a place in a young man's education, but I consider commerce in a much higher light when I recommend the study of it in republican seminaries. . . . I consider its effects as next to those of religion in humanizing mankind. (Rush 1798: 173).

Not only was the study of economics practical, it had the potential to lead to virtue. Rush proposed that his version of higher education would produce republican, commercial, Christian gentleman.

The idea that commerce led to the humanization of mankind was a novel one. Adam Smith had delved into the possibility of the accumulation of wealth leading to more well-formed minds, but had less to say about trade making a person more humane (Stabile 1997: 300). Moreover this idea goes against the grain of philosophical ideas that had held sway since Plato and Aristotle – moneymaking is detrimental to living a life of virtue.

To counter this opposition Rush could have observed that many of the leaders of the US were republican, commercial, well-educated, virtuous and especially practical men. Hamilton, who had studied at King's College, had a keen understanding of business and built a legal practice around handling business affairs especially in banking, making him perhaps the first corporate lawyer.

Washington, although a plantation owner, had been a solid manager of his plantation and had engaged in operating a commercial sawmill and helped to form a corporation for building a canal along the Potomac River. He was one of the wealthiest men in the country. Benjamin Franklin's entire life had been devoted to entrepreneurship, and he was a friend of Adam Smith. In short these leaders already displayed in their thoughts and activities an acceptance of the money-making approach of a commercial society without any feeling that they had not lived a life of virtue.

Rush's proposal has three lessons for us. First Rush not only proposed a Federal University but indicated its curriculum and its financial organization. This tells us that patronage even from the government has strings attached to it. Second one of those strings, the curriculum, contained practical subjects not commonly taught in higher education at this time; Rush would use the government to return sophism to academia. Third the proposal contained the idea that competition among faculty for student fees would have benefits for the educational outcomes Rush sought. Rush had very likely read and been influenced by Smith's *The Wealth of Nations*, as had many political leaders of his generation in the US (Stabile 1998: 74–6, 124, 131, and 174–6). His use of student fees as part of faculty pay certainly reflected Smith's thinking.

Congress did not provide the funds for a Federal University, despite support for it from the first six presidents and Washington leaving a bequest from his substantial estate for Congress to apply to funding it (Washington 1790: 157–8). This lack of government funds meant that the Federal University never materialized.

ECONOMICS AND EDUCATION: JEREMY BENTHAM

Rush's proposal for a Federal University indicated that he was aware of Adam Smith's economics as applied to academia. To be sure the proposal for public funding of the Federal University went against Smith's advice that universities should not receive government funds. Still Rush saw the federal government giving money for buildings and providing faculty with a minimal salary. Student fees would make up a large portion of faculty salaries, just as Smith wanted. Rush also followed Smith in arguing for changes in the curriculum in response to new ideas and to social needs.

In advocating academic reform Smith was hampered, I argued in the last chapter, by ambiguity over whether he was appealing to self-interest or to well-formed minds. The economic thinker featured in this chapter, Jeremy Bentham (1748–1832), aimed to remedy this ambiguity with his philosophy of utilitarianism. Bentham wrote his works on utilitarianism with a goal of describing how individual interest could be trusted in a variety of individual

and social choices. Although his writings did not become influential in economics until the twentieth century, from the long-term perspective of this book, Betham's ideas defined the issues emerging in academia in the early-nineteenth century.

Bentham's contribution to economics was to reframe self-interest into the notion of individual calculations of utility and to explain how they led to the greatest good for the greatest number. As Lowry points out, Bentham's ideas have a lineage that traces back to Protagoras and Plato (Lowry 1987: 40–4). His goal was to require rational approaches to policy making and to make acceptable for intellectual study the idea that individual efforts to find pleasure and avoid pain were a useful way of evaluating human behaviour. By raising the notion that the consequences of human behaviour were worth study, he hoped to counter the conservative idea that traditional values were the best indicator of how humans should behave, much as the sophists had in Greece.

Despite his stress on individual calculations of utility, Bentham's utilitarianism was not a simplistic psychology of egoism. He provided a catalogue of motivations and believed that pleasure could be gained from sympathy and beneficence. While Bentham admitted that these qualities did exist in human behaviour, he did not expect to see them often enough to be counted on. Why base policies on human traits so rare that they 'cannot reasonably be regarded as being so frequently exemplified as insanity'? The well-formed mind of Adam Smith's *Theory of Moral Sentiments* was so rare that Bentham thought it better to rely on self-interest, which he saw in evidence all around him (Bentham undated a: 421–33 and Bentham undated b: 95, and 102).

To highlight self-interest as a reliable social force Bentham analysed all human action through his pleasure/pain principle. He believed that what gave one pleasure or pain was a matter of individual taste. As he put it, the 'quantity of pleasure being the same, push-pin is as good as poetry' (quoted in Oser and Blanchfield 1975: 120). While educators may cringe at this statement, we must recall that at the time it was a daring stance for Bentham to take, for it elevated the pleasures of the working classes to those of the high born. Push-pin was a game played by children of the poor, while only the higher ranks enjoyed poetry. Equality of pleasure was possible among all members of society, which meant that legislators had to treat all persons equally in their deliberations.

In setting forth his utilitarian philosophy Bentham pushed to its limits the idea that all human rules, traditions, values and actions had to be judged from the perspective of the extent to which they caused pleasure or pain for every individual. There was no such thing as intrinsic value to a principle. Modern moral relativists have pushed the idea that values are multicultural. Bentham made them individual. In this regard he can be seen as following the ideas of the sophist Protagoras and his view that man was the measure of all things.

Despite his holding to this utilitarian individualism, Bentham did not condone all activities and pleasures that individuals might pursue. However much pleasure criminals might derive from criminal activities, for example, they were not tolerable because of their impact on society when they hurt other persons. The individual gain from criminal activities had to be weighed against the total personal loss to society from all crimes. Consequently Bentham did not accept the idea that the individual's pursuit of utility necessarily promoted the good of the community. An individual might be the best judge of his or her utility, but it was up to society to judge the overall impact of individual actions on the tally of utility for the community.

Here Bentham touched on the issue facing academia in its response to public needs for education. Under a philosophy of utilitarian individualism students should be permitted to choose their courses for themselves by considering what gave them pleasure (benefits) and avoiding what gave them pain. Did this mean that there should be courses in push-pin as well as in poetry? Perhaps there should be, but only if inclusion of those courses benefited society.

When it came to the issue of who would decide when those benefits occurred, Bentham hoped that his utilitarian, cost/benefit approach would lead to more enlightened policies from elected government officials. In the case of education, however, Bentham put himself to the task. Before looking at his educational proposals, we need to understand Bentham's own educational experience. He had received his formal education at a boarding school and at Oxford. He started at Oxford in 1760 at the age of 12. Like Adam Smith just before him, he did not find it an enriching experience. His tutor 'took no trouble to ascertain what his pupils knew or knew not. He cared not whether they advanced or retrograded.' Consequently Bentham undertook many studies, mathematics for example, without any assistance from his tutor. This tutor was no exception, however, as Bentham found the general group of professors and tutors at Oxford to be 'insipid' (Bowring 1962: 37, and 39). Oxford had failed Bentham's utilitarian test of providing benefits for individuals and for society.

Bentham's approach to educational reform can be seen in his proposal for 'Chrestomathia.' The term combined two Greek words and meant conducive to useful learning. Bentham used it as the name for a prototype day school for boys aged 7 to 14. In it teaching would be greatly increased in scale by having a teacher lecture to a large number of students enhancing efficiency and reducing costs; no individual tutorials would be used. This approach to education mirrors the change brought about by Isocrates' school in early Greece. The curriculum would focus on mathematics and science, especially in their practical applications, and the study of the 'dead languages' of Latin and Greek would not be required. To make clear why he made such curricular reforms, Bentham included a listing of the branches of learning that were to be omitted

from his school and gave four principles for the omission. The most important principle, 'utility not sufficiently general,' led him to exclude fine arts, military studies, politics, and economics as a policy science. These courses may have been taught for traditional reasons, but Bentham found no social benefit to them (Bentham 1816: 14, 17–18, and Table I insert).

In arguing against traditional education Bentham wanted an education that was practical and could be offered at low cost. Keeping costs low was important, for he would use the endowment model to fund this education. His proposal for Chrestomathia was a request for funds from wealthy donors. He was promising them to use the funds wisely, keeping costs low by increasing the student/faculty ratio in his school. He also promised a curriculum that benefited both students and society.

While he was proposing a system for educating young boys, Bentham took it to be obvious that it was equally applicable to 'the higher, not to say the highest, branches of intellectual instruction' (Bentham 1816: 54). He went so far as to compare his proposed approach to what was being or not being accomplished in the great universities of England (Oxford and Cambridge), Ireland and Scotland, writing,

> Compare, on the one hand, the copiousness of the branches of education uniformly proposed to be administered; on the other, the smallness of the number customarily administered to one and the same person; on the one part, the preferable regard; on the other, the comparative disregard for immediate and extensive use; . . . on the part of the unendowed proposed institution the relative smallness; on the part of the antique and richly endowed institution, the largeness of the sums expended in the endeavours to produce the intended effects. (Bentham 1816: 22)

By following Bentham's plan of large lectures to students on a variety of useful topics, universities could offer more courses that were practical to more students and at a lower cost.

As an overarching goal Bentham wanted to put practicality on par with intellectualism as worthy of inclusion in higher learning, even if he did not stoop to adding push-pin to his proposed curriculum (he also left out poetry). Still he did not address, accept in a general way, why he was equipped to determine the curriculum and not the students he wished to educate. More to the point here it is not clear the extent to which Bentham had a direct influence in academic circles. Much of his writing remained unpublished and he was not cited in intellectual or political circles in the US the way Adam Smith was, although we will see in Chapter 5 that he did influence Charles W. Eliot, a reforming president of Harvard. Still his proposal for a large-scale practical education was prescient of the path academia would follow in the US. The only ingredient he left out was public funding. We will see in Chapter 5 how Bentham's protégé, John Stuart Mill, shored up the weaker

points of Bentham's proposal and added in a justification of public funding for academia.

Meanwhile Bentham had addressed an issue facing colleges in the US. How should they deal with the need to include new subjects in the curriculum?

VIRTUE: THE YALE REPORT OF 1828

Just before the end of the eighteenth century higher education in the US experienced a growth spurt. From 1780 to 1802, 19 colleges were started. A case can be made for Transylvania University (1780) as the first state university in what was then Virginia and now Kentucky (Thelin 2004: 46). For the next 20 years the states began establishing colleges that evolved into the 'flagship' universities of today. Private colleges, especially religious ones, also began appearing in larger numbers. In his thorough study of the increased number of colleges Colin Burke finds that they went from 20 in 1800 to 217 in 1815 and that most of them survived (Burke 1982: 14).

The inclusion of new colleges brought about a debate over curricular reform. While the movement for curricular change reflected a changing intellectual climate, there was also concern because in the late-1820s, enrolments in New England colleges levelled off in general and even declined at a few institutions. At Harvard, for example, a period of student unrest caused a decline in enrolments as parents tried to send students to more quiescent colleges. The fiscal problems this caused were added to when, in 1824, the Massachusetts legislature cut off all state funds for the university. Scholarship support for poor students decreased, and some faculty members lost their jobs. As a result Harvard had to turn to its endowment for financial support: in 1800 it had received 55 percent of its funding from the government; by 1840 it was getting 40 percent of its income from its endowment (Lipset and Riesman 1975: 65–7; Lucas 1994: 114–16). Because of similar fiscal concerns from the lower numbers of students, colleges in the New England region began considering curricular changes that might attract more students. They were especially troubled by a decline in the number of students seeking to enter the ministry (Burke 1982: 59–61).

These financial pressures did not result in extensive curricular reform, however. In 1828, for example, Yale issued a report to respond to the call for more practical studies. Written by Yale's president, Jeremiah Day, and a faculty member, James L. Kingsley, the report agreed that some changes in higher education were needed, specifically education in the sciences. Regardless, it was important not to go too far in changing the basic mission of academia. The main purpose of a college education was to give students the foundation of knowledge in literature and science that would serve them in all

of what they did afterwards. It would not be a professional education, as there were professional schools for that purpose. Nor would it include 'the minute details of *mercantile*, *mechanical*, or *agricultural* concerns.' The reason for not including them was simple. The report stated,

> These can never be effectually learned except in the very circumstances in which they are to be practiced. The young merchant must be trained in the counting room, the mechanic, in the workshop, the farmer, in the field. But we have on our premises, no experimental farm or retail shop; no cotton or iron manufactory . . . For what purpose then, it will be asked, are young men who are destined to these occupations ever sent to college? They should not be sent, as we think, with an expectation of finishing their education in the college, but with a view of laying a thorough foundation in the principles of science, preparatory to the study of the practical arts. (*The Yale Report* (1828): 282–3)

A college education would be expanded to include science but not business.

This expansion did not eliminate the need for a prescribed course of study, however. The report went on to answer the question of why a student should not be able to choose courses most in line with his tastes and abilities. First the prescribed course of study at Yale was what all students should know. Second adding in more courses would mean that other more valuable courses would have to be eliminated. Third forcing students to take courses might teach them that they had ability in that subject that they did not know about. Finally students in their junior year were permitted elective courses.

The report then took on a major issue, public calls for expanding educational opportunities for all and making that education more practical. It responded with an argument Adam Smith would have loved, that is, specialization and the division of labour kept colleges from answering these public calls. High schools might teach a broad range of subjects, but colleges, by aiming at 'one uniform course,' did their work with 'greater precision' and 'economy of time.' Consequently colleges operated efficiently, 'just as the merchant who deals in a single class of commodities, or a manufacturer who produces but one kind of fabric, executes his business more perfectly, than he whose attention and skill are divided among a multitude of objects' (*The Yale Report* (1828): 286).

Smith had indicated that specialization went along with expansion of the market. The report addressed the issue of expansion as well. Expanding the curriculum and taking on more students could increase the income of colleges. That might happen in the short run the report observed. Once the public recognized that the expansion weakened the education being offered, however, the college's income would fall. Consequently Yale, at least, would stick with its required curriculum of basic education in science and literature. Other colleges might try a different approach. Competition among colleges could improve

overall learning, 'if it is a competition for excellence rather than for numbers; if each aims to surpass the others, not in an imposing display, but in the substantial value of its education' (*The Yale Report* (1828): 287). Yale would retain its mission of virtue and eschew sophism.

Thus, while the curriculum expanded to include science, the mission of education at Yale remained that of training ministers and forming Christian gentlemen. The report noted that merchants and manufacturers were taking a more active part in government and they were piling up large fortunes. An education that made them Christian gentlemen would inspire them to greater things than 'to hoard their treasures, or waste them in senseless extravagance' (*The Yale Report* (1828): 288). Education with a mission of virtue would keep them from the pursuit of Aristotle's unnatural acquisition.

Not everyone in higher education agreed, however. A special meeting was called in New York City in 1830 to counter the Yale Report. Henry Vethake, then a professor of mathematics at Princeton, stated the gist of the contrary argument. He agreed about the value of a classical education, but thought it was given 'an artificial preference' in higher education. Colleges should give instruction in all branches of science and literature, but he 'would leave the *supply* of instruction in all to be regulated by the proportional *demand* of the public for each' (Vethake 1830: 294). Student choice in the courses they took would send signals to colleges as to what real preference as opposed to artificial ones would be.

The faculty and administration at Harvard had also reviewed its curriculum and retained a similar approach as Yale to the mission of higher education (Ticknor 1825: 269–73). As Frederick Rudolph argues, the spirit of the Yale Report of 1828 carried the most weight in curricular matters for another 30 years (Rudolph 1962: 116–20, 126–7, and 151–5).

The two sides in this argument indicate a dilemma colleges and universities have faced ever since this period. Should institutions of higher education be limited in the scope of their curriculum, even at the cost of their scale of operation? Alternatively should they expand their scale of operation by catering to every demand of the marketplace (public) in adherence to sophism and risk a weakening of their curriculum and a loss of focus in their mission of virtue? Members of academia during this period debated the answers to these two questions. Mainly they clung to the model of a traditional education that worked for them individually. It also helped that enrolments rebounded by the beginning of the 1830s, and growth in the number of students increased significantly over the next three decades, from 4847 in 1829–30 to 16 600 in 1859–1860 (Burke 1982: 54).

Did this expansion stave off the inevitable response to a changing market for education? In considering this question we should note an anomaly in academia and how it responds to market forces. In a product market firms try

to attract customers by offering a product that is different from other firms. This leads to specialization in terms of the products offered, and as the market expands, the result is products that are more specialized. In academia at this time, however, colleges apparently specialized in the same product, that is, the same general curriculum. Recognition of the problems this approach caused for academia can be found in the writings of an academic economist in the US, Francis Wayland.

FRANCIS WAYLAND AND THE ECONOMICS OF SOPHISM

Francis Wayland (1796–1865), president of Brown University, took the lead in examining how higher education functioned as an economic enterprise. Wayland was the author of a widely used text in economics, *The Elements of Political Economy* (Wayland 1853), which was first published in 1837 and ran through several editions. The book covered the standard thinking in economics at the time and offered an updated version of the ideas of Adam Smith. While his writings may not be representative of higher education of his day and were based on his impression that enrolments threatened to decline permanently (Burke 1982: 60), they give a glimpse of what an economist felt to be the issues confronting academia in the US in terms of the economic model of competition as it existed in the mid-nineteenth century.

Wayland began his economics textbook with a discussion of intrinsic value (value in use) and exchangeable value (value in exchange). Intrinsic value was the quality of a commodity to gratify 'human desire' and the more desires a commodity could gratify, the more intrinsic value it had. If the desire was necessary to the 'existence or to the comfort of man,' its intrinsic value would be great. Thus luxuries, which could be dispensed with, had a low intrinsic value. Exchangeable value resulted from the need to use labour to produce a commodity (Wayland 1853: 16–20).

When he looked at the conditions of labour Wayland, as befitted a college president, divided it into simple labour and educated labour. Regarding educated labour, he had in mind the 'learned professions.' To enter them a person had to spend time in college, pay for tuition, fees, and books, spend more time in professional training, and to forego income during the years of education. Consequently parents with money to give their children would not invest in an education unless the earnings that resulted from it were sufficient to make the investment pay off (Wayland 1853: 297). Parents, in short, wanted an education that offered future income. Here Wayland's argument has clear parallels with the type of education the sophists had offered.

Not all professional labour met this test, however. In a society with high

wages for professional labour few persons would enter into professions that did not pay, such as the fine arts. He noted,

> It is only in the later and more advanced stages of society, where hereditary fortunes have been built up, and where accumulated property gives opportunity for leisure and refinement, that much desire is manifested for those productions of the fine arts, which are considered the offspring of the rarest and most highly gifted talent. (Wayland 1853: 309)

To Wayland the US in the middle of the nineteenth century was not at that high stage of development. Although he did not mention them, only wealthy southern plantation owners, bolstered by the slaves they owned, might have had the attitude and affluence that would permit them to pursue virtue in education. They likely would have avoided Brown, however, and he thus felt that academia had to make allowance for economic conditions, which meant students and their parents would be more interested in training that paid off (sophism) than in an education in the fine arts (virtue). Professional training had an intrinsic value that brought a high exchangeable value, while training in the arts, because it could be dispensed with, was a luxury that had a low intrinsic value. It might bring a high exchangeable value from the few in the US who could afford it, but there were dangers in pinning hopes for a successful college on the demand for study of the arts.

Plato and Aristotle had not aimed at creating a successful college. They had set a mission of educating a few, wise men to the point where they could participate in discussion over virtue. Wayland, in a manner consistent with the sophists, felt that the revenue a college needed had to be based on its ability to attract a larger number of students. Since future income was a more powerful attraction to parents and students than virtue, sophism combined with a tuition-driven model would be conducive to the expansion of academia.

In 1842 Wayland applied his economic analysis to the current state of academia. Colleges were supported by the endowment model through state funds or from contributions of individual benefactors. These funds were a form of capital and they were not invested with an aim of supporting professors, who only deserved pay in return for their work, nor to support the education of professionals, who could earn a sufficient income to pay for their educations. The real purpose was to provide a liberal education to students as a way of improving society.

As operating entities, however, colleges had pitfalls. Faculty might be appointed who were not capable instructors. Wayland followed Smith's advice that a professor should be paid based on his success, writing, 'A small salary might be guaranteed to him, and the rest should depend on himself.' He even mentioned a system of 'tickets' to place teaching on a competitive basis. Use

of competition would boost the quality of teaching and eliminate the need for close supervision of faculty by trustees (Wayland 1842: 350–1).

Competition did not have such salutary effects on colleges as a whole, however. Wayland pointed out that parents often sought out the college that offered the lowest tuition, regardless of its quality, echoing Isocrates' complaints about sophists who charged low fees. To him this created a situation whereby all colleges offered their educations too cheaply. In business prices determined whether a firm covered its costs and prospered or declined; a natural price, following Adam Smith, would cover all a firm's costs including a normal profit. In areas of economic decline, when firms could not earn a natural price, they left the market or would not produce as much. In this way supply and demand would restore a natural price to the firms that remained (Wayland 1842: 360–1).

Wayland thought the same economic analysis applied to colleges. For them, the 'natural price' would be one that covered the costs of operating a college, including interest on capital invested in buildings, libraries, and equipment, depreciation charges on that physical plant, operating costs and the salaries of faculty. A 'natural tuition' should cover those costs. In most colleges, however, tuition did not cover the cost of capital or the depreciation charges needed to maintain it. In addition, faculty salaries were notoriously low compared to other professions, as were the salaries of college officials, leaving them below their natural price. As a result colleges were selling their product below its natural price. A price below the natural price cost meant that colleges should be leaving the market. Instead new entrants kept coming into the market adding to the existing levels of competition (Wayland 1842: 362–3).

Wayland later stated the problem bluntly:

> We have produced an article for which the demand is diminishing. We sell it at less than cost, and the deficiency is made up by charity. We give it away, and still the demand diminishes. Is it not time to inquire whether we cannot furnish an article for which the demand will be, at least, somewhat more remunerative? (Quoted in Lucas 1994: 137)

As he had argued in his economics text, Wayland concluded that colleges were not offering enough of the practical courses that parents would invest in for their children.

Wayland later elaborated on what he meant by looking for a more remunerative demand in a report to Brown in 1850. Colleges with their narrow curriculum were meeting the needs of a small segment of society. They needed to do more. Wayland noted,

> We must carefully survey the wants of the various classes of the community in our own vicinity, and adapt our courses of instruction, not for the benefit of one class,

> but for the benefit of all classes. The demand for general education in our county is pressing and universal . . . .The proportion of our young men who are devoting themselves to the productive professions is great and annually increasing. They all need such an education as our colleges, with some modification in their present system, could easily supply. (Wayland 1850: 478)

To adapt its instruction to meet these larger needs of the community Wayland recommended a more flexible approach. Students should be allowed to study at their own pace, not in a four year sequence. They should have a choice in what they studied, although they or their parents might ask faculty to tell them what to take. Wayland's list of recommended courses was more extensive than what most colleges taught, but it did not include direct study of business.

He did not rule it out either. Every student, he argued, had a right to any education he was willing to pay for, a classic statement of sophism. In line with that sophism, Wayland went on, every student had a 'special right to the kind of education that will be of greatest value to him in the prosecution of useful industry.' The US had 127 colleges, he went on, and 47 law schools, but 'not a single institution designed to furnish the agriculturalist, the manufacturer, the mechanic or the merchant with the education that will prepare him for the profession to which his life is to be devoted.' Wealthy members of the mercantile classes helped support higher education, he went on. Should they not have some courses that their children could put to good use? (Wayland 1850: 482).

Catering to that large class of society did not mean that academia would have to give up its traditional mission of virtue. Increased enrolments would create a larger institution able to support a variety of courses. Even business-oriented students would be drawn to courses in the traditional liberal arts. Nevertheless, Wayland recognized that the expansion he was advocating would bring about competition that would alter higher education. Colleges that felt they should maintain the traditional education to attach themselves to its prestige value would lose out. Students from the 'productive classes' would avoid them and their enrolments would decrease, causing many of them to close. Within the curriculum some courses might also lose out when students had more choice. Wayland had no objection, writing, 'If, by placing Latin and Greek upon their own merits, they are unable to retain their present place in the education of civilized and Christianized men, then let them give place to something better' (Wayland 1850: 487).

Rudolph credits Wayland for providing an influential counter-argument to *The Yale Report* of 1828, with its adherence to a traditional mission of virtue in education (Rudolph 1962: 237–9). Did Wayland's analysis represent the experience of the typical college president? Were all colleges in the weak condition he seemingly indicated for Brown? Could reliance on a market driven curriculum help them? Historians of US higher education have cast

doubt on the extent to which we can rely on Wayland's writings for identifying a real problem, especially since at the time that he wrote college enrolments were rising. Moreover Brown tried some of Wayland's suggested reforms to give students 'a large liberty of choice' and they did not work, because students did not take advantage of the opportunities offered to them. Finally, students who attended college in the ante-bellum years started entering careers in business using their liberal arts training to do so (Burke 1982: 70, 140–50, and 185; Hawkins 1972: 83).

The point here is that Wayland argued from the perspective of economics to conclude that if colleges competed by expanding their offerings they could attract more students and expand in size and scope. We do not know if Bentham influenced Wayland, but Wayland's argument has elements of both Smith's and Bentham's thinking. Colleges could follow Bentham and expand by offering more subjects that are practical and thereby increase their tuition until it reached Smith's natural level. With sophism the tuition-driven model could facilitate a better education for more students.

CONCLUSION

This brief survey of the development of higher education in the US for its first two centuries indicates that there was little development. The mission remained that of offering a basic curriculum that served to train ministers to tend to their flocks and to prepare Christian gentlemen for whatever they pursued in life. Following Harvard, colleges of this era used a combined model of endowment and tuition, but the emphasis in major colleges was on endowment and public funds were part of that endowment. As long as they had willing donors and government funds, they could avoid undue concern with sophism and the tuition-driven model.

Still we have the case of Benjamin Rush, who resorted to competition and the tuition-driven model to argue for expanding the curriculum by adding courses that were more practical. He specifically applied the competitive model to teaching, much as Adam Smith had, by arguing that basing professors' pay on student fees might make them perform better as teachers. That he did not succeed should not keep us from seeing that he believed that the tuition-driven model and monetary incentives could benefit academia.

In England Bentham set forth a new version of economics that stressed the importance of individual calculations of costs and benefits in social decision making. While this new version of economics did not lead him to espouse a market-driven curriculum, he did set forth a plan of education that he thought would produce increased utility for society. It used economies of scale to keep costs low and expanded the curriculum to bring in more students with funding

based on the endowment model. In this regard Bentham looked forward to an expansion of higher education that took another century to bring to fruition.

Francis Wayland stands out for recognizing that while competition had a place in academia, competition in the form of many new colleges that replicated each other was uneconomical, and caused wastes from oversupply. In this regard, he followed Bentham in arguing that academia needed to expand by offering a wider array of more practical courses. These new courses would attract students whose tuition would pay for the expansion. He also wanted faculty to be paid based on student fees, putting himself squarely on the side of sophism. We will see in the next chapter that Wayland's idea of expansion from an enlarged curriculum did happen.

5. Academia and the rise of capitalism in the US

The US in 1860 remained in the early stages of economic development. The largest business corporations were railroads, yet a transcontinental railroad had yet to be built. Petroleum had only recently been turned into a useful resource, and coal and wood were the main fuels. Sailing ships remained the mainstay of oceanic travel, although steamships were common on rivers. The 'American System' of interchangeable parts had been established, but not perfected. Few consumer products had national recognition and acceptance. Within a span of 40 years that would all change. Businesses went from being small family-owned firms to large corporations whose stock was traded in financial markets.

Academia in the US also displayed a pattern of growth in size and scope. In 1860 colleges, and they were still mainly colleges, were small and served local communities, with about 20 000 students enrolled. By 1900 universities of increased size with graduate and professional schools became more common and enrolment totalled 250 000 students (Burke 1982: 216). This chapter will describe the economic ideas associated with the growth of universities during the post-Civil War era. We will see that universities did not, as Francis Wayland had argued, expand through gaining more tuition from more students by offering more practical courses. Instead they grew with finds provided by public and private patrons, that is, they followed the endowment model.

Due to this use of the endowment model academia did not succumb to sophism and expand by selling education to students. Still we will see a limited form of sophism as academia began using arguments based on competition to justify offering students curricular choice. As universities grew in size and scope students found a broader array of courses to take. To keep courseloads for students manageable, those universities began offering students greater latitude in elective courses. This approach meant that courses and their teachers would be competing for students. Members of academia then had to debate just how much competition there would be in terms of the number of electives students would have.

Before looking at that debate we will first consider the ideas of John Stuart

Mill. Mill followed up on Bentham's economic thinking with an elaboration on how utilitarianism could function effectively as an economic tool. In education Mill's version of utilitarianism placed limits on the degree of competition that was healthy. It also envisioned how the expansion of academia could take place with public funds, using the endowment model. While Mill's influence might not have carried as far in the US as Adam Smith's had, his *Principles of Political Economy* replaced *The Wealth of Nations* as the most influential book on economics during the second half of the nineteenth century.

ECONOMICS AND EDUCATION: JOHN STUART MILL

John Stuart Mill was a follower of both Smith and Bentham by holding with Smith's vision of well-formed minds as combined with Bentham's emphasis on calculations of utility. This Millian version of utilitarianism aimed at considering what impact the pursuit of utility had on the human personality.

Bentham had set forth his pleasure/pain principle as a tool for policy makers, to oblige them to think more carefully about the consequences of their laws for human behaviour. In doing so, Mill acknowledged he had added precision to the idea that persons acted in their own self-interest. The problem with Bentham's utilitarianism was that calculations of pleasure and pain were too complicated to be useful, as no one could know all the consequences of his or her actions. In addition the distinction between self-interested acts and acts that affected others was vague; every human act had consequences for others (Packe 1970: 87–9 and Thomas 1985: 41).

To address these issues Mill added that there were higher and lower utilities, with some persons being better equipped to calculate pleasure and pain than others. The formation of moral character made some humans better calculators of their own pleasures as well as the pleasure and pain of others (Mill 1957: 30). Mill highlighted this higher facility by writing,

> It is better to be a human being dissatisfied than a pig satisfied, better to be Socrates dissatisfied than a fool satisfied. And if the fool, or the pig, are of a different opinion, it is because they only know their own side of the question. The other party to the comparison knows both sides. (Mill 1957: 14)

This statement signified that Socrates was a better judge of higher utilities than the fool was or even the common folk of the masses. Having experienced push-pin and poetry, he knew that poetry was better. Here Mill has followed the argument of Plato, noted in Chapter 2, that philosophers know better than mere lovers of money and honour what constituted the good life.

Moreover Mill believed that his environment had shaped Socrates' higher

facility. With a proper environment others could attain his higher facility for utilitarian calculations. Mill looked to education as a way of elevating an individual's appreciation of the higher utilities, an idea that he shared with Protagoras, who argued that education could improve human perceptions. Mill recognized, however, that there were limits to what education could achieve. Not all individuals had the same abilities or motivation to learn. Since Mill believed that the function of universities was the formation of minds that could appreciate the higher utilities, he determined that they needed special treatment as an economic factor to create the type of education he thought essential (Raines and Leathers 2003: 75–7).

For example in most cases of economic activities, Mill believed, '*Laisser-faire*, in short, should be the general practice: every departure from it, unless required by some great good, is a certain evil' (Mill 1969: 950). In the case of education, however, Mill saw that a departure from laissez faire would create good results. He had great faith in the powers of education as a force for improving all members of society, but thought that someone other than the consumers of education had to determine the proper course of study. As Mill put it, 'The uncultivated cannot be competent judges of cultivation. Those who most need to be made wiser and better, usually desire it least' (Mill 1969: 956). Someone had to tell parents how to educate their children.

Mill here is much more doubtful than Adam Smith about the ability of students and their parents to be effective consumers of education. They might be capable of choosing the right school to give them professional training, as they would be guided by self-interest. The main function of a university was not to educate professionals, but to teach general learning that included both the classics and science. The inability of English universities to add science to the curriculum, he added, was due to their being controlled by the Church of England, not because of the lack of competition (Raines and Leathers 2003: 77–9). It was not the presence of an endowment that hindered curricular change, as Smith had argued, but who controlled the endowment.

To attain a better standard for educational excellence Mill argued in favour of government regulation. Faculty who received steady pay from an endowment needed to be pushed by government to aspire to excellence. Echoing Smith, Mill argued that the only motive that might inspire teachers paid a fixed salary from an endowment was 'conscience of a disinterested love for his duty, and the insufficiency, in average cases, of these motives, is the principal cause which renders laws and institutions necessary' (quoted in Raines and Leathers 2003: 82).

To add an incentive to teachers Mill recommended that their pay be tied to their students' performance on proficiency examinations. He also espoused the cause of public support of higher education. Private education as it existed outside of the endowed universities was not a very good form of competition

for those universities, as it offered weak programs that preyed on the lack of knowledge of parents and students. Public universities would be a good form of competition for the endowed university, because the government was wiser than parents about what made for a good education. Public universities should not have a monopoly on higher education, however, as that would easily lead to a decline in their standards. Instead there would be competition between public and private universities, as monitored by government assessment of them through proficiency examinations. Government regulation of education was necessary because, Mill observed, 'Schools on the trading principle will not be improved until parents insist on their improvement.' The ability of parents to judge the effectiveness of educational institutions would be slow to develop, he added, which meant that criteria for educational standards had to be set by 'the existence of a certain number of places of education with the prestige of public sanction' (Raines and Leathers 2003, 85–6).

Between them Mill and Bentham foretold the future of higher education in the US. Bentham argued for a high volume, low cost education in useful subjects (science) by using economies of scale. Mill looked for a higher education in subjects that led to a well-formed mind and expected government to provide funds for public universities to compete with private universities and to assess how well both public and private institutions excelled in their programs. Betham and Mill believed individual choice worked only if the individuals had attained a facility for making judgments about their education. Only the educated were capable of judging what a good education was. It was too important to be left to market forces of supply and demand.

Their joint concerns about whether self-interest and a free-market could lead to a good education mirrors the debate educators in the US were having about the nature of higher education in the second half of the nineteenth century. The debate became important at this time, because academia was expanding the scope of courses available to students as part of its growth after the Civil War. At issue was a key question related to competition: should students be allowed to choose their own courses or should colleges do that for them?

LAND-GRANT UNIVERSITIES AND PUBLIC ENDOWMENT

In the US business boosters always proclaim the virtues of the free enterprise system. While business has its virtues, the free market has often needed government programs to get it going. In the nineteenth century government supported the development of canals and railroads as economic development projects. The post-Civil War period saw national and state government taking steps to expand higher education.

In 1862 Congress passed the Morrill Act, which provided support for at least one college in each state that specialized in agricultural and mechanical training. The Act gave the states 30 000 acres of land for each senator and representative and a small amount of money for an endowment. States had previously used grants of land to support the founding of colleges. With the Morrill Act, the federal government enlarged on this funding method. The grants may sound large, as they did when they were given to railroads, but land prices were low in this period and the actual value of the grants would not impress us today. A second Morrill Act in 1890 established an annual appropriation of funds to give more support to land-grant universities.

The states took the incentives to heart. Starting with Iowa in 1862 states transformed existing agricultural colleges into land-grant universities, started new programs at existing state universities or gave the funds to private schools to provide the programs required for land-grant funds. Eight states added new universities. Cornell University (1865) in New York was the first newly created land-grant university.

Cornell University had a further element to its origins in that it also had a grant of private funds to help establish it. Its guiding light, Andrew D. White, had studied at Yale and in several European universities. He wanted to form a college that avoided the Yale pattern of a single course of study that all students had to take regardless of their tastes or abilities. In 1864 he became a member of the New York State Senate, where he met Ezra Cornell, a wealthy individual with an interest in education. Cornell wanted to use his wealth to help the working classes of New York. White convinced him that a university was the best way to do it. Cornell agreed and used his money to supplement New York's land-grant from the federal government. His philosophy of education was broad. As he put it, 'I would found an institution in which any one may study anything.' White became president and Cornell University opened with 400 students (Hawkins 1972: 13; Westmeyer 1997: 61–6).

White's operational approach to the curriculum was a change from the pre-Civil War standard. Under his approach every area of study had the same level of status, and no subject was a core course. Science would be studied for its own sake and for the rigour its methods could bring to other disciplines. The overall goal of education was to create persons who were productive members of society. To attain this program, Cornell's curriculum stressed the equality of all subjects and included the study of commerce (Westmeyer 1997: 77).

Cornell and other land-grant universities changed the concept of a practical education. Previously a practical education stressed the vocation of ministry and the moral development of men for whatever careers they chose. The land-grant universities did not give up on moral training, but they added more practical training in subjects with direct economic application. They also drew in

students from a broader population base. Cornell offered scholarship to the brightest students in New York, regardless of their income. These students would be more likely to want an education that helped advance their careers directly.

The inclusion of practical courses meant the intrusion of sophism into the program at Cornell and at other land-grant universities. It was not complete sophism in the sense of making money from student fees. Rather it was a limited sophism of offering practical courses that students wanted, but using the endowment model to fund the expansion that brought about those courses.

PROPRIETY LAW SCHOOLS: A FAILED EXPERIMENT IN SOPHISM

Today's law schools are a testament to the value of a well-educated legal profession, except perhaps for those who think lawyers are a superfluous cost of capitalism. Less recognized is the origin of some of the most prominent law schools in the sophist tradition of teaching to earn a living.

In law, starting in the colonial era, merchants engaged in its practices as part of their normal business affairs, learning how to execute contracts through routine work. Trained lawyers came from England. When colleges were started in the colonial period, individuals with a college education still entered law through an apprenticeship with a lawyer. In New York, apprenticeships for the college educated lasted for three years, however, compared to the seven-year apprenticeship for someone without a college education. Several colonies passed laws regulating the practice of law, and local bar associations were formed to certify the professional quality of their members, starting with the New York Bar Association in 1748 (Stabile 2000: 442–3).

By the start of the nineteenth century, few law schools existed. The Litchfield Law School was a well-known legal training institute that trained 805 students in law from 1784 to 1833. Its founder, Tapping Reeve, started out by taking on multiple apprentices and then discovered it was more effective to hold group classes for them, much as Isocrates had. At this time lawyers earned fees for taking on apprenticeships and Reeve expanded the principle by making his school proprietary. He did not offer a degree, but gave students a letter indicating that they had completed his program. Many of the students at Litchfield had college degrees, which meant their apprenticeship was shortened. The curriculum featured practical coursework.

As late as 1860, only 9 of the 39 states mandated any education for lawyers. Still, the market for legal training expanded, and additional proprietary law schools were founded. The New Haven Law School started on an individual apprenticeship basis and followed the pattern of Litchfield to become a proprietary school. When one of its instructors became professor of law at Yale, an

affiliation between Yale and the proprietary law school began. The school became the Yale Law School, even though it operated on a proprietary basis for another half century. In this way, Yale was able to expand into legal training without the commitment of resources. The law schools at Harvard and Columbia followed a similar pattern of starting from an affiliation with a proprietary law school (Langbein 2004a: 32–6).

The early proprietary law schools had a mixed success. Litchfield was unable to compete with the proprietary law schools affiliated with major colleges and closed. The proprietary law school at Yale almost closed twice, before getting help from Yale. The first time, in 1847, Yale hired a second professor who also taught at the law school. The second time, in 1869, it brought in Simeon Baldwin, a graduate of Yale and the law school, to be a professor. Baldwin also practiced law very successfully and gave much of his fortune to endow the law school; with his help the law school was able to build an endowment and become a permanent part of Yale (Langbein 2004b: 56–62). It is instructive to note that Yale held the law school at arm's length while it was tuition-driven, embracing it only when it had an endowment. Had the propriety law schools maintained their independence, they might have created a for-profit model of higher education to bring about the sort of changes that the land-grant universities aimed at. Instead they were incorporated into private universities which were beginning to expand.

THE COMPREHENSIVE UNIVERSITY AND PRIVATE ENDOWMENT

As important as the land-grant universities were to the development of higher education, the post-Civil War period had an equally important advance through the opening of a number of private universities complete with graduate and professional schools. These newer schools, moreover, owed their existence directly to capitalism as they came into being through the donations by wealthy men of the share of the economic surplus that capitalism bestowed on them. Such universities included the Johns Hopkins University (1876), Clark University (1889), the University of Chicago (1890) and Stanford University (1891). The donors who created the initial endowments for these universities kept their hands off the formation of them. Perhaps they agreed with Cornelius Vanderbilt who said, 'If it was to build a railroad, I would know what to do, but I know nothing about a University' (quoted in Thelin 2004: 117).

Although funded with the fruits of capitalism, these new universities took form under the influence of the system of higher education in Germany. The emphasis at German universities was on research and scholarship. This emphasis, when imported into the US, meant that the new universities would

offer graduate training aimed at teaching students how to accomplish research that created new knowledge. Yale had offered the first Ph.D. in the US in 1860. By 1876, 44 universities offered that degree.

Among them was Johns Hopkins University. Its president, Daniel Coit Gilman (1831–1908) had determined that Hopkins would offer a broad based curriculum. Many years later he detailed what Hopkins had accomplished as follows:

> Another danger, thirty years ago, was that of conflict between the advocates of classical and scientific study. For many centuries Greek and Latin were supreme in the faculty of liberal arts, enforced and strengthened by metaphysics and mathematics. During the last half century, physical and natural sciences have claimed an equal rank. The promotion has not been yielded without a struggle, but it is pleasant to remember that in this place, no conflict has arisen. Among us, one degree, that of Bachelor of Arts, is given alike to the students of the Humanities and the students of nature, and the degree of Doctor of Philosophy may be won by advanced work in the remote languages of the past or in the most recent developments of biology and physics. (Gilman 1901: 645–7)

As Gilman's comments indicate, the new university settled the quarrel between the older college education for ministers and Christian gentlemen and the newer training for men of science by offering both. The curriculum expanded as a result, and students had more choice of subjects to choose from. Once that happened, however, academia had a new question to answer: how were students to take in all of the courses a new curriculum included?

ELIOT AND ELECTIVES AT HARVARD: THE TRIUMPH OF COMPETITION

It is hard to gauge the extent, if any, to which competition from land-grant universities and the research universities put pressure on existing colleges to change as John Stuart Mill had hoped, but change they did. An especially notable and significant change in the curriculum took place at Harvard under the direction of its president, Charles William Eliot (1834–1926). To resolve the issue of how students would take all the courses in an expanded curriculum Eliot determined that they could not, that they had to have choices offered to them through an elective system. His elective system is especially of interest here because its approach reflected the economic model of competition of Adam Smith.

Eliot had attended Harvard (his father had been its treasurer) as had many members of his wealthy family and studied science. He began teaching mathematics there, but after further training in Europe found a better professorship in chemistry at The Massachusetts Institute of Technology. In 1869 he returned

to Harvard to serve as president, a position he held for 40 years (1869–1909). Even though he specialized in chemistry, Eliot was a wide-ranging thinker who had the broad background to qualify him as a college president. He had, after all, attended Harvard at a time when students took a fairly set curriculum. Of importance to this book, in his senior year he took up a special study of Francis Wayland's *The Elements of Political Economy* and his biographer, Hugh Hawkins, notes that 'his thought owed little to Plato, much to Jeremy Benthan . . .' He also owed much to Herbert Spencer and Charles Darwin (Hawkins 1972: 10, and 52). Overall, Eliot was eclectic in his ideas.

In his inaugural address as president, Eliot began championing the cause of elective courses. Academia had been filled with debate over whether college education should be literary or scientific. The new university had room for both. The aim of a university should be to 'broaden, deepen, and invigorate American teaching in all branches of learning.' The problem was in how to develop a faculty equipped to offer all branches of learning. Here, Eliot suggested, 'the revolutions accomplished in other fields of labour have a lesson for teachers.' Great gains in productive capacity had been achieved through specialized production. Education could follow this pattern by offering general knowledge for students and 'a minute and thorough knowledge of the one subject which each may select as his principle occupation in life' (Eliot 1969: 1–3).

The old approach of a uniform curriculum for all students offered no choice to students in subjects or teachers. This idea remained popular in the US. Eliot continued, 'As a people, we do not apply to mental activities the principle of division of labour: and we have but a halting faith in special training.' The uniform curriculum ignored the possibility that humans had varying intellectual abilities. Studies in secondary school should be on general subjects, but 'the young man of nineteen or twenty ought to know what he likes best and what he is most fit for.' This idea had brought about a gradual increase in elective study at Harvard in the years preceding Eliot's selection as president. As he spoke, under the Harvard system only the freshman student experienced a fixed course of study for all students; for the next three years about half the courses were elective. To Eliot, this approach still had limitations (Eliot 1969: 9–10).

The elective system would also have benefits for faculty. University teaching suffered because few men of talent were drawn to teaching due to low pay and poor working conditions. The problem, according to Eliot, was that

> The law of supply and demand, or the commercial principle that the quality as well as the prices of goods is best regulated by the natural contest between producers and consumers, never has worked well in the province of higher education . . . . It is well nigh certain that the so-called law can never work well in such a field. The reason is that the demand for instructors . . . is an ignorant demand, and the supply of highly

> educated teachers is so limited that the consumer has not sufficient opportunities of informing himself concerning the real qualities of the article he seeks . . . . When it comes to hiring learning and inspiration and personal weight, the law of supply and demand breaks down altogether. A university cannot be managed like a railroad or a cotton-mill. (Eliot 1969: 20–1)

We can see here that Eliot discovered the problem John Stuart Mill also highlighted, that is, consumers of education were not qualified to judge the quality of education, and so colleges could not operate on market principles. He believed, however, that some form of competition could help inspire better performance from teachers. Students were informed enough to pick the courses that would be most beneficial to them and, we will see shortly, Eliot believed that letting them do so would foster competition among professors as efficacious as basing their pay on student fees. Although Eliot did not cite him by name, Adam Smith, with his analysis of the division of labour, did have lessons for universities that could be used to improve education.

The elective system Eliot would champion provided a major in a single subject and a free choice in general education (with only English and a foreign language required). Eliot recognized that this educational program would increase the size of the institution. When students took all the same courses for four years, the curriculum would consist of just a few courses, with just a few professors to teach them. An elective system required a larger number of students to ensure that every course had enough students to justify its being taught. This expansion of offerings could also lead to greater specialization in teaching by faculty, which would improve their working conditions. Eliot noted, 'It is a very strong point of the elective system that by reducing the size of classes or divisions and increasing the variety of subjects, it makes the professors' labours more agreeable.' Also agreeable to faculty would be Eliot's insistence that their pay needed to be increased (Eliot 1969: 21).

To combat the presumed indolence of faculty Harvard would call forth greater responsibility by faculty under its system of specialization. Not as sceptical as Adam Smith about the moral character of professors, Eliot observed that 'the principle of divided and subordinated responsibilities, which rules in government, in manufactories, and in all great companies . . . must be applied to the University.' The president could not take care of every detail of running the college and had to rely on faculty to take on a share of work. One of the largest tasks of the president was to see that the college or university 'accommodate itself promptly to significant changes in the character of the people for whom it exists' (Eliot 1969: 26–7). The elective system would position Harvard to be more responsive to the academic marketplace.

Although it took time Eliot carried through on all elements of his inaugural address, as Harvard ended required courses for seniors in 1872, juniors in 1879, sophomores in 1884, and freshman in 1885 (Rudolph 1962: 194). By

1899, all of the elements of his elective system were in place (Hawkins, 1972: 272). He also encouraged leading scholars, such as Henry Adams and Henry Cabot Lodge, to offer competing sections of the same subject from a different perspective to give students greater choice. He substantially increased the size of Harvard's endowment through aggressive fund-raising, increased faculty salaries to very high levels for the period and set up a tenure system (Lipset and Riesman 1975: 95–102).

Eliot would later expand on his arguments for an elective system as Harvard gained experience with it. He now had some data on the effect it had on teaching and the size of the university. Consequently he used them to compare the fixed system with the elective one. A college with a fully prescribed curriculum, he argued, could teach everything in 16 hours a week for each year-class of students for 64 total hours of teaching per week in any semester. At most this would require a faculty of 20 and many colleges made do with less. At Harvard College 80 faculty members offered 425 hours of courses a week with no repeats. It would take a student 40 years to complete all these courses, so students must be allowed to choose.

A student, he went on, was better at making this choice among courses than a faculty member would be who did not know him well. In addition students could gain advice from their professors or friends, but the purpose of such advice was to enable the student to work out the problem for himself. Eliot also countered an objection to the elective system that surely there must be some knowledge every human should attain. He doubted this was possible due to the rapidly expanding frontiers of knowledge. Thus students had to follow their own inclinations as to what they wanted to study in general and what they wanted to specialize in for their careers.

To be sure, he added, the elective system was not completely free. Some courses had prerequisite courses that had to be taken first. Specialized majors had to be offered in an orderly sequence, and Eliot believed that his system had brought more order to the study of each discipline (Eliot 1885: 710–14). The driving force in bringing about this change was competition.

As W.B. Carnochan points out, Eliot was a bit of a social Darwinist who also was well versed in the ideas of Adam Smith. With this background he saw the development of knowledge as being a process of competition leading to the survival of the fittest ideas. In the same way competition through the elective system would bring out the best in teaching. Academic departments would want their students to win college honours and students would seek departments most likely to help them win those honours. 'This demand,' Eliot believed, 'taken in connection with the competition which naturally springs up between different departments, stimulates the teachers, who in turn stimulate the students' (quoted in Carnochan 1993: 14). Led by incentives to stand out, students would follow their self-interest to study subjects that they liked or in

which they excelled. To attract those students in the academic marketplace, departments and professors would, acting in their own self-interest, improve their course offerings and teaching. In this way Eliot saw competition for students (but not their fees) serving as an incentive for the production of better quality courses. A university might not be run like a railroad, but it could be run like a free-market economy.

Eliot was more of a follower of Smith than he recognized. As described in Chapter 3, Smith had argued in favour of competition in the marketplace as a way of setting social priorities, and Eliot's system electives comes very close to the market approach to course selection presented in Chapter 1. Smith, however, had further argued that well-formed minds that aimed at virtue would limit their self-interest to proper market activities, reducing the need for regulated markets. Eliot followed by believing that both faculty and students had the well-formed minds needed to keep them from taking advantage of the free market for courses he was creating.

Moreover, the free-market education was itself a learning tool. In his introduction to Herbert Spencer's *Essays on Education and Kindred Subjects* Eliot acknowledged the soundness of Spencer's idea that 'it is the true function of parents and teachers to see that children habitually experience the natural consequences of their conduct' (Eliot 1977: xi). The market system allows competitors to learn from their mistakes, and the elective system would do the same for students. Still it was not as free a market as we are used to today where everything is for sale. Eliot and his faculty would still determine the range of choices offered to students. Eliot might let students have choices, but he and other members of academia still determined what the alternatives would be.

As was the case with Jeremy Bentham, push-pin might be as good as poetry as an item of consumption, but not as an academic subject. The educated person might find physics to be as good as poetry and Eliot gave him leave to do so. He would not give him leave to study anything his inclination led him to, however. Even though he had once called himself a Benthamite utilitarian, Eliot held as his motto, 'Truth and right are above utility, in all realms of thought and action' (Hawkins 1972: 200–1). We will see later in Chapter 7 that it took some convincing before he would let Harvard students study business.

Eliot's use of the competitive model of economics to justify elective courses for students looks a lot like sophism. Against this resemblance, we might also argue that his aim was virtue. He could easily have argued that all the courses at Harvard aimed at virtue and that he left it to students and competition to determine which courses were most virtuous for them. Still this approach makes virtue a relative matter with each student picking his own path to virtue, albeit with a limited number of paths open to him. Thus we can

call Eliot's plan of electives sophism with constraints designed to channel them to virtue.

OPPOSITION TO ELECTIVES: THE REGULATED MARKET

Regardless of its constraints Eliot's move toward more freedom in educational choice found opposition. Yale's president, Noah Porter (1811–1892), for example, granted that the elective system had use in helping the mature student make career plans. 'The majority of students,' he cautioned, 'have neither the maturity nor the data which qualify them to judge of the relative value of studies or their bearing on their future employments. The few who have a definite career, or pronounced tastes, many be misled by their feelings to judge in the direction which is most injurious because for the present it is most pleasant.' Instead, all students should have an education that gave them a liberal culture so that when they did pursue their careers they could avoid 'the insatiable greed of money getting' (Porter 1871: 699–700). Here Porter's thinking reflects an interpretation of student behaviour different from Eliot's in terms of what information students had. It also harkens back to Plato and Aristotle in its concern with the nefarious aspects of moneymaking.

Princeton's president, James McCosh (1811–1894), set forth the staunchest criticism against Eliot and his elective system. McCosh had been born in Scotland and educated at Glasgow and Edinburgh. After teaching at Queen's College in Belfast and becoming a prominent scholar, he became president of Princeton in 1868. In 1885 he and Eliot met for a debate on education in New York City under the sponsorship of the Nineteenth Century Club.

McCosh quickly got to the main point of controversy he had with the elective choice, the ability of students to make informed choices. He noted, 'Those who are in the secrets of colleges know how skilful students are in choosing their subjects. They can choose the branches which will cost them least study, and put themselves under popular professors who give them the highest grades with the least labor.' Freedom to choose had to have limits placed on it. First, because students might choose an area of study but not take any of the difficult courses in it, those courses had to be required. Second secondary schools did not provide adequate preparation in general knowledge, so institutions of higher education had to supply what earlier schooling had left out. Third the elective system watered down the curriculum with 'dilettanti courses.' Students had to be required to take some rigorous courses as part of their education.

McCosh was not against elective courses and Princeton had its share of them. By this time he had introduced a set of requirements based on a distrib-

ution system where students fulfilled general requirements by choosing among a menu of courses. He just thought that Harvard had gone too far in its elective system. To him students should have a core of required courses 'to make them educated gentlemen.' They could then elect to take higher level or specialized general courses that interested them and to elect to specialize in a major. In the major there would be required courses and electives. Above all there should be a unity in the total course of study. The free-market model could not be applied to education because students did not know enough to fashion the unity their education needed (McCosh 1885: 715–26), much as John Stuart Mill had argued.

To test the effectiveness of the elective system Harvard conducted studies of how it worked in practice. One such study in 1900 found that of 33 subjects available to the class of 1901, the top five choices based on student enrolments were English, History, Economics, German and French. Given the difficulty of classifying which courses were easy, the study found little evidence that the elective system let weak students get by with not much work. Students did specialize to a great degree and avoided certain courses. For example, about two-thirds of the class had avoided Physics, Mathematics or Greek. Still, only 8 percent took no science and about one-fourth took neither Greek nor Latin (Harvard Study 1900: 738–40). Eliot presented testimony from six long-term professors of Harvard that the elective system had increased 'the minimum attainment' of Harvard students (Eliot 1908: 145). Other studies undertaken at Harvard at this time found less good in the elective system, however (Lipset and Riesman 1975: 129–30).

This negative finding was in keeping with the controversial nature of the elective system among the faculty at Harvard. Eliot continued to face opposition to the system of electives throughout his presidency, and his successor, Abbott Lowell Lawrence, began modifying the system soon after taking office. No other college adopted an elective system as free as Harvard's (Hawkins 1972: 280–3). Still, the rigid system of requirements of the early-nineteenth century was obsolete by the beginning of the twentieth century.

ELECTIVES AND COMPETITION

The debate between Eliot and McCosh was really over the degree to which students could choose electives. Regardless, Eliot carried the day in the sense that colleges began offering students more choice in the courses they had to take. The debate also mirrors a debate over the nature of the competitive system. Most economists today follow the ideas of Jeremy Bentham that individuals need only consult their own pleasures and pains to determine what they want to consume. Opponents argue that the free market panders to the

lowest tastes of consumers, who just do not know what is good for them. Consumers need to be better informed about the value of what they are choosing. If they still choose badly after they are informed, then perhaps their actions need to be regulated. Regulation with benefits for individuals and for society can justify limiting what the market offers, as Bentham knew. Thus, for example, the law requires that all persons purchasing an automobile must purchase a seatbelt and wear it because it will protect them from bodily harm and reduce medical costs for society.

In education McCosh fell into the camp of opponents of the free-market approach, which means he had less confidence than Eliot that faculty and students had Smith's well-formed minds. Without some regulations in place, colleges and professors might pander to students who wanted easy grades in non-demanding courses. Lazy students would especially seek what was easiest unless colleges required them to take rigorous courses. In turn Eliot was for a freer marketplace, but not the extreme one of anything goes. Students should have choice, but some choices would be ruled out. His Harvard did not offer coursework in everything possible. Moreover colleges could guide students to studies that were more rigorous. As for lazy students, he would have wondered how they would fare any better under a compulsory system. Compulsion did not stimulate interest and might stifle it. At least under the elective system, the weaker student might stumble into something he liked or was good at and find his intellectual interest aroused.

CONCLUSION

In the course of three decades, after the Civil War, academia in the US began to be transformed. Supported by patronage from the federal government, state governments and wealthy benefactors, the new university with its graduate and professional schools was the most apparent change. To incorporate these changes the new universities had to change the curriculum they offered. The change in curriculum was significant. In a brief time a model of electives, majors and some general requirements replaced the model of a unified, basic education suitable for all students. The question was what would be a unifying element of this new education?

The variety of these courses diminished academia's mission of virtue. In the new university, science vied with the humanities for the attention of students, but neither of them had the claim to virtue, as did Christianity. To be sure science was solving a great many human problems such as in the area of health, and it contributed to the mass production society. And the humanities added to the beauty of life. But would the hard-headed scientist in the laboratory or the elegant poet in his studio replace the Christian gentleman as the

epitome of virtue in the mission of education? Alternatively, would the utility of education come to lie in the eyes of its students, who might, as sophism claimed they would, begin calculating whether the costs of getting a degree were worth the economic advantages the degree conferred on them? These are issues academia still faces.

6. Corporate capitalism and the university as a business

The twentieth century was the century of business in the US. There may have been periods when business was on the defensive, such as the 1930s and the 1970s, but for most of the century business could take credit for a transformation in the US economy and society that is still dizzying. In 1900 few persons had automobiles, and no one had flown in an aeroplane, watched a television show or surfed the Internet using a computer. These and other activities too numerous to mention now comprise ordinary human events. The corporate system of large firms that we both love and hate brought all of them to us.

In academia large universities also became the norm. To paint the big picture of those changes, between 1900 and 1930 the number of colleges and universities expanded from 977 to 1907, with the number of students increasing from 238 000 to 1.1 million; the average number of students per institution more than doubled from 244 to 577. The number of degrees conferred rose from 16 314 in 1900 to 128 243 in 1930. Universities grew larger and their course and program offerings became more varied. Medical and law schools at universities increased in number, and other graduate and professional schools became more common. Professional programs gradually infiltrated into the undergraduate curriculum as well, with undergraduates majoring in disciplines such as engineering, journalism, business, nursing and education.

Because the changes in academia associated with the large university correlated with the growth of the large corporation, academics began to question whether higher education was becoming a business. This chapter will explore both sides of this question, examining the extent to which sophism, synonymous with business, had infiltrated academia in the early years of the twentieth century. The starting point in that exploration will be in the change that took place in economics by the end of the nineteenth century. Through the refinement of the economic ideas of utility and production, marginalist economics developed a richer understanding of the way markets worked by using the concept of value added, bringing about a refined version of sophism that justified education based on its practicality to society. We will see examples of academic leaders who resisted efforts to make academia more productive and will end with Thorstein Veblen's analysis of the social incidence of sophism.

MARSHALL, MARGINALISM AND MARKETS: THE NEW SOPHISM

Towards the end of the nineteenth century economics underwent a transformation that gave it a methodology based on mathematics and Newtonian physics. The gist of the new methods was that all human decisions were based on rational calculations not simply of utility as Bentham had argued, but of increments of utility added by additional units of consumption or increments of output added by additional units of input. Economists adopted the term marginal as a synonym for incremental and began calling the approach marginalism. The founders of this new approach laid the groundwork for an economic theory of competition with an emphasis on value added and cost/benefit analysis.

The synthesizer of marginalism was the English economist, Alfred Marshall (1842–1924). Marshall had studied mathematics at Cambridge University, but his interest in the problems of poverty induced him to study economics; he hoped to add mathematical rigor to its study. In his classic textbook *Principles of Economics* (Marshall 1895), which went through eight editions between 1890 and 1920 and was widely used in the US, he argued that at any point in time a consumer would derive diminishing marginal utility from additional units of consumption of a particular product. That meant that he or she would switch to other products in order to maximize total utility. Accordingly consumer choice became a central idea in economics.

With Marshall's marginal approach consumers compared the utility of each additional unit of a product they bought to its price. As long as the marginal utility was greater than the price for the product – that is, as long as the benefit was greater than the cost – the consumer should keep purchasing more units of the product as long as they did not exceed their budget. With a wide array of products to choose from a consumer reached a point of balance when the ratio of marginal utility to price was equal for all commodities that could be purchased with a given budget. Only the individual could judge what provided the most utility, so it was acceptable to spend large sums on luxuries as long as they provided a large amount of marginal utility.

This approach has a number of implications for higher education. First it stresses the importance of consumer choice; consumers should pick the array of consumption items that give them the maximum utility and it was up to businesses to try to produce products that met the consumer's utility expectations. The same logic applies to institutions of higher learning. Second it centres on cost/benefit analysis as the correct way to make decisions. Consumers, businesses and academia should make decisions based on marginal benefit versus marginal cost not of specific actions but for alternative actions. For a college this means that a program, the benefits of which exceed

its costs should be introduced even if it means sacrificing a program where benefits do not exceed its costs. Since the benefit of a program was in the eye of the beholder, programs that attracted more students must have a high benefit. The challenge was to find ways to measure the value added of a program, its marginal product.

Marshall recognized that measuring a theoretical economic concept such as marginal utility was impractical, which was one reason why he avoided the problem of interpersonal utility comparisons. Consequently throughout his book, Marshall defined wealth as all the things that satisfy human wants. In this way he avoided the idea that wealth was the accumulation of money as Plato and Aristotle had maintained. Moreover his notion of wealth as want satisfaction avoided Aristotle's idea that there were unnatural needs. Items of consumption satisfied human wants, as defined by those humans having the wants, with no distinction between necessities and luxuries.

Yet at one point when discussing the standard of living of low-wage workers Marshall needed to distinguish between necessities and luxuries much as Aristotle had. To do so he used a value-added approach arguing that necessities could be defined as the items of consumption that improved a worker's efficiency. In this sense items that met basic human needs were defined as those goods and services that led to the enhancement of production, that is, they added to the production of the total wealth of a nation (Marshall 1895: 8, 124, and 138). It was the practical effect of consumption on human productivity not its leading to virtue that mattered.

By using this definition of necessities Marshall clearly put himself in opposition to Aristotle, who defined natural needs in terms of the necessities that allowed a person to live a life of virtue, and work for pay was not part of his characterization of a life of virtue. Although he found the Greek philosophers to have been very modern in some of their thinking, Marshall chided them because while they tolerated farming, 'they looked upon all other industries as involving degradation.' Their impatience with 'the anxious cares and plodding work of business' became a hallmark of the academic mind ever since, and led academia to neglect the study of economics especially as it related to the organization of business (Marshall 1895: 18–19). Marshall had apparently overlooked the sophists, as well as Adam Smith's accounts of them, in his description of Greek economics.

If he had been aware of the sophists, he would have found them to be kindred spirits. He surely would have appreciated their use of cost/benefit analysis as a way of showing how their practical education added value to the lives of their students and thus to society. In the same spirit Marshall was concerned to give economics a dose of reality through study of what took place in business, and one of his accomplishments was the development of a theory of the representative business firm. His aim was to understand the

complex behaviour that was involved in making money. He held this aim not because he wanted to make money or to teach others to make money, but because making money, that is, business, was becoming an important social function and needed to be understood as such.

This concern spilled over into his writings on education. His primary interest was with the provision of technical education to the children of the working classes and 'the old grammar-school education' given to the children of the middle classes. That grammar-school education was called liberal as being the best available, but it failed in its efforts to get students interested in 'the great thoughts of antiquity.' He believed that the older form of education needed to be supplemented by science and art, which developed the students' ability to think and started them on the path to better thinking after school. Marshal then added a new definition of liberal education consistent with his economic writing: 'A truly liberal education adapts the mind to use its best faculties in business and to use business as a means of increasing culture.' He did not mean that a liberal education would train students for the specifics of operating a business or concern itself with the workings of a particular trade. Rather, he advised, 'That task is left for technical education' (Marshall 1895: 200). By defining liberal education in this way Marshall was indicating that academic study of business as a social function was valuable per se. His call for practical results from education in terms of benefits to society meant that he implicitly sided with sophism.

We can see this alignment with sophism in Marshall's support for public funding of education as a way to improve the ability of the children of the poor and working classes to gain more opportunities for economic advancement. He based his fight on the idea that denying them an education had an economic cost in terms of the lost efficiency it caused. Even the development of 'the artistic facilities of the people' was 'becoming a chief factor of industrial efficiency.' More important, public education would raise the possibility of allowing any brilliant minds among the poor to rise to their full development. Here, too, Marshall had a practical outcome in mind writing, 'The economic value of one industrial genius is sufficient to cover the expenses of the education of a whole town.' He did not limit himself to industrial efficiency, however, writing, 'All that is spent during many years in opening the means of higher education to the masses would be well paid for if it called out one more Newton or Darwin, Shakespeare or Beethoven' (Marshall 1895: 299). The mission of higher education was to add value to society in practical ways, that is, sophism and not virtue. Public investments in education had a potentially high pay off.

Although he pioneered in the creation of a theory of economics that brought out the advantages of a free-market approach, Marshall here was asking the government to support higher education, putting him forward as an advocate

of the endowment model of academia. His argument made it clear that education was not valuable in itself (virtue), it was valuable because it created economic gains for society through its enhancement of industrial efficiency, science and art. As long as the value education added to society surpassed the costs of producing it, it was worth supporting by the government.

The marginal approach was more in tune with the array of choices offered to consumers and workers in a mass production society than was the thinking of Adam Smith. Smith had stressed the way competition brought about a greater supply of the subsistence items any society needed, while the marginalists, with their stress on utility, focused on demand as well as supply. The outcome of supply and demand was independent of any intrinsic value of what was being produced. There was no basic subsistence that every person needed, only individual wants to be satisfied through market transactions. The standard of a necessity was not that it enabled a person to live a life of virtue as Aristotle had argued, but that it improved the consumer's efficiency as an economic agent as the sophists had insisted. Moreover marginalism implied that the price that the product or service garnered in the marketplace determined its value-added to society, which carried the further implication that a high price indicated a high value-added, much as Isocrates had said about his teaching.

To be sure this is a very hollow idea to academics even if it does explain why professional athletes make more money than college professors do. The idea that value should be based on marketplace outcomes remains a powerful one, for it focuses attention on demand as well as supply. The mass production society vitiated the idea that a business could supply a product without thinking about demand. In its place there arose the concept of marketing and its lesson that businesses had to learn what consumers wanted and then supply it. Academia did not follow mindlessly down this path toward tapping consumer demand, but the mass production society with its idea of consumer choice weakened the premise that students would take whatever courses were offered to them. Still academia did not have to offer students whatever they wanted. The key question in determining how far it would go toward sophism is the extent to which academia would function as a business.

ELIOT: ACADEMIA IS NOT A BUSINESS

The rise of a business society in the early years of the twentieth century could not help but have an impact on academia. As noted above, the number of institutions of higher learning increased significantly during this period, as did the number of students who enrolled and graduated. The programs they enrolled

in also changed drastically. We could interpret this simply as evidence of a business-like response whereby colleges and universities supplied what the market was demanding. Academia is never that simple, however. College trustees and presidents had no ability to act as boldly, decisively or unilaterally as a business would.

Before colleges and universities could act like businesses, they had to be transformed into businesses. This transformation of colleges and universities into businesses was never completed to such an extent that they responded to market demands the way a business would. All institutions of society, from cultural ideas to social organizations, lagged behind the driving force of the changing technology of mass production, including the technology of business management. No matter how progressive any organization or ideology might appear, it contains elements of the tradition from which it emerged. Even if business methods had an influence on academia its traditional values kept it from adopting those methods wholesale.

We can see one example of how a leading educator believed academia should be managed through consideration of the approaches of Harvard under the presidency of Charles W. Eliot, as presented in his book, *University Administration* (Eliot 1908). Eliot, as shown in Chapter 5, was an educational innovator who believed that an elective system in the curriculum could use competition to bring about better teaching. He was well-known and influential in academic circles. One of his contemporaries, James Ford Rhodes, a noted historian, said of him in 1902, 'For 12 years past no public addresses, save those of the Presidents of the US themselves, have been so widely read throughout the country as have those of President Eliot' (quoted in Keller 1982: 128).

In his book Eliot covered the full range of academic administration, starting with trustees. His view of the type of person needed for boards of trustees reflected the changing economic climate. He wrote that the trustee should be 'the highly educated, public spirited, business or professional man, who takes a strong interest in educational and social problems, and believes in the higher education as the source of enlightenment and progress for all stages of education, and for all the industrial and social interests of the community' (Eliot 1908: 2). Board members should have a business or professional background yet remain sympathetic to the mission of academia as set forth by Eliot. By taking academia's mission as having a progressive social influence Eliot clearly had virtue in mind as the fundamental value of academia.

To fund that mission of virtue university trustees had a special function of increasing university resources. In endowed universities they had to set tuition judiciously to avoid reducing the number of able students who could attend. Eliot thought that they needed special judgment because they could charge high tuition, as long as they offered scholarships to capable students from

poorer families; this would enable high-tuition colleges to compete with low-tuition colleges for poor but capable students. Just as important, trustees had to manage the growth of the university's endowment. This they could do by demonstrating to donors how effectively they had used previous donations. Trustees also had to see to it that students at the university had safe and affordable housing and food and that prices they paid for supplies were reasonable by setting up 'a cooperative society' for supplying student needs. Eliot made it clear that trustees could not allow the prices of what students needed 'to be determined by competition between private persons' (Eliot 1908: 16–7, and 20–1).

Through scholarships, enhanced endowment and reasonable living expenses, trustees could provide students with an education that stressed virtue at a reasonable, if not a just, price. Oxford University in medieval times had the legal ability to set prices for student lodging and food. Eliot hoped to win over the persons doing business that catered to students around the university to offer fair prices to students by giving them access to the facilities and programs of the university.

This avoidance of competition out of concern that students pay fair prices was not a business-like approach. Eliot made this quite clear, writing,

> A university should not be carried on, like a business corporation, with any policy of laying up undivided profits, or of setting aside unused income for emergencies or future needs. On the contrary, it should endeavour to expend all its available income. While it should never live beyond its means, it has no call to accumulate for the benefit of future generations. (Eliot 1908: 29)

Eliot's view of the economics of a university stayed within the realm of virtue and delineated clearly the different missions of academia and business. The main aim of a business is to make profits to reinvest to make even bigger profits in an ongoing quest for the accumulation of wealth. This process of accumulation and reinvestment is what separates business from academia, unnatural acquisition in Aristotle's sense from natural acquisition with a goal of virtue. Because academic institutions do not accumulate profits for future investment to bring even bigger profits, they are not businesses. While we cannot be sure of this, Aristotle might have categorized them as practicing natural acquisition with a goal of virtue.

Eliot gave other examples of how a university differed from a business. He insisted that the relation between trustees and university faculty and staff was 'an entirely different relation from that in which a business board of directors stands towards its employees.' Faculty and staff were educational experts and their expertise far exceeded that of trustees. Trustees with a background in business would be expert in business, but that did not qualify them as experts in education. Trustees also had to set aside their business-like

attitude that money would buy whatever the university needed in the way of human resources, because money 'was not the appropriate reward' for the qualities that made a person a top-rate professor. Finally Eliot believed that the then new business methods of advertising had no place in the university, and especially not in the recruitment of potential students (Eliot 1908: 37, 39, and 78).

In a later chapter Eliot elaborated on why money could not buy good professors. He observed, 'In the United States the profession of teaching and scientific research offers absolutely no money prizes, and the average annual income of the university teacher is sure to be moderate.' In Germany professors were paid higher salaries for being effective in teaching subjects that had a high student interest, but such a system was incompatible with the democratic ideals of the US. In the US the person who chooses an academic career should not expect to attain wealth. 'What he may reasonably expect,' Eliot wrote, 'is a secure income, a life-tenure, long vacations, the gratification of his intellectual tastes, good fellowship in study, teaching and research, plenty of books, and a dignified though simple mode of life.' Even in attracting quality faculty from other institutions, the draw would not be more money but a better lifestyle (Eliot 1908: 98–9).

To Eliot, then, faculty salaries should not be a matter of paying a competitive wage. Moneymaking was not a part of academia and faculty salaries should be determined on a basis of need as defined by a faculty member's modest lifestyle and the requirements of his family if he had one. Early in life Eliot had written, 'I have no desire to be rich, and if I were obliged to turn to money making as a profession, I should feel that I had exchanged a direct usefulness for an indirect one' and he held to this view after his father had lost the family's fortune through unwise investments (Hawkins 1972: 33). This view is consistent with Aristotle's idea of natural acquisition and argues against sophism. Professors would have their basic human needs met, including their need to be an intellectually good person, in exchange for helping students become better persons fit for greater personal and social responsibility, that is, giving them the capacity for a life of virtue. Money merely made the transaction easy to complete. This is not close to a business-like approach, and Eliot was undoubtedly proud to adhere to it. It also showed that he chose virtue over sophism and he expected professors to make the same choice.

Still Eliot may have been looking backward. At the time he wrote some members of academia tried to take business methods and apply them to colleges and universities. They did so, however, in the context of the traditions of academia that had existed for almost a millennium in Europe and for over two centuries in the US. Their efforts to change college and universities fell short of the business ideal.

MORRIS L. COOKE: THE SCIENTIFIC MEASURE OF SOPHISM

In an insightful study of how corporate capitalism influenced higher education Clyde W. Barrow makes a cogent case for the idea that the transformation of industry produced a similar pattern in academia. He writes, 'The transformation of the traditional American college into the modern university followed the same patterns of institutional change [as in corporate capitalism], concentration of the means of mental production, centralization and bureaucratization of administrative control, the construction of national academic markets, and the rationalization of market relations between competing institutions' (Barrow 1990: 31).

To support his argument for this case Barrow shows that during the early years of the twentieth century the boards of trustees on colleges and universities went from having members whose majority were clergymen to a majority composed of businessmen, bankers and lawyers, much as Eliot wanted at Harvard, one must add. He describes the work of educational foundations, such as the Carnegie Foundation for the Advancement of Teaching and the General Education Board, which contributed money and ideas that aided the trend toward business-like colleges and universities. These foundations also came under business control. They channelled their funds into a few, large universities, adding to the concentration of the academic market, and produced books on effective business management of colleges and universities. The backgrounds of college and university presidents also changed from being primarily ministers to being college professors who had worked their way up the career ladder of academic administration, serving as deans, provosts and so on, for the experience it gave them (Barrow 1990: 34–93).

Despite these efforts to create a business-like approach to college management, academia still had room to manoeuvre. We can see this manoeuvrability in business methods in the case for a business-like administration for higher education made in an article by John J. Stevenson, a geology professor at New York University, published in *Popular Science Monthly* in 1902. According to him there was widespread pessimism over whether higher education could meet the challenges it was facing due to the rapid changes in the economy. Businesses had faced these same challenges and overcome them. Consequently, he argued, the solution for the problems in academia was, 'Let the business common sense, which has made the United States preeminent in commerce, be applied to university matters and it will give us equal preeminence in education.' The growth in universities had created a greater need for knowledge about finance by trustees and top administrators. With so much time taken up by financial matters, they lost sight of the purpose of the university, teaching and research. Just as businesses were giving more managerial

responsibility to mid-level managers and engineers, university boards needed to give faculty greater control over the day-to-day operations of the university (Stevenson 1902: 761–71).

Stevenson aimed at making universities more efficient by using participatory management techniques. With their business backgrounds, board members would be expected to be more impressed by efforts to enhance the efficiency of colleges and universities that gave measurable results. Although there are numerous examples of those efforts, I will focus on the work of Morris L. Cooke.

Cooke was a prominent engineer/reformer with a long and illustrious career in private and public service (Stabile 1984: 53, 96, 107, 112–13, and 224). In 1910 Cooke published a study for the Carnegie Foundation for the Advancement of Teaching, *Academic and Industrial Efficiency*, to show how scientific management could do for academia what the efficiency expert, Frederick W. Taylor, was promising to do for business. The cost of a college education was rising very rapidly in the US, and to reign in those costs colleges and universities had to become more efficient. That was the premise behind Cooke's study (Cooke 1910: v).

To complete the study Cooke focused on the physics departments of eight top-notch colleges and universities. In addition to studying the physics departments he looked at the overall organization of each institution. He immediately recognized that their organizations differed markedly, with there being no standard methods applied to collegiate organization. Instead these institutions ranged from administrations based on a military system of top-down administration to committee run systems with every decision being made on a participatory basis.

The business world was moving to a management style that was based on a functional approach, and academia should follow suit. Cooke held out an alluring possibility,

> The first university that will try conscientiously to obtain all the help which it is possible to obtain from the commercial and industrial world in a broad effort to increase its effectiveness will make a very strong plea to men of means who have money which they are willing to devote to educational purposes. (Cooke 1910: 8)

Not only could academia save money by following Cooke's advice, those methods would attract funds to increase its endowments.

The key to using the functional approach was to move away from the extremes of the military model and the committee model. The military model was autocratic and the autocrat could no longer attain the expertise needed to make decisions. The committee model built solidarity and harmony among the faculty, Cooke conceded, but it was inefficient. He cited a case at Princeton where a committee of the entire faculty (120 members) made all decisions. In

one case the committee had debated the same issue annually for 25 years without resolving it definitively. The matter was so simple that in business 'a good executive in a few moments' would have resolved it (Cooke 1910: 12).

Cooke had in mind that academia adopt the functional expert approach of scientific management. Within each department of the university or college one person would be put in charge of deciding the issues on which he was the functional expert. Committee decisions hid a problem in academia in that department committees retained solidarity internally, but desired too much autonomy compared with external requirements of the university as a whole. The use of the functional expert would achieve this broader perspective, and Cooke found support for his approach by quoting Charles Eliot of Harvard as saying, 'To instil respect for expert judgment is one of the most urgent duties of the American university' (Cooke 1910: 12–14).

It is doubtful that Cooke's specific recommendations would have instilled that respect. First he indicated that academia had no gauge for efficiency, as did business with its measure of profitability. He suggested student credit hours as the best measure of efficiency in academia, although he indicated that it would have to be weighted to reflect the type of teaching being done. With this measure one could determine the cost per student credit hour for each teaching department, allocating both direct and indirect costs (including an implicit rental charge for building facilities). These costs could then be weighed against the tuition revenue allocated to the department based on its share of the total student credit hours taught. One could then compare departments based on the ratio of revenue to costs and have a gauge of the efficiency of each as Cooke did for several departments at Yale (Cooke 1910: 20, 55, and 58). Here we have business methods applied as directly as possible to academia in the format of the cost/benefit methods of value added versus costs incurred with both being measured in dollar terms. Cooke's method anticipated a recent approach in higher education, responsibility-centred management (RCM), a system whereby academic departments were given resources based on their student credit hours (Geiger 2004: 242–3).

Cooke was well aware that such a measure would have him accused of 'Philistinism' by faculty members, and we might add sophism to the list of charges. He thus conceded that his measure did not touch on the usefulness of the work done in a particular department. Nor was he seeking to put a commercial value on that usefulness. He wrote,

> In the last analysis, the 'usefulness' of the university is the measure of its mental, moral, and spiritual product – and product interpreted as broadly as you please. But it is only logical to analyze carefully all the different activities which are supposed to work individually and collectively toward this end, if we are to judge intelligently of how adequately the mission is being instilled in comparison with the time, effort and money expended thereon. (Cooke 1910: 56)

An academic institution took on many functions that did not pay in a commercial sense of having revenues greater than costs. Departments that filled those functions might have very high costs per student credit hour compared to low revenues and the college may make some subjects available 'to protect some branches of learning in the face of extreme indifference on the part of the student body.' Still every member of the institution would take a greater interest in the management of those departments because they would be more aware of the extent to which they were subsidizing them (Cooke 1910: 56).

In addition to better measures of efficiency Cooke gave some specific suggestions for improving the productivity of professors including the elimination of tenure and the reduction of committee work. One suggestion of special note was his call for the development of standardized lectures that all members of a department would use. There were many courses where the material was routine, and once a set of lecture notes was created, all faculty teaching the courses could use them. To be sure one might argue that the quality of lectures depended on 'the inspiration of the moment.' In contrast, many capable teachers, Cooke indicated, had assured him a well-planned set of lecture notes would always be more effective than inspiration (Cooke 1910: 26).

It would be hard to determine how influential Cooke's study was. The allure of scientific management in general was more promise than application, at least in its early years. At its heart Taylorism focused on the idea that monetary incentives would motivate workers to cooperate with the efficiency experts. Instead workers and managers resisted this approach (Stabile 1987). Eventually scientific approaches to the management of workers did develop, but they included a broader, psychological human relations perspective.

The application of scientific management in academia proved equally disappointing. In 1914, for example, Raymond M. Hughes, president of Miami University, took Cooke's ideas and used them to focus on the productivity of professors. Five years later Leonard V. Koos, a professor at the University of Minnesota, went further and devised workload standards based on the teaching methods and curricular needs of different disciplines. The methods he developed, however, proved to be too complicated to be useful (Barrow 1990: 155–60).

The problem with all these attempts was that they were trying to do one of the most difficult jobs in economics, measure the productivity of workers who produce services. Even today economists disagree on how to measure service productivity and the national measures of it are notoriously weak. Businesses have a hard time determining the productivity of service workers, and it is doubtful colleges could do better. The difficulty in measuring productivity is in determining the value added by each person. This might be easy to do in, say, a law firm, where attorneys produce billable hours or in a business supplying

direct services to customers at an hourly rate. It is less easy to measure the productivity of a bank teller or baggage handler.

Academia falls into the latter category, because colleges and universities do not sell the services of professors directly for fees. For them the issue is the quality of their professors and not the revenue they produce. The presumption is that high quality professors will produce high quality learning among students, a presumption that is neither measurable nor vendible. Moreover the number of student credit hours taught by a particular professor or department will depend primarily on the popularity of the subject being taught, something that is out of the control of the professor or department. To be sure, popular professors may attract larger numbers of students, and if they are popular for helping students learn we have some idea of their productivity. Demand for particular subjects and professors, however, is based on student preferences and cannot be known until students make their choices. Although professors and colleges may promote their courses to attract students and thus improve their productivity measure, there are limits to what they can accomplish. As Cooke pointed out academia cannot curtail low productivity programs and transfer faculty to high productivity programs the way a business might.

For recognition of the differences between a business and a college we can turn to a 1920 statement by A. Lawrence Lowell, president of Harvard. Lowell portrayed a university as a guild of scholars and rhetorically asked why it needed any outside oversight. He answered that external trustees were needed to manage the university's finances and to provide input for the public being served by the university. The board of trustees was not in the same position as an 'industrial employer.' He explained further that the task of trustees was 'not to earn dividends for stockholders, but . . . to help the society of scholars to accomplish the object for which they are brought together.' Trustees should work to make scholars more effective 'for the intellectual and moral training of youth and for investigation.'

As part of their role trustees had to refrain from treating faculty as mere employees. In business workers were paid in accordance with their worth and could be fired if they did not produce. Regarding academia, Lowell went on, 'it is impossible to determine the value of scholars in the same way as that of commercial officials.' Consequently, he concluded, the relationship between trustees and faculty was not one of 'employer and employee,' but 'one of mutual cooperation' (Lowell 1920: 836–9).

As a result of this relationship early efforts to bring a business-like efficiency into academia fell far short of what similar methods eventually did for business. At Harvard, at least, the fad of scientific management from 1910 to 1920 apparently had no impact. Lowell's comments reflected the outlook of his predecessor, Charles Eliot, who stated the problem succinctly, 'Education for efficiency must not be materialistic, prosaic, or utilitarian; it must be ideal-

istic, humane and passionate, or it will not win its goal' (quoted in Cooke 1910: 70).

Not everyone agreed with this interpretation of the effect of business on academia. In economics Thorstein Veblen wrote an analysis of higher education in the US to show that it was becoming too much like a business.

THORSTEIN VEBLEN AND INSTITUTIONAL ECONOMICS

As an earlier section of this chapter indicated, by 1900 economics came under the thrall of the marginalist approach. Not all economists became part of the marginalist school, however. In the US a school of institutional economics that investigated the control of competition being put in place in the early-twentieth century was established. One of its founders was Thorstein Veblen (1857–1929).

Veblen's reputation as an intellectual rests on his classic book, *The Theory of the Leisure Class* (Veblen 1973), an essay on upper class behaviour and social influence published in 1899. In that book, he used the term 'conspicuous consumption' to describe how members of society used public displays of expensive commodities to demonstrate their adeptness at making money. These ideas trace back to Plato and Aristotle with their dislike of moneymaking, luxury spending and the unnatural acquisition of wealth. Lowry, the reigning scholar of Aristotle's economics, calls Aristotle's 'allusion to conspicuous consumption, a Veblenian concept' (Lowry 1987: 177). Veblen's version of these concepts was part of his Institutional Economics.

Underlying Veblen's Institutional Economics was a methodology based on the interplay of human nature, social institutions and technology. Human nature gave human beings clusters of habits that he labelled instincts. He identified three of them of importance in this study, workmanship, predation, and idle curiosity. Workmanship reflected the human desire to be useful, predation emphasized greediness and idle curiosity represented the disinterested pursuit of knowledge. Veblen's instincts have parallels with Plato and Aristotle. To give just two examples from Chapter 2, Plato called sophists 'hunters,' indicating their predatory instinct, and Aristotle's idea that natural productive labour aimed at fulfilling basic human needs resembled the instinct of workmanship. Veblen's instincts, however, were highly adaptable and could adjust to differing conditions. It was the social institutions under which humans functioned that had the most influence on behaviour (Stabile 1982: 12–14).

To make use of these concepts Veblen took a broad approach to economics by studying economic behaviour in a social context. This approach reflected his intellectual training. He had studied at Carleton College and then went on

to earn a Ph.D. in philosophy at Yale in 1883, working under the tutelage of Noah Porter, a traditionalist in philosophy (Dorfman 1972: 41). As president of Yale, we should recall from Chapter 5, Porter had espoused a curriculum to enable students to avoid 'the insatiable greed of money getting' (Porter 1871: 699–700). Veblen took this lesson to heart, even when, after seven years of trying to find a teaching job in philosophy he retooled himself in economics at Cornell University (Dorfman 1972: 46–53, and 79).

When he began to study the economics of a commercial society, Veblen discovered that the most important factor in the social environment that influenced human behaviour was work. He identified two types of work, pecuniary and industrial. Pecuniary work stressed making money through dealing in finance and competitive sales, while industrial work required efficient production through use of technology. The former highlighted the predatory instinct while the latter derived from workmanship. In terms of our Aristotelian concepts industrial work focused on value in use while pecuniary work aimed at unnatural acquisition.

The capitalist economy of the US emphasized pecuniary work as business leaders became financial experts in an effort to enhance the gain they could achieve through their firms (Veblen 1901: 279–323). Their stress on finance led them to make all decisions on dollar-based values. Their rational calculations of gains and losses became a standard procedure for business and for other areas of life even in areas where it did not apply. The values of their pecuniary culture with its emphasis on unnatural acquisition became institutionalized throughout society.

VEBLEN AND ACADEMIA AS A BUSINESS

One area where pecuniary values were having an influence that Veblen found to be especially unhealthy was academia. His book on it, *The Higher Learning in America* (Veblen 1919) is often cited as an authoritative source on the ills of higher education, as Patrick Raines and Charles Leathers point out (Raines and Leathers 2003: 8–10). Often overlooked in these citations is that Veblen's analysis of higher learning came from his holding a lofty, utopian standard for how it should be organized. To him higher learning equated to scholarly research in a university.

He began the book by pointing out that all societies have had 'esoteric knowledge' that they left in the hands of a select group of thinkers. In the modern world this higher learning took the form of science, the matter-of-fact inquiry into ideas that had no practical value. This lack of practical value in scientific research set modernity off from previous civilizations according to Veblen. To him the pursuit of knowledge was based on either the instinct of

workmanship, which always looked for practical applications or the instinct of idle curiosity, whereby 'knowledge of things is sought apart from any ulterior use of the knowledge so gained' (Veblen 1919: 1–7).

Knowledge for its own sake was created and taught only in the graduate schools of the university, however, and that was the problem for Veblen. The university actually had two functions, scholarship and teaching, and there should be no doubt that Veblen placed research above teaching even as he admitted that teaching might have more social value. To him there should be a division of labour between the researcher who only taught graduate students the methods of research and the 'schoolmaster' who taught only undergraduates and students enrolled in professional schools with the aim of fitting them for practical work. Here Veblen was calling for the same division of labour that had existed between the sophists and Plato and Aristotle in ancient Greece. This division of labour had not taken place, however, in any university, so that the functioning of the undergraduate and professional schools unduly influenced higher learning in the graduate school. Veblen made it clear that the undergraduate college at the university that was replacing the small college could not 'be rated as an institution of higher learning' (Veblen 1919: 9–41).

In addition Veblen saw the trend whereby businessmen had replaced ministers on the boards of trustees of universities. This change brought about a business-like approach to the running of universities that was counter to the pursuit of higher learning as Veblen defined it. In this case the predatory attitude of business corrupted the environment needed for the functioning of idle curiosity. Both business control and undergraduate education had a detrimental impact on the idle pursuit of knowledge in the new graduate school of modernity (Veblen 1919: 9–41).

Let us take the case of businessmen as trustees first. To Veblen, 'the place in men's esteem once held by the church and state is now held by pecuniary traffic, business enterprise' (Veblen 1919: 48). With this new prestige businessmen now came to be in charge of higher education. They controlled the overall budget of the university and selected the 'captains of erudition' who acted as its presidents. In their control the trustees always looked for practical results from the university and they wanted presidents who could attain them. Furthermore they had the moral backing of the culture of capitalism, which nourished the idea that 'business success is . . . taken to be conclusive evidence of wisdom even in matters that have no relation to business affairs' (Veblen 1919: 69). Here we can see that Veblen would have shared Socrates sarcastic portrayal of Hippias' success, 'The mark of being wise, I see, is when someone makes the most money' (Plato 1982: 5). To Veblen business wisdom included the idea that higher learning had no use in business. He agreed with the truthfulness of this wisdom, but wondered why it did not extend to the

equally valid wisdom that business wisdom had no place in higher learning (Veblen 1919: 59–73). The university in pursuit of higher learning could dispense with the sophism of business ideas.

In making clear the implications for the control of academia by business leaders, Veblen harkened back to Greece, writing, 'Plato's classic scheme of folly, which would have the philosophers take over the management of affairs, has been turned on its head; the men of affairs have taken over the direction of the pursuit of knowledge' (Veblen 1919: 77–8). Veblen here is presumably referring to Plato's *Republic* and the idea that philosopher-kings would gain influence in political affairs. These are the only references to the Greeks in his writings I have ever found.

The business ideas that influenced academia demanded results especially in the undergraduate and professional schools. With its aim at achieving those results the university, in Veblen's view, was like a department store that aimed at giving customers what they wanted, and Veblen spoke of how the competitive methods of 'retail trade . . . contributed to the principles of businesslike management in the competing schools' (Veblen 1919: 106–7). Plato's retailers of food for the soul had an expanded array of product lines. This catering to students contributed to a carefree attitude of undergraduates, which meant that the university needed to impose a careful enforcement of rules, grades, credits and so on to direct them to the ultimate goal of graduation. The problem was that these same rules, grades and credits became part of the graduate school, where they had no use because graduate students were of a different calibre.

Moreover, the need to keep up enrolments of undergraduates involved all colleges and universities in competition for their business. One might think that this competition would take the form of improved quality of education. Veblen thought otherwise. He took a dim view of business competition in the marketplace as leading only to the minimal level that consumers, with their lack of knowledge, would accept. In the education marketplace, colleges and universities tried to attract students with football, fancy buildings, and well-funded extracurricular activities. The expenses of this type of competition took resources away from the pursuit of higher learning was Veblen's complaint. He held the same view regarding the quest for endowment funds, as university leaders would use those funds on decorative effects to enhance their prestige in the eyes of prospective donors.

The point for Veblen was that a pecuniary approach based on sophism as practiced by business would not work for academia. In this regard he is more a follower of John Stuart Mill than of Adam Smith. While he did not talk about the role fees played in determining the motivation of faculty, as the sophists might have, he did think that salaries for the work of research were comparable to a 'piece-wage plan' (Veblen 1919: 117). More important to him,

perhaps, he observed, 'A university is an endowed institution of culture; whether the endowment take the form of assigned income, as in the state establishments, or of funded wealth, as with most other universities' (Veblen 1919: 151). The pursuit of endowment funds gave college administrators great latitude in how they ran the university. Their ability to secure endowment funds and their control over those funds gave them the freedom to pursue their own goals. We saw in Chapter 2 that the endowment model had given Plato the freedom to explore the meaning of virtue in his Academy. On Veblen's view modern academic leaders used the endowment model in the pursuit of sophism, following strategies that added to their own prestige and hiring faculty who would be popular with wealthy donors rather than true scholars whose research led to conclusions that might offend those donors (Veblen 1919: 59, 131, 134, and 203). The type of boasting by scholars that Aristotle deplored was becoming all too common.

Veblen's solution to the infiltration of sophism in higher learning through business values was to see universities broken up by eliminating the boards that governed them along with the presidents who ran them like a business. The result would place graduate schools on an independent footing with faculty in charge. To be sure faculty might not be effective at managing the affairs of this new institution of higher learning, but they could not possibly do worse than what existed under the current system, because their size would be greatly reduced (Veblen 1919: 272–84). Veblen further hoped that 'the underlying units would return to their ancient footing of . . . personal communion between teacher and student' (Veblen 1919: 284). He meant by ancient footing the small colleges of the US of the nineteenth century, such as Carleton College, which he attended. His prototype of a small, independent graduate school was also reminiscent of Plato's Academy and Aristotle's Lyceum.

CONCLUSION

The first three decades of the twentieth century saw the consolidation of big business as a social institution in the US. Business enshrined sophism with its emphasis on competition and moneymaking as a cultural value. In economics this new view of competition was captured by Alfred Marshall's notion of marginalism as incremental value added. To add value to society academia accommodated itself to the rise of corporate capitalism by expanding the number of practical programs large universities offered to students. Did those accommodations go too far and turn academia into a business? Eliot hoped not and offered examples of how to avoid sophism. Veblen, however, thought business values and sophism were becoming much too influential in academia.

Veblen posed important questions for academia through his revival in

modern terms of Plato's and Aristotle's distrust of moneymaking. Academia needed to be concerned about how its value to society was changing and whether the change was for the good. Implied in that need was a second need to keep moneymaking in its proper place, which to Veblen meant on the outside of academia. Regardless of his forebodings, by the time Veblen published his analysis of academia the organizational structure that would serve it for the rest of the twentieth century was in place. The large university with undergraduate, graduate and professional schools was being administered functionally. The idea that academia achieved this structure by taking over methods that had proven effective in business is important and needs further study as does the idea expressed by leaders in academia, Veblen notwithstanding, that their use of these methods did not justify categorizing them as businesses.

7. Collegiate business schools in the US: sophism or virtue

As described in earlier chapters the nineteenth century was an age of science while the twentieth century was one of business. In academia in the US the age of science brought about changes in the curriculum that gradually added courses in science and eventually added programs in applied science, such as medicine and engineering. During the age of business academia also began adding programs designed for the study of business. In doing so it met a clearly expressed social need, as we will see in this chapter.

In terms of bringing about the age of business the first three decades of the twentieth century were a pivotal time. In the world of business the publicly owned corporation consolidated its position as the mainstay of the capitalist system and the basic methods needed to manage a large business firm were developed. The rest of the century might see large firms come and go, but the large firms of 1920 that persisted became even larger. The corporate model of a multi-division organization became a leading institution in the US.

In academia a similar organization for the administration of a university was also established. The research universities of 1900–1930 remained small by today's standards, with five to six thousand students. In place, however, was an organization of schools and colleges, including undergraduate, graduate and professional programs, that provided the means for expansion into the large multi-campus systems that exist today. Extension programs had been established at many major universities, and the social, athletic and extracurricular features of higher education were put in place.

This chapter will focus on one ingredient of that expansion, the collegiate business school, for the first three decades of the twentieth century saw a degree in business become a standard credential for a career in the new corporate world. Corporations needed trained talent to run their vast organizations and colleges began to supply it. From small beginnings in a few places, enrolling less than 1 percent of all students, business programs have grown so rapidly that by the end of the twentieth century they account for over one-fifth of all undergraduate students and a large portion of graduate students.

By its very nature a collegiate business program has important elements of sophism. We should recall from Chapter 2 that Plato and Aristotle criticized

the sophists for achieving worldly success by teaching how to achieve worldly success. We will find similar charges levelled against collegiate business schools as they emerged in the US. Proponents of collegiate business schools, however, never argued that their programs were aimed at moneymaking. Rather they did their best to argue for the virtue their programs could accomplish.

THE COLLEGIATE STUDY OF BUSINESS

Once higher education accepted a mission of serving the practical needs of society, as it did when it began offering programs in science, medicine and law, it would be hard for it to ignore business, a system of organizing production that was becoming a leading institution in the US. Here was another opportunity for higher education, helping businesses solve a challenge their growth was creating, taking control of the giant organizations they had become. As businesses became larger, employers would not know or see what their employees were doing. The salaried persons who ran these companies might pursue their own interests instead of those of their owners; they would also encounter difficulty in supervising the activities of a large number of wage earners. By the beginning of the twentieth century businesses in the US had to find ways to administer themselves with the visible hand of management, to use the apt words of Alfred D. Chandler, Jr., replacing the invisible hand of the marketplace (Chandler 1977). Frederick W. Taylor, who eschewed a classical education at Harvard to study engineering at the Stevens Institute, developed his principles of scientific management to show that there was a science of management that could be experimented with, studied and learned.

In 1910 the Census Bureau added a category of business to its occupational listings and that year saw 320 000 persons in the category; by 1930 the business category reached 783 000 (Stabile 1984: 21). Still not many of the business managers and accountants were college-trained in their professions as most persons working in business in 1910 had received on-the-job training through an informal apprenticeship system. The rapidly increasing size of business as an occupation put a strain on an apprenticeship system, however. There were too many employees to train, and the trainees might take what they had learned and use it to find better jobs elsewhere. Collegiate business schools would be a better system of general training and represented an expanding market for academia.

Those educators and their friends who sought to include business as a part of academia had the advantages of late developers. The pioneers in medical, legal, and engineering education had already established a standard for professional education for them to follow. The transformation in higher education

that created the university in its modern form had taken place. All advocates for the collegiate study of business needed was to use the same approach as engineering or law to develop the professional study of business. An important part of that approach, which business schools followed diligently, was its reliance on the endowment model.

UNDERGRADUATE BUSINESS SCHOOLS

As also had happened in law, proprietary schools of business preceded the study of business in academia. They, however, offered lower-level skills in areas such as bookkeeping and shorthand. An early example of such a school in the US was the Hartford Commercial Academy opened in 1840. Some colleges such as the forerunners of Auburn University and Tulane University offered similar commercial training to students in the mid- to late-nineteenth century but not a degree (Whitten 1987: 117–19). There may have been similar programs at other colleges, especially as adjuncts in an economics department. This form of business education had the market for business training to itself, until public high schools began offering business education late in the nineteenth century. The subjects taught at proprietary business schools and early colleges were too narrow and too focused on basic skills to be helpful in grooming top managers.

In 1881 Joseph Wharton (1826–1909), a wealthy Philadelphia merchant and manufacturer, gave the University of Pennsylvania $100 000 to start the Wharton School of Finance and Economy; his donation placed the Wharton School within the endowment model. Wharton was born into a prominent family in Philadelphia. Poor health prevented him from attending Harvard, and he stayed home to learn business as an apprentice in a fledgling accounting firm. He also learned the technology of metallurgy and made a fortune in three different ventures in zinc, nickel and iron. He retained an interest in cultural affairs by reading widely and writing verse. Recognizing that existing propriety business schools did not provide a broad enough education for a business leader, he aimed at combining university training with business training.

The early years of the Wharton School were not good ones. The faculty for the school was drawn from the liberal arts disciplines. They knew little about practical methods of finance and with their classical training were not in sympathy with the school's mission. The university's other faculty and students strongly opposed the new school. By 1883 the Wharton School tried a new approach of finding a faculty more suitable to its mission and giving it the task of devising 'a university curriculum which it would be worth the while of a future business man to complete.' Its name was changed to the Wharton School of Commerce and Finance. This approach helped but funds for putting

it into operation were insufficient, and all the other parts of the university remained opposed to the plan of business education (Ruml 1928: 245–52).

One of the Wharton School's earliest faculty members and deans, Edmund L. James, later reported on how the Wharton School was surviving by proving its usefulness. He also described how its approach had been followed by other universities and observed that state legislatures were earmarking funds for business programs in Wisconsin and Illinois, adding to the importance of the endowment model in bringing about business programs. This growth and success, he argued, came from two sources: universities had recognized an 'unexplored field open to them' and there was 'a growing demand for higher education in our business classes.' That demand was not reflected directly by students but came from businessmen who served as trustees of colleges and universities. Moreover business was becoming a major social institution and training its leaders was an important public service. In this way academia could have a positive influence on business in the same way it had with physicians and attorneys. If the existing colleges and universities had not taken up this task, newer institutions might have arisen and taken resources and prestige away from academia (James 1901: 144–9).

At the time James wrote in 1901 he could pinpoint two problems for collegiate business programs. First the old liberal arts curriculum was a necessary adjunct to the study of business, but it was not sufficient as preparation for a career in business. Second the curriculum of the business school was not well developed. The Wharton School had experimented with various approaches in its 20-year history, but had not reached a consensus on what courses were needed. James saw agreement on a general approach, writing:

> I believe the American University ought to take the same attitude toward the higher learning of the future merchant, railway or insurance manager, as it has long taken toward the professional education of the future lawyer, physician or engineer. . . . It should recognize as one of its proper and necessary functions to provide the best facilities it is capable of for this training. (James 1901: 156–7)

He was pleased to say that academia in the US had already begun to take this attitude seriously (see also McCrea 1913: 111–16).

He had a point. Following the Wharton School's lead, starting in 1898 additional collegiate business schools appeared. The second one was at the University of Chicago still in its infancy. It was called the College of Commerce and Politics. In the same year the University of California established a College of Commerce. By 1900 there were seven colleges and universities with business programs thanks to the addition of programs at the University of Wisconsin, the University of Vermont, New York University and Dartmouth College. All of these programs encountered opposition from the liberal arts faculty at the college where they were located.

Still their organizers believed that a person entering business should be given the same preparation for a career as was found in schools of engineering, law and medicine. That preparation included coursework in the traditional liberal arts. After all, students entering college to study business had to meet the same admission standards as other applicants and to complete the same required core courses as other enrolled students. Moreover a large portion of the business education in these programs consisted of the study of economics and law to help fledgling businessmen grapple with the social and legal issues they would encounter in their careers. These new collegiate business schools offered a bachelor's degree, except for the Amos Tuck School of Administration and Finance at Dartmouth, which offered Dartmouth students the opportunity to earn a Master of Science in Commerce by completing a fifth year (Broehl 1999: 7–8).

GRADUATE BUSINESS EDUCATION

The Tuck School was the result of the collaboration between two former Dartmouth roommates, Edward Tuck and William Jewett Tucker. Tuck had a successful career in finance with an affiliation with the railroad builder, James J. Hill. Tucker became president of Dartmouth in 1892 and embarked on an ambitious campaign to create a 'New Dartmouth.' His plan was to raise funds to finance his campaign, following the endowment model. As part of Tucker's campaign, Tuck agreed to endow Dartmouth with a graduate business program named after his father, Amos Tuck, who had been a prominent New Hampshire politician. The Tuck School would follow a pattern of three years of undergraduate courses and two years of graduate courses. To impart to these students the larger meaning of business, the Tuck School required coursework in the traditional liberal arts in an effort to give a basic education to students before offering them coursework in business, an approach that was in keeping with Tuck's personal philosophy (Broehl 1999: 35–7, 44–5, and 94–7; Person 1913: 127).

Tuck's interest in business brought about a slow and steady infusion of the teaching of business at Dartmouth. Harlow Person, the first dean of the Tuck School became a pioneer in business education. Person had an undergraduate degree in engineering and a Ph.D. in economics. He was a member of the scientific management movement inaugurated by Frederick W. Taylor and served as president of the Taylor Society in the 1920s, after hosting a major conference on scientific management at the Tuck School.

Person thought that business education should inculcate the right attitude into the minds of students. He stated the problem as follows:

> The business world is not wrong when it says the average college graduate is not adaptable to business . . . .The difficulty arises not from a lack of physical and intellectual capacity; it arises from the attitude of mind which college develops in the student. He is indifferent; he has had too little experience with responsibility, he is impatient of small things and a beginner's salary. (Person 1913: 24)

The Tuck School would add in activities to overcome this attitude.

As the Dartmouth experience attests, the introduction of business schools in academia at the turn of the twentieth century followed a pattern established by engineering and law schools. Students interested in attending them would take the same general course of study in terms of core courses, as did all students in higher education. Only after completing the courses that would make them broad-minded would these students major in the areas of business. The idea set forth by Francis Wayland that commercial training would bring in a new class of students and expose them to training in the liberal arts would be given a try, even at the pinnacle of academia in the US, Harvard.

The idea of a business program at Harvard University was first proposed to its president, Charles W. Eliot, in 1895, by a Harvard alumnus who had written an article in the *Harvard Graduates' Magazine* arguing that railroad management was a science that could be taught; he then began lobbying Eliot to have Harvard teach it (Cruikshank 1987: 7–10). Eliot did not commit to the idea of the subject of railroad science or of business being taught at Harvard. Instead he developed a standard reply to calls for the teaching of business at Harvard. Here is an example:

> I have no adequate statistics about the success of our graduates in business. From fifteen to twenty percent of every graduating class go into business, including under the term business the service of business corporations, and their success in business is truly remarkable . . . .Most of the desirable business corporation appointments in Boston are filled by our graduates . . . .It stands to reason that thorough mental training must give a man an advantage in any business which requires strong mental work. (Quoted in Cruikshank 1987: 25)

At this time Eliot believed that general training in the liberal arts was a suitable background for a career in business.

Faculty at Harvard agreed with him. To be sure, members of the economics department might tell prospective students that they offered courses that would be useful to them if they wanted a career in business. Most faculty, however, would have agreed with the words of Thomas Nixon Carver, a well-known professor of economics at Harvard, that it was not 'the function of the university to teach business' (Hawkins 1972: 220).

Through the efforts of Frank Taussig, a professor of economics, and A. Lawrence Lowell, professor of government, Eliot came to change his mind. Eliot had wanted the two professors to plan a program of training in diplo-

macy. Lowell objected to the idea because careers in diplomacy might not materialize, that is, there would be no demand for graduates of such a program, but he liked the inclusion of business in the plan (Cruikshank 1987: 30–1). Lowell went on to propose that to be done well a business program had to made into a separate professional school, such as the schools of law and medicine.

Eliot came to agree with Lowell. Perhaps his earlier use of economic theory to describe the elective system made him realize that business offered a demand for programs that Harvard could fill. Regardless of the source, Eliot changed his mind about the type of education that Harvard could offer to students wanting a career in business. He wrote,

> I believe commerce and industry in their higher range to be eminently intellectual pursuits, and I know of no other intellectual calling for which a professional school is not now provided . . . .To deny that young men may be systematically trained for industry and commerce is to assert that industry and commerce are merely imitative arts . . . .In industry and commerce all things are become new, and new methods of preparing young men for these occupations must be invented. (quoted in Daniel 1998: 46)

Still, Eliot had to explain to business leaders that Harvard's program featured practical applications as well as theory (Hawkins 1972: 222), exhibiting his Benthamite utilitarianism in ways that went beyond Bentham.

Eliot then put Taussig and Lowell in charge of developing the new school. They added Edwin F. Gay, a scholar in the history of economics with a doctorate from a German university, to be a member of a committee to establish a graduate business program. He would serve as the first dean of the Harvard Graduate School of Business Administration (Mintzberg 2004: 22). The term 'administration' was adopted as more agreeable in academic circles than management (Hawkins 1972: 221).

As an underlying philosophy for the new business school, Gay set forth high ideals. To him business meant making goods and services to sell at a profit in a manner consistent with decent behaviour. A person in business had to have courage, good judgment and 'kindness of spirit.' The new business school at Harvard should nurture these ideals. It should also foster 'intellectual respect for business as a profession, with the social implications and heightened sense of responsibility that goes with that.' Above all else, Gay believed there was a science of business that could be taught. That science was a much better curricular goal than 'teaching young men to be "money makers" ' or 'how to get the better of their competitors' (quoted in Cruikshank 1987: 44, and 54). The Harvard MBA would focus on virtue not sophism.

The Graduate School of Business Administration at Harvard University began operations in Fall 1909, helped by a grant from the General Education

Board (Hawkins 1972: 222). *Science* magazine outlined its special features as follows:

> The unique feature of the school, both in Harvard experience and in the educational world, is that the new school starts with the requirement of a college degree for admission. Upon that foundation of a liberal education it rests a severe two years' course, partly prescribed and partly elective, leading to the degree of Master in Business Administration. (Campbell 1908: 273)

Beyond media support the school soon had a professorship endowed in the name of James J. Hill, the railroad builder in the northwest. Its early years were not successful in terms of the number students who graduated (Mintzberg 2004: 22). Regardless, by 1917, it had an endowment of $450 000 producing income of $20 402 a year, important but less than tuition brought in. Thanks to a generous contribution from George F. Baker, a prominent banker in New York financial circles, the school was able to build its own campus. From then on, it became a thriving institution, prominent in business circles (Cruikshank 1987: 55–92). That prominence enabled it to build its endowment even further.

The decade of the 1920s saw other universities following the lead of Wharton, Dartmouth, and Harvard and led to the spread of business programs in higher education. Starting with just ten schools offering business programs in 1906, 147 schools offered a business program by 1922. Other schools offered business courses without establishing a program, moreover. The pattern of collegiate business education followed that of other professional schools, except that the intensity of opposition to them was greater. Members of academia retained the disdain for business as moneymaking that began in academia with Socrates, Plato, and Aristotle.

THORSTEIN VEBLEN: BUSINESS SCHOOLS AS SOPHISM

We can see this disdain in Thorstein Veblen's criticism of business schools. In them, Veblen wrote, 'Facility in competitive business is to take the place of scholarship, as the goal of university training, because, it is alleged, the former is more useful.' The individual student, however, determined that usefulness. In other professional schools practical training may have some usefulness to society as a whole. That was not the case with business education. Veblen wrote, 'The business proficiency inculcated by the schools of commerce [is] directed singly to a facile command of the ways and means of private gain' (Veblen 1919: 204–6). In short, business programs were training in predatory behaviour and did not even inculcate workmanship much less idle curiosity as part of their curriculum. To Veblen business programs represented sophism at its worst.

Here I must make it clear that Veblen did not subscribe to Adam Smith's account of how the pursuit of private gain led to an increase in the wealth of the nation. Veblen believed that business was nothing but predatory, a zero-sum game wherein shrewd businessmen waited for the right moment to secure a larger share of the community's wealth through practices that might redistribute that wealth, but would not increase it. Business competition as a predatory activity amounted to plunder and not production. What the US needed was fewer businessmen not better-trained ones. He wrote:

> A college of commerce is designed to serve an emulative purpose only – individual gain regardless of, or at the cost of, the community at large – and it is, therefore, peculiarly incompatible with the collective cultural purpose of the university. It belongs in the corporation of learning no more than a department of athletics. Both alike give training that is of no use to the community. (Veblen 1919: 209–10)

Moreover the funding of business schools was a drain on the resources available for the idle pursuit of higher learning. Veblen feared that the only way business schools could be staffed was by hiring experienced businessmen at high rates of pay, which meant that the schools would operate at a loss. He also worried that business schools would neglect scientific inquiry and theoretical training in pursuit of education in practical affairs (Veblen 1919: 210–14). They would achieve worldly success by teaching about worldly success.

To be sure students major in business with an idea of making money in the sense of earning a good living. Some of them may hope to become wealthy, and a few of them do. But a career in business, while it pays better than a career in academia on average, has the same pattern of income as does academia, that is, work for wages. Whether the pay in business represents the natural acquisition of wealth that Aristotle hoped for is unknown and unknowable. What is known is that higher pay will attract talent, and the growth of business schools continued. During the 1920s, one contemporary business school dean estimated, the number of students in collegiate business courses grew from 17 000 to 70 000 and the number of degrees awarded in business increased dramatically from 640 to 7000 (McClung 1932: 29). Masters degrees went from 110 in 1920 to 1017 in 1932 (Mintzberg 2004: 24) Business schools, to the extent that they followed the viewpoint of Edwin Gay at Harvard, aimed at making business more effective in serving society and not at moneymaking.

BUSINESS SCHOOLS RESPOND WITH VIRTUE

Articles appearing in academic journals during this period made it clear that training in business had to be at a level consistent with that of other professional

schools. This raised an important issue, that of professional ethics. As one writer pointed out, law, medicine and engineering had professional codes of behaviour that predated their inclusion in academia. Business had no such codes, and many thought that the basic business code was *caveat emptor*. Training in collegiate business programs could improve the basic business code of ethics, but it would take effort. Liberal arts graduates, presumably grounded in ethical behaviour, had not brought higher ethical standards to the business world when they entered it. The business school could inculcate higher ethical standards among its students by focusing on standards of behavior as applied to business per se. To be sure, they had to be careful that they did not produce a group of students who became so ethical that they could not find jobs. Over a long period, however, by subtly bringing ethical issues into the curriculum, they could bring a greater ethical perspective to business (Wooster, 1919: 47–63).

The idea that the collegiate business training would foster a better sense of social responsibility, that is, a claim that it had a mission of virtue, was repeated in academic discussions by business faculty of the curriculum of business schools (Hotchkiss 1920; Neuner 1930). One writer went so far as to use Veblen's concept of the instinct of workmanship as a standard of behaviour that businesses should endeavor to inculcate in the life of business leaders (Wooster 1919: 51–2). Whatever business schools aimed at, virtue or sophism, they proved successful because their growth was fuelled by greater acceptance of business graduates in business. The attitude that business leaders had previously held, that college graduates were unsuited for employment in business, changed. Students with degrees in business were welcomed into the business world. It helped that articles in popular magazines promoted the idea of business education. The rapid growth of the economy in the 1920s was also important to acceptance of business school graduates.

As noted above, in the 1920s, the number of students in collegiate business courses grew from 17 000 to 70 000 and the number of degrees awarded in business increased dramatically from 640 to 7000. Another survey indicated that about 850 students per year completed a graduate degree in business during 1925–1927 (Matherly 1931: 53). These were still small numbers, however, in light of the census figures for business occupations given at the beginning of this chapter. Nevertheless, advocates of business programs took heart from their success and regarded it as a sign of their value. Spurgeon Bell of the Ohio State University considered the success of business graduates in their careers as a sound reason for the growth of business programs: 'The success of the business school graduates and the satisfaction of their parents with the result of their education will remain always the basis of the good will of the constituents of the collegiate schools of business' (Bell 1931: 140). These comments follow Isocrates' justification of his own teaching, 'All men

are aware that a sophist reaps his finest and his largest reward when his pupils prove to be honourable and intelligent and highly esteemed by their fellow-citizens, since pupils of this sort inspire many with a desire to enjoy his teaching' (Isocrates 1982: 309). In one article, Wharton's dean made common cause with the sophists by writing, 'Business education in colleges and graduate schools has for its specific aim the education of prospective business men for what they are to do in life, and one may note in passing that this utilitarian purpose is not greatly different from the motive of education for public life in ancient Greece' (Johnson 1932: 17).

Sparked by this growth, business schools found themselves in a quandary over how to proceed. In an article published in 1920 one business professor described their situation in this way: 'The business course as now found in American colleges and universities is a very ill-defined institution' (Hotchkiss 1920: 92). To bring coherence to the study of business its practitioners followed a pattern of professionalism that had been established by other disciplines in academia.

To start with they began to develop a consistent standard of what subjects a degree in business should include. Conferences, such as one in Ann Arbor, Michigan in 1903, brought together academics and business leaders to work out what courses should be included in the business curriculum (Loos 1903: 457–66). To maintain that standard, in 1916 leaders from 16 schools in business education formed the American Association of Collegiate Schools of Business (AACSB – now The Association to Advance Collegiate Schools of Business) to provide a forum for discussion on how to solve the problems facing business programs. It grew to 39 members by 1919 and evolved into a body that accredited collegiate business schools much as regional accrediting agencies did for all colleges and universities, the American Medical Association did for medical schools and the American Bar Association did for law schools. The AACSB did so by setting standards for membership for business schools in terms of admission requirements, a minimum credit requirement for an undergraduate degree, the training, rank, salary and teaching load of business faculty, the curriculum, and the schools' library collection. It conducted research into what business schools required of students in terms of general coursework and business courses (Heilman et al. 1928: 1–59). By 1931 AACSB had 45 members consisting of 26 state universities and 19 private universities (AACSB 1931: 1–3).

In addition to this overarching association, discipline associations in business were formed: the Society for the Advancement of Management (1912), the American Marketing Association (1915), the American Accounting Association (1916), and the American Management Association (1923). The associations began publishing journals, as did collegiate business schools. The *Harvard Business Review* was first published in October 1922. Also established in 1922

at the University of Chicago was the *University Journal of Business*; its goal was to provide intellectual stimulus for students in collegiate business schools, a place for students and faculty in those schools to communicate with each other and to provide a linkage between higher learning in business and the business community. In 1928 its name was changed to the *Journal of Business of the University of Chicago* to reflect its change into a more scholarly publication. Since 1954 it has been published as the *Journal of Business*. The number of journals in business grew in the 1920s, as did the number of books published on business topics.

Business schools also tried to demonstrate their service to society by forming bureaus of business research. These aimed at showing that faculty in business schools could conduct research that was both scholarly and practical. One such researcher stated the case for this type of research as follows: 'Organized research in [business] schools is preferable to individual research [and] the instructional staff, the student body, the school, and business profit most under such conditions.' In that way faculty could meet their responsibility to train students in scientific methods of research and introduce them to business problems. This team-based research also gave business schools 'the opportunity to render service to business' (Secrist 1930: 354; see also Swanson 1914, and Mayer 1925).

Another writer pointed out that 'in the commerce field it is difficult to bring the laboratory into the college.' The bureau of research could serve as a social laboratory where faculty and students could learn and improve business methods. In this way the criticism of *The Yale Report* of 1828 (see Chapter 4) that colleges could not reproduce business conditions for students was answered. Moreover if the research reduced the costs of business and thus reduced prices to consumers, society benefited just as Marshall (see Chapter 6) had anticipated (Bell 1931: 138, and 142). In a classic example of this type of research, while at the Harvard Business School during this period, Elton Mayo undertook the path breaking research into human motivation at the Hawthorne plant of Western Electric that created a new discipline of human relations.

Mayo's research was an effort to take a scientific look at the impact of lighting conditions on worker productivity, but it expanded into something more, a theory of human motivation. As the results of this and other research projects that became incorporated into the business curriculum, business education became richer and rigorous. Writing at the end of the 1920s Professor Frances Ruml of the University of Chicago surveyed the previous three decades of business education and concluded,

> Commercial education affiliated with the university is making the art of business into more scientific form, not to make the results less artistic but rather to make them more realistic. Business itself has created the demand for men with breadth of

> vision . . . .with a comprehensive view of the whole social structure . . . The collegiate school of business is attempting to prepare such persons for entrance into the business world. (Ruml 1928: 255)

By couching business programs in terms of providing service to society their proponents aimed at establishing their virtue. In doing so they took advantage of a changed definition of virtue in academia. As described in Chapter 6, by the beginning of the twentieth century academia had set forth science and the humanities as secular versions of virtue in place of religion. Regarding business the change allowed the scientifically minded businessman to replace the commercially minded Christian gentleman who had attended college in the nineteenth century. As one business school dean put it,

> What the world needs most at the present time is not more money-makers of the older type but a new generation of scientifically minded business statesmen who, while earning profits for themselves and their associates, shall have a broad vision, a long-time point of view, a sense of obligation to the general public, and a will to do their part toward making the economic order better and more satisfactory to all concerned. (LeRossignol 1931: 137)

This attitude became a constant theme in business education. While Aristotle might not have characterized it as virtue, we might call it enlightened sophism.

Whatever we call it, it kept growing. Collegiate business schools all reported large increases in enrolments during the depressed 1930s. Individuals who had jobs saw business education as a way to enhance their careers, while those who were unemployed thought it would help them get a job when the economy recovered. In addition the public and business began calling for more business schools and graduates as a way to improve the functioning of the economy.

To find out more about how business students met the needs of business, leaders at the Wharton School asked one of its faculty members and a sociologist to take a survey to determine if the schools were producing students with the right capabilities. The survey found that Wharton School alumni were going into marketing more than any other area, with manufacturing second, and banking and finance third. From them it learned that the two most important factors in a business career were technical knowledge and the ability 'to function effectively through and in co-operation with others in the attainment of desired ends.' Scholarship was not important to businesses that were hiring college graduates beyond some minimal level of grades, but personality traits were important. Extracurricular activities helped to develop the proper personality for a business career, proving their usefulness.

The survey asked Wharton graduates which courses they found beneficial. They rated English number one, followed by three types of business courses,

mathematics, interpretive studies, science and foreign language. The inclusion of non-business courses on the list created a problem for a business school as they were offered outside its domain. Those non-business departments were initially glad to see the increased enrolments from business students. They then made the mistake of offering business students the same coursework they offered more traditional students in the liberal arts. Business students then reacted negatively as they wanted courses consistent with their goals. The authors of the Wharton report noted, 'The problem of the college of commerce in this respect is to persuade liberal arts departments . . . to adapt their work to meet the needs, and to fit in with the purposes of, commerce curricula.' Solving this problem, the study showed, was 'one of the most important aspects in the improvement of collegiate education for business' (Bossard 1931: 5–6; see also McClung 1932: 31–2).

Survey research results of this type may have been pleasing to faculty in business programs, but they would surely annoy faculty with a liberal arts perspective. By the end of the 1930s the collegiate business school complete with its MBA was a firm part of the university system put in place by leaders in academia. Not everyone in academia approved, however, and I will let the opposition have a word through consideration of the writings of an academic expert who set forth the counter argument to the good that business schools could accomplish, Abraham Flexner.

ABRAHAM FLEXNER: THE ATTACK ON SOPHISM

A well-known figure in academia Flexner graduated from Johns Hopkins in 1886, completing his degree in two years because that was all he could afford. He became a schoolteacher in his hometown of Louisville, Kentucky. Opening his own school he became known for how well his students did at top colleges. Harvard's president, Charles W. Eliot, encouraged him to write about his methods of education. He did so and then undertook graduate study at Harvard and in Europe. He wrote a book critical of colleges in the US, which led the Carnegie Foundation for the Advancement of Teaching to ask him to review the educational practices of medical schools. His study appeared in 1910 and led to the closing of inadequate medical schools. After two decades of working for educational foundations, he ended his career as director of the Institute for Advanced Study at Princeton.

In 1930 Flexner published *Universities*, an expansion of the Rhodes lectures he had given at Oxford in 1928. The theme of the book was that universities were not ivory towers, separate from society, but part of and a reflection of the society in which they existed. When that society changed, universities had to reflect that change. Recognition of this dynamic and social

nature of universities led Flexner to speak of a danger they faced. He wrote: 'I have spoken of the intelligent modification of universities – of their modification in the light of needs, facts, and ideals. But a university should not be a weather vane, responsive to every variation of popular whim. Universities must at times give society, not what society wants, but what it needs' (Flexner 1968: 5–6).

What society needed that universities could give it was scholars who conserved and interpreted knowledge, searched for the truth and trained students to carry on the work of the university. The purpose of a university was to offer a haven for these scholars and students to work on research untouched by practical concerns.

Flexner had a clear conception of the mission of academia and it was akin to the one of Plato and Aristotle, that is, a mission of virtue. The university and its faculty would be engaged in scholarly work, not 'the training of practical men.' They should be educated elsewhere. This ideal meant that the university would be an educational institution with a strictly limited purpose. Flexner made this very clear, writing that universities were not a 'dumping ground.' If they kept to their proper work, they would be 'unfit to do other tasks.' He added,

> On the basis which I have discussed, the pursuit of science and scholarship belongs to the university. What else belongs there? Assuredly neither secondary, technical, vocational, nor popular education. Of course, these are important; of course society must create appropriate agencies to deal with them; but they must not be permitted to distract the university. (Flexner 1968: 11, and 27–8)

To be sure, Flexner went on, universities in the US were not living up to this ideal. Instead they mixed in undergraduate education, graduate and professional education and service to the public.

The result was a watered down education for all students. Students needed an education that was concerned 'with the development of taste, with culture.' Universities, however, offered them degrees that could be completed with courses such as 'principles of advertising,' 'practical poultry raising,' and 'business English.' Students interested in learning such topics were better off working. The university could do nothing for them that was 'worth their time and money. Both are worse than wasted. For undergraduates do not even learn the tricks of business . . . .' Moreover the presence of such courses and students diluted the education for serious students (Flexner 1968: 53–6).

As one example of where academia had gone wrong he cited Columbia University for expanding its size by selling education much as a business would. To an argument that this approach led to an expansion of education, Flexner responded that expansion itself was a bad idea. In doing so he stated his position definitively:

> Culture cannot flourish in the feverish atmosphere of a university which draws no distinctions, sets up no criteria, and engages in every miscellaneous activity. The whole American public may never be civilized; but America's contribution to civilization depends not on the whole public, but upon a gifted, earnest, and agglutinated minority. This minority needs to be protected against the beating waves of mediocrity and humbug. The university which fails in its responsibility to them must answer heavily at the bar of history. (Flexner 1968: 144–5)

Not surprisingly Flexner found that universities in the US had failed in their responsibility, and he predicted a poor future for them.

A huge part of their failure came from their having programs in business. Undergraduate programs in business were 'poor substitutes for a sound general college education' but were not very important in their impact on education. 'More pretentious,' he went on, 'and for that reason more dangerous is the Harvard Graduate School of Business Administration.' That school claimed to be a professional school but business was not a profession, except in the same sense as a 'professional football player.' A true profession was a learned profession, and business might meet this standard someday. Its current emphasis on profit seeking excluded it from claiming to be a profession. Profit seeking relied on shrewdness, not intellectual activity (Flexner 1968: 162–3).

Business was a key part of modern life and was worthy of serious study by scholars. As a subject of study it belonged in the university. The university could not deliver on a goal of reproducing business experience and cramming it into a few courses, however. The Harvard Business School was on the right track when it had faculty members who were legitimate scholars. Unfortunately the administration of the school was 'concentrated on "getting on" – the canker of American life.' Moreover, he added, the school took a narrow view of business:

> The Harvard Business School raises neither ethical nor social questions; it does not put business on the defensive . . . . [I]t does not even take a broad view of business as business. For example, it describes its department devoted to foreign trade without one word as to the importance of mastering foreign languages or acquiring a sympathetic knowledge of the history and 'mores' of foreign countries; attention is concentrated on superficial tricks, really to be acquired only by contact and experience . . . This is not only to waste cultural opportunities; it is unimaginative and short-sighted from the sheer business point of view. (Flexner 1968: 166–7)

Other subjects taught at the School were equally superficial and uncritical yet the faculty and trustees of Harvard apparently had no objections to them.

To be sure, Harvard was not the only university that Flexner faulted for its approach to business. 'Other university schools of business,' he added in a footnote, 'are no better and no different.' The point for him was that universities 'should not concern themselves with miscellaneous training at or near the vocational level.' After all, Yale and Princeton did not have business schools

and no one would doubt that their graduates would be successful in business (Flexner 1968: 168n).

Flexner also criticized the Harvard Business School in a novel way by claiming that it was not business-like. It had been given a large endowment (from the banker, George Baker) and had put most of it into buildings. As a result much of its work including the research undertaken by its faculty was poorly funded. No businessman would invest most of his 'capital in bricks and mortar and trust to luck for the money needed to give substance and vitality to the enterprise.' The School's faculty itself needed to go to the school of experience to learn proper business methods. The point was important, he later observed, because Harvard had to subsidize the business school along with many other wasteful items. Consequently, he argued, 'of Harvard's total expenditure not more than one-eighth is devoted to the *central* university disciplines at the level at which a university ought to be conducted' (Flexner 1968: 171–2, and 197).

To Flexner this last criticism reflected his overall view that the expansion of higher education to meet the needs of the marketplace – its sophism in terms of this book – had not been beneficial for academia. Mass education did not work as the extra students and the programs needed to attract them diluted the central mission of the university by adding weak courses and by taking away money from that mission. In making this criticism Flexner said more than he knew. His observation that the business program at Harvard took funds away from other programs, if valid, aimed to show them up as hypocrites in their own game of moneymaking. Instead those observations simply indicated that the business school was run like the rest of the university in using endowment money for buildings and tuition to pay for operating expenses. Business schools were not business-like because they followed the approach toward funding of the universities within which they operated, that is, they functioned under the endowment model. Why that model had led them to the sophism he claimed they adhered to is a question Flexner never asked.

THE DEFENCE OF SOPHISM

Advocates of business programs did not agree with Flexner's criticisms. At the annual meeting of the AACSB in 1931 several papers were presented in a response to Flexner. Spurgeon Bell pointed out that new programs in academia were always criticized by participants in older programs, because 'vested interests exist in education as in business.' Those vested interests feared newer programs would take funds away from 'from what they regard as the sounder fields of educational development.' Who was to say, however, that spending to produce the 'best research on Chaucerian literature' was a wise way to spend

money? Business research, like medical research, aimed at solving immediate problems to the benefit of society. Bell asked,

> Why is a lifetime of research devoted to the study of the infinitive or to the study of the meaning of the preposition *eis* in Greek literature of greater dignity than a lifetime devoted to the study of the place of cost accounting in the management of business enterprise? The latter is certainly not less difficult than the former. (Bell 1931: 139, and 144–5)

Here Bell raised an important issue for academia. Once academia had become secularized and given up its mission of virtue as defined by training clergymen and Christian gentlemen, what was the definition of virtue? Greek and Chaucerian scholars might feel virtuous in their research and that feeling of virtue might make them act as if they had a privileged place in academia. The fact that their research had no impact on moneymaking might add to their feeling of virtue as it had for Plato. But absent a clear standard of virtue such as Christianity had offered, they were prey to Protagoras' notion that man is the measure of all things. Business faculty could lay the same claim of virtue as did liberal arts faculty. With no intrinsic standard of virtue such as Christianity held, all disciplines could claim a privileged place. To gain that status of privilege Bell urged business schools at state universities to promote their programs among the public at large (Bell 1931: 139–40), that is, to appeal to their ultimate patrons the taxpayers to certify the virtue of what they taught.

Another paper at the 1931 AACSB proceedings by J.E. LeRossignol, dean of the school of business at the University of Nebraska, took Flexner on directly with a review of his book. He characterized Flexner as being alarmed 'by the specter of vocationalism' and wanting to remove it from the university. To LeRossignol, Flexner set a very high standard for academia, so high that in his book he found no institutions that measured up to that standard. LeRossignol described Flexner's attitude as follows, 'Evidently, the ideal Flexnerian university is not found in America, England, France, Germany, nor anywhere on earth. But, as Plato says of his ideal city, that does not matter, if only we keep the pattern in view and try to organize ourselves accordingly.' Unfortunately Flexner did not keep to this ideal, for he would allow law and medical schools to be part of the university, and they were vocational fields (LeRossignol 1931: 128–9).

Flexner had argued that law and medicine were learned professions and business was not. LeRossignol quoted him at length on this issue of whether business was a profession. In answer he noted that business was being considered worthy of professional status by universities, not only in the US, but also throughout Europe. This spread of business programs throughout the industrial world was giving them the legitimacy they needed. Moreover the study of

business and business research were reaching the same high standard as in other professional programs. As LeRossignol put it,

> Yet, as Dr. Flexner in effect admits, there is a scientific basis for business statesmanship, in that a vast body of important and teachable knowledge has been accumulated by economists, statisticians, historians, and business executives, about which students might well inform themselves before plunging themselves into the complexities and difficulties of the business world. True, arm-chair economists have shrunk from close contact with this fruitful field, and most business men have got along without much scientific knowledge of it; but the changing times demand more research into business conditions and problems. (Le Rossignol 1931: 156)

Consequently business was entitled to be part of the university and its growth as an area of study would surely increase.

At the 1932 AACSB proceedings an invited keynote speaker, E.B. Wilson, professor of vital statistics at Harvard, took up the question, 'What is a profession'. He admitted he did not know much about business schools except that they were among 'the least desirable adjuncts of the university.' He knew of no data to support or refute this view. He agreed, jokingly, that it was 'a fair statistical inference, based on a now reasonably large sample, that Dr. Flexner has a poor opinion of schools of business.' What should business schools do? Wilson suggested that they follow what other professional and science programs had done by integrating theory and practice. In this way they could offer their students both depth and breadth of study and 'develop that which Dr. Flexner says is neither art nor profession into the condition of being both an art and a profession' (Wilson 1932: 4, and 7).

THE ENDOWMENT MODEL HELPS COLLEGIATE BUSINESS SCHOOLS GROW IN THE TWENTIETH CENTURY

LeRossignol was right in his prediction that business would grow even faster than the rest of academia. Despite Flexner's criticism of academia, during the second half of the last century it used the endowment model and expanded with proceeds from state and federal governments, keeping in mind that from the perspective of this book annual funding of public universities is equivalent to the endowment income of a private university. The following brief account of the history of US academia from 1940 through the 1970s will outline how this growth in the endowment model took place.

The starting point for growth in modern academia took place when Congress passed the Servicemen's Readjustment Act of 1944 (the GI Bill), which made it possible for 2.2 million former soldiers to attend college.

Higher education experienced the greatest expansion it had ever seen. Undergraduate degrees awarded increased from 157 346 in 1946 to 496 874 in 1950, with master's degrees awarded being 19 209 and 58 183 for the same years. Because they were older than the typical college student, returning soldiers had a better sense of what they wanted from academia. And what they wanted was an education that would help them to get going in their careers. All disciplines showed double-digit gains during this period, but business topped the list with a growth rate of 88 percent (Daniel 1998: 138–9).

As enrolments began to stabilize in the 1950s, academia found that it now included business schools that catered mainly to undergraduates and that those business undergraduates were 15.3 percent of the total of college graduates in 1950. This emphasis on business education brought about expansion in other areas of academia. First of all students in business still had to take general requirements in the liberal arts. Second, proponents of business schools had never denied the importance of the liberal arts for students majoring in business. The spillover effect of business programs added to the demand for the traditional liberal arts just as Francis Wayland had predicted a century earlier. Wayland had thought this growth would be fuelled by the tuition-driven model, however, and not by the endowment model.

During the 1960s academia experienced additional growth due to the baby-boom generation coming of age in 1964. The baby-boom expansion of higher education was funded by rapid increases in state funding of higher education during the 1960s (Zumeta 2004: 84–5) and new programs of federal spending under the 1965 Higher Education Act which gave direct grants to academia and indirect grants through student aid and loan programs (Hearn 2001: 273–8). These increases were justified by a political consensus that academia had a benefit to society in terms of improving the quality of students as productive citizens and of adding to economic development (St. John and Parsons 2004: 1–10) much as Alfred Marshall had argued (see Chapter 6).

The 1960s are remembered as a time of student protests and great changes in higher education in the US especially as protestors against the Vietnam War sought an education that was relevant to their concerns, reaffirming the need for a mission of virtue. Hidden in the noise of student unrest was that as part of the expansion of academia, the number of students earning undergraduate degrees in business doubled during the 1960s, from 58 000 to 116 000. Graduate degrees in business, mainly the MBA, outpaced any other field. The number of MBAs awarded skyrocketed reaching 42 654 in 1976 (Mintzberg 2004: 29), and the MBA became the degree most often held by top executives. These trends are indicative of a tilt toward sophism.

They also were part of a continued expansion in academia, as total enrolments went from 2.5 million in 1955 to 8.8 million in 1974 (Keller 1982: 8). This growth fuelled a corresponding increase in physical facilities on academic

campuses and brought about a period of growth in the number of professors. The increased demand for professors brought about rising salaries for faculty and enhanced the need for graduate programs to train those professors. By the early 1970s academia in the US reached a pinnacle of success in terms of its offering an education to a wide array of students at a reasonable tuition rate in terms of public higher education.

This brief review of the rapid expansion of academia in the third quarter of the twentieth century serves to indicate how important patronage was for higher education in comparison to market incentives. To be sure, universities responded to student interest by expanding popular programs, at least to some degree. But they did so with public funds and not to gain the increased tuition revenue those programs might have produced. As a result, even as it expanded practical programs, academia retained its spirit of virtue. We can see this spirit through a discussion of the ideas of an economist whose works exercised a great deal of influence during the period, John Kenneth Galbraith. His views on academia reflect the optimistic outlook of a golden age of academia where virtue remained the primary mission of academia and sophism was held in check.

JOHN KENNETH GALBRAITH DEFENDS VIRTUE

Much of the growth in academia during this golden era was in practical, career oriented fields such as business and engineering. As an intellectual response to this growth in business and in other technical disciplines, John Kenneth Galbraith, in his book, *The New Industrial State* (Galbraith 1971), offered an analysis of how this service to the industrial world enhanced the social influence of academia. Galbraith envisioned an educated elite, what he called the technostructure, as running the large corporations that produced the goods and services that society needed. His technostructure included business professionals as well as engineers, scientists and computer experts. Because their expertise was necessary for the economy to function, higher education had become an important force in the modern world. This increased personal and social benefit of a practical higher education conferred newfound prestige and power on the 'educational and scientific estate' in charge of academia.

According to Galbraith modern economic production required the use of complex and sophisticated technology. To work with this technology corporate leaders had to be well trained in a variety of disciplines, especially in science and engineering. More important, the technology used in business was geared to mass production and necessitated planning well in advance of production to be sure that there would be a demand for what was produced in such massive quantities. This large volume of sales planning needed the talents of project

managers, marketing researchers and advertising experts. In addition, experts in human resource management oversaw the corporate system. As a result, Galbraith argued, the technostructure, not the capitalist entrepreneur, now ran business, and it pursued its own values (Galbraith 1971: 22–4, 152–3, and 161).

The technostructure, however, relied on academia for its education. Members of academia found the economic activities of the technostructure to be unnatural in Aristotle's sense of the word, to say the least. Because of their ability to control the content of the educational system, members of academia should be able to foster a sense of virtue among the technostructure and provide a proper education for students interested in other pursuits. As Galbraith stated his lofty aim,

> The growth and influence of college and university communities are in response to the needs of the industrial system. But that does not necessarily create a primary obligation to the needs of the industrial system. Gratitude and debt do not exist as between social institutions. The only reality is the right social purpose. (Galbraith 1971: 378)

In sum, Galbraith had hopes that the leaders of academia would be able to persuade the technostructure of the industrial system and in government that they should pursue the goal of responding to the needs of society. In this way academia could take the lead in establishing virtue to primacy over sophism in social affairs.

By calling for academia to take the lead in restoring balance between virtue and sophism in society Galbraith was harkening back to Plato and Aristotle and the idea that members of the academy would be philosophers who would advise rulers about virtue and doing the right thing. His call for an activist academia to perform this Platonic function contained an admission that business did perform a legitimate task for society, but that it was subverted by its quest for profit. The right type of education could bring about Aristotle's mean of balance between virtue and sophism. In this regard the idea espoused by business faculty, such as LeRossignol (see p. 109), that they aimed at making business leaders more ethical had been accepted.

CONCLUSION

In 1923 Elliot G. Mears of the Stanford University business school wrote, 'It is no exaggeration to assert that the introduction of courses of business is the most startling development during the twentieth century in American higher education' (Mears 1923: 639). The rise of collegiate business schools was clearly a response to the need for trained managers and experts in other facets of business

such as marketing and accounting. We could easily categorize these schools as engaging in sophism, because they did teach practical courses aimed at worldly success. But their application of sophism was not strictly a market-based response with business school advocates in a quest for the worldly success of moneymaking as the sophists had been. Rather the slight evidence in this chapter indicates that collegiate business schools were largely funded using the endowment model, getting wealthy benefactors to finance their beginning in the case of private schools and employing state funds in the case of public ones. Moreover the advocates of business schools aimed higher than just giving business what it wanted. Professional managers would not simply work for a business; they would have a calling of improving business and society along with it. They would be ethical as well as effective in their business careers.

Regardless of their dual missions of sophism and virtue, the rise of business programs in academia would be anathema to anyone, and especially to Veblen, who followed the disdain Socrates, Plato and Aristotle had for commerce and who held strictly to a mission of virtue in education. To them business was about making money, that is, Aristotle's unnatural acquisition. Training in making money was not a part of academia, at least so they might argue. Critics of the teaching of commercial activities in academia, from the Greeks through Veblen and Flexner, assumed that moneymaking is easy to do and easy to teach. Here, as in other places, they missed the point of competition. Any method for making money that can be taught can be imitated, and its advantages eroded. It is not easy to make money using well-known methods that can be offered in the classroom. None of the persons associated with the rise of business programs in academia argued their students would gain wealth from their studies. Rather, advocates of those programs could argue that they had a mission of virtue in the sense that they served a social need for better-trained persons for the effective running of what was becoming the main economic institution of the US, the business corporation.

One problem with this argument is that at the undergraduate level the concepts involved in business courses are deceptively simple. To be sure a course in basic management touches on a wide range of subjects, and it is probably the most multi-disciplinary course on many college campuses. However, compared to physical chemistry or the advanced semiotics of poetry, the principles of management as taught in the basic course are easy to understand. The hard part of management is execution, and that cannot be taught in a college classroom, as *The Yale Report* of 1828 (see Chapter 4) argued long ago. Consequently business courses carry little respect among the professoriate in academia, and aside from accounting, the disciplines of business have not attained professional standing in a way comparable to law or medicine.

Still, business programs have become an important component of the

modern university and played a significant role in its transformation. The model these universities used to bring about the transformation of higher education in the twentieth century was in place by the 1930s. The subsequent story of academia, as the brief history presented in this chapter indicates, was one of expansion in terms of size and scope of programs offered by the research and comprehensive universities that went beyond even Francis Wayland's dreams. Faculty who bemoan the presence of sophism on their campuses in the form of practical courses should ponder Wayland's message. The only way academia could have expanded to its current size, offering employment to many professors, was to offer more courses that students found useful, including business courses.

8. Academia in transition: the road to sophism

From its beginning in Greece to its current status in the US, academia has vacillated between two overarching ideologies, sophism and virtue. The material presented in this book has given examples of how a variety of educators and economists employed these two ideologies of academia to address two fundamental issues: What is the mission of higher education in a changing world? How does the need to find the resources to fund academia influence that mission?

This chapter will briefly review the dispute of sophism versus virtue throughout its history. It will then describe the decline of the public funding version of the endowment model and how that decline has brought the pressure for sophism that comes with the tuition-driven model. Finally the chapter will describe the emergence of a new ideology in academia, the for-profit model with an emphasis on sophism, and will speculate on what its influence might be in the future.

FROM SOPHISM TO VIRTUE

For the first millennium of its existence academia operated under an ideology of sophism. Under this approach the ancient equivalent of college professors offered their services for sale in a market for higher education using the tuition-driven model. They used a variety of techniques to attract students and did so successfully. We have mixed anecdotal evidence about whether the sophists became wealthy because of their innovation of the tuition-driven model of higher learning. Plato and Aristotle portrayed the sophists as motivated more by the love of money than by the love of knowledge, but the accuracy of this portrayal is arguable. The sophists responded to charges of their wealth with the line of reasoning of economic competition that argued that their fees would not lead to their being wealthy as long as other sophists competed with them. More important, we do not know the extent to which their fees for teaching influenced the education the sophists offered, as they, except for Hippias, had little to say on the issue of whether they altered the

content of their teaching to gain students. Sophism passed the market tests of bringing in paying customers and attracting imitating competitors.

There is a saying that winners get to write the history of any society. In the case of the Greeks, the educators whose history survived became the winners. Socrates, Plato, and Aristotle opposed the sophists and their fee-based approach to teaching, and even though the tuition-driven model of the sophists won out as the method of education for a thousand years we revere Socrates, Plato and Aristotle for their mission of virtue. We cannot be sure that their mission of virtue meant that they objected to everything that the sophists taught, but the evidence is that they objected to what we would now call the commercialization of education. To Socrates, Plato and Aristotle the mission of an education was that it nurtured the will to be a good person by stressing virtue and that was more important than its ability to enable educators and their students to earn a living. Plato and Aristotle funded their schools with their own wealth, which meant that they operated under the endowment model. Regardless, the sophist approach of teaching for a fee was the common form of higher education for the next 1000 years.

Christianity revived the endowment model just as it revived the thought of Aristotle. Academia entered a second millennium in which the endowment model became the paradigm of higher education and virtue became its mission. To be sure, fees might be charged, but from medieval times in Europe through the nineteenth century in the US, the goal of leaders in higher education was to gain from patrons the funds to offer an education with a mission of virtue by training clerics and Christian gentlemen. This Christian ethic was in keeping with the communal spirit of the church.

The rise of capitalism brought about economic thinking that extolled the benefits of markets and competition. The first synthesizer of that thinking, Adam Smith, sided with sophism by arguing that the market tests of producing a successful product in terms of attracting customers and attracting competitors could be applied to academia. His argument was that competition could facilitate the effectiveness of education without becoming an unnatural acquisition in Aristotle's sense. In the nineteenth century his views on using economic incentives to improve the quality of education were intellectually influential in terms of the case that was made for applying competition to academia. As set forth in this book, Benjamin Rush used Smith's ideas in his push for a national university in the eighteenth century, and leaders in academia in the nineteenth century, Francis Wayland and Charles W. Eliot for example, argued that competitive incentives had a place in higher education.

At the time they were making this argument capitalism was rising to its current ascendancy as the leading mode of economic production. This rise of capitalism and the corporate business firms that constitute its core created a

demand for higher education in the US in the form of scientific and professional skills. To meet that demand academia had to redefine its mission to add more practical subjects. It did so, however, without using the clear incentives of competitive markets. Bentham and Mill can be credited for seeing how the endowment model could fund large public universities to compete with older schools and expand educational opportunities. Marshall went further and argued that the value of education was the economic value it added to society. While these economists' arguments contain elements of sophism, they never thought academia could expand using business principles. Only Veblen among the economic thinkers in this book believed that academia had succumbed to market pressures to become a business.

Far from succumbing to sophism, however, during the early years of US capitalism academia retained its mission of virtue by following the endowment model. What evidence I have been able to find indicates that even that most readily commercialized academic discipline, business, owed its existence to funds from patrons. Advocates of business programs justified them based on their improving the quality of mind of business leaders, that is, based on virtue. What sophism they included remained an enlightened sophism similar to what Protagoras practiced. Even though some of them did view economic incentives favourably, none of the thinkers highlighted in this book ever suggested that academia be based on profits.

Throughout this book I have looked at how developments in the economic model of competition have influenced dialogue over the mission of higher education. I have focused on this economic model, because it describes a theory of market behaviour, and markets have existed for as long as academia. Indeed, it came as a surprise to me that academia had its roots in a fee-based market system that the sophists innovated, even though great minds denigrated it as soon as it was applied to higher education. Still, it persisted from Greek times when the sophists earned a living to the Middle Ages when the tide turned in favour of the endowment model thanks in no small part to the ethos of Christianity.

More to the point here, that Christian ethos has persisted despite the secularization of academia and the influence of capitalism. The economic system of capitalism has brought markets and competition to the pinnacle from which they dominate all of Western society and perhaps as the twenty-first century proceeds, the entire globe. It is a testimony to the resilience of academia that it has coexisted with the culture and values of capitalism, but has not capitulated to them. In part that resilience relied on the generosity of capitalists, who used the profits they garnered in business to endow universities, schools within universities and programs within those schools. Income and wealth generated by capitalism also provided a tax base for funding public higher education.

THE DECLINE OF THE ENDOWMENT MODEL

The idea that virtue has retained its primary place in academia in spite of academia's being surrounded by the culture of capitalism is an important one. The key reason why is that during the second half of the last century academia in the US used the endowment model and expanded with proceeds from state and federal governments. Up until the 1980s academia was able to maintain a mission that put virtue first and sophism second because of this support from government. At the start of this book I indicated the great growth in the number of students attending college in the US between 1860 and 2000. An important part of that story is that a high proportion of the growth took place in public universities. In 1890 they accounted for 22 percent of all students. That number increased to 40 percent in 1940. By the turn of the twenty-first century it was 80 percent (Goldin and Katz 2001: 6).

For a large portion of the latter half of the twentieth century the expansion of public higher education in the US followed the combined model of endowment and tuition with an emphasis on endowment in the form of state government support. State government support for higher education showed a large increase in the 1960s with many states raising their appropriations to higher education at a rate of over 20 percent per year. The combined model of academia, part endowment from state funds and part tuition-driven thus became established as the key ingredient of the system of public higher education that greatly expanded access to college-level study in the US during the past half century.

Because of its hybrid nature, this combined model maintained balance between virtue and sophism. Income from tuition meant that institutions of higher education had to offer more courses in subjects students wanted because of their practicality; funds from state governments, federal programs and private donors still gave academia the autonomy to expand its programs that retained the mission of virtue. They did not gain complete autonomy, however, as state governments and private donors earmarked their contributions to aid economic development in the case of states and specific programs in the case of private donors. Professional schools of engineering, education, law and business did proliferate in the twentieth century as a condition of increased endowment, but so did programs tied to the traditional liberal arts.

In recent years, however, state funding for higher education in the US has declined. From a longer historical perspective public support for higher education can be interpreted as a 'bubble,' a short-term upswing in funding that was unlikely to continue. Continued double-digit increases in state appropriations for higher education such as took place in the 1960s would have bankrupted the states. By the 1990s annual increases in state appropriations for academia had levelled off into the single digits. Now the question is whether or not state

funding of higher education will end, which remains to be seen. Either way public colleges and universities are becoming more tuition-driven. Continued large increases in tuition at public colleges and universities for the last two decades would indicate their greater use of the tuition-driven model.

In his thorough analysis of the economics of this transition to the tuition-driven model by public universities Roger L. Geiger describes how for academia, 'Social coordination through markets has undoubtedly grown in the current era,' reducing the ability of government officials to affect institutions of higher learning. Private colleges have also used the tuition-driven model, along with endowment growth from the stock market, to enhance their funding. While most academics might deplore this greater reliance on markets by academia, Geiger points out that even given the greater price competition entailed by markets, selective universities have greatly increased their total resources and used those resources to enhance the quality of their programs (Geiger 2004: 9 and, 40–51).

As argued in Chapter 1 the use of the tuition-driven model to fund a college can be seen as simply a way for it to gain the money it needs to buy the resources needed to provide the education it sells. Although Plato and Aristotle found the sophist's use of the tuition-driven model to have been corrupt and unnatural, our greater experience with the functioning of a market economy allows us to make a finer distinction than they did and characterize the tuition-driven model of academia as natural. Despite modern critics of higher education insisting that it has become like a business, tuition-driven colleges do not envision returning profits to investors or using them to finance their capital needs. There is no bottom line in higher education and no stock market sell-offs to indicate widespread disapproval of its programs.

Of course, Plato, Aristotle, and Veblen would deplore spending by colleges and universities on such ostentatious items as sports arenas and stadiums, lavish dining halls and fitness centres, high salaries and extravagant expense accounts for college presidents and well-manicured landscapes and grounds. The other side of the story, Protagoras might remind us, is that these items attract tuition-paying students and support from wealthy donors. Nevertheless they are not part of a mission of virtue and it is doubtful they are efficient at sophism in the sense that they generate sufficient funds to pay for providing them. Conspicuous consumption may qualify academia for membership in the leisure class, but it does not make it a business.

In her book on academia's business-like approach to intellectual property Jennifer Washburn writes, 'Academic administrators have, indeed, embraced the language of the business world' (Washburn 2005: 209). Embracing a language, however, does not mean embracing a culture. Geiger indicates that university administrators have become better at management, but their success in doing so has been uneven. As an example he points to responsibility-centred

management (RCM), a system whereby academic departments were given resources based on their student credit hours. This would, it was assumed, make them more cost conscious. We can recall from Chapter 6 that RCM is nothing more than the approach Morris Cooke proposed of allocating costs and revenues to departments based on credit hours taught, and it has apparently been as ineffective in practice as attempts to use his methods were (Geiger 2004: 242–3).

The inadequacies of trying to understand academia as a business can be seen through consideration of what it would be like to operate a college as a business. We do not need imagination to make this consideration, however, because academia now has a new sophism captured in that most recent and growing model, the for-profit college.

THE FOR-PROFIT COLLEGE AND SOPHISM

Proprietary schools have been a small part of the story of academia. In the US they helped originate law schools and provided some medical training, but made few inroads into higher education. That has now changed with the rise of colleges run for a profit, such as the University of Phoenix. The big difference is the basic source of funding. For-profit colleges get their initial funding not from patrons under the endowment model, but from investors through the sale of stock publicly traded on the stock market.

A stock exchange is the quintessential location of Aristotle's unnatural acquisition. Stock shares have no value in use to satisfy a natural need and their sole function is to earn a gain for the persons owning them. Regarding for-profit colleges the sale price of their stock reflects investors' confidence in the college's ability to produce an education and sell it at a future profit. Of importance to the for-profit college, however, the stock exchange becomes the benchmark of whether it is doing well, with 'well' defined in terms of its price on the stock market not in terms of virtue. Most colleges undergo a reaccreditation review every ten years and public colleges may have to provide annual evidence of their effectiveness to state government agencies. With the stock market, financial analysts, who will have studied the ins and outs of academia in order to make sound investment decisions regarding the stock of for-profit colleges, review the for-profit college every day. This continual assessment places immense pressure on for-profit colleges.

Consequently the for-profit college must pay strict attention to the market for higher education. The business attitude it employs would not care why a student took courses as long as he or she paid for them. For-profit colleges and universities use marketing research to find out the courses students wanted most and then offer them at the highest quality for the lowest cost. In this way

they would beat the competition by offering something better to students than other colleges and universities. The focus would be on moneymaking and if virtue does not sell, it will not be offered. The for-profit college does not have a mission of virtue, because its only mission is the acquisition of wealth. It is sophism through and through.

To find out what students want, the for-profit college might also survey their prospective employers to determine the skills they seek from employees. It could then sell those skills to students directly or sell courses to employers to offer to their employees. This approach comes through in the words of the Apollo Group, the company that operates the University of Phoenix and other institutions of higher learning:

> The success of the Apollo Group learning model rests in our ability to anticipate student needs and our willingness to create change within our organization. Understanding and acting upon student, employer, and faculty feedback has been essential to the Company's growth and will remain a critical aspect as we envision our future – as an educational institution as well as a business. (Apollo Group 2004: 4)

The idea that an institution of higher learning would respond to student needs and employer feedback is an old one, dating back to the sophists. Isocrates put it best, 'All men are aware that a sophist reaps his finest and his largest reward when his pupils prove to be honourable and intelligent and highly esteemed by their fellow-citizens, since pupils of this sort inspire many with a desire to enjoy his teaching' (Isocrates 1982: 309).

It also means that all decisions in the for-profit college would be strictly economic and employ all aspects of marketing. There is a vogue in academia to speak of traditional colleges employing the tools of marketing, but what is really meant is promotion. Marketing is a process that has four parts, product, price, place and promotion. Its premise is that if a business gives consumers a product they want, at an acceptable price, in a convenient place, then promotion is the easiest part. For-profit colleges, as businesses, are much more adept in this total approach to marketing. They ask and answer such questions as: Are there courses being offered that do not attract sufficient students to cover their costs? Get rid of them or hire temporary professors to teach them with just enough frequency to make them pay. All programs are turned into profit centres and those that lose money are eliminated. What books and journals should the library purchase? Only those students are willing to pay to read. Does the college need a football team? Only if it pays by attracting more students. Does it want to offer scholarships? Maybe, if the scholarship is used as a tuition-discount in the practice of price discrimination, that is, offering lower prices to fill empty seats. A better approach is to encourage businesses to pay the tuition of their employees. Do we need an ivy-covered campus?

Only if it can be done cheaply and in a place that is convenient to reach. More likely, the campus will be in a shopping mall with easy access from a major highway or in a computer through on-line courses. What is our mission? We must bring in as many paying students as possible and earn a profit for stockholders by educating those students.

Most businesses undertake advertising to increase their market share, bringing in more customers. Another reason it is wrong to think of traditional colleges as businesses is that they aim their promotion at increasing the quality of their students. As true businesses, for-profit colleges have the business goal of increasing their market share, and their efforts may increase their share of the higher education market. Consequently the for-profit college has made economic gain for its leaders and stockholders the focus of its efforts. While the for-profit college has not obliterated virtue in terms of giving students a basic education, it has subsumed it as part of the quest for profit.

As a result the for-profit college has come close to turning education into a generic commodity whose only purpose is to produce a profit. First of all, although the importance of on-line education in for-profit education is probably still overrated it does come very close to being a generic commodity. The for-profit college produces a standard set of lectures for each course (it is called courseware) and then hires faculty to service the students who take it, in a way that the scientific management expert Morris Cooke anticipated with his idea of standard lectures for all faculty teaching a particular course (see Chapter 6). Courses in this way lose their distinctive qualities and become very similar. If all courses are pretty much the same and potential students can find them through the Internet, price will become the main decision variable. Students will find courses at the lowest price and take them. Eventually, perhaps, an enterprising for-profit college will allow students to assemble a portfolio of courses from a variety of institutions and earn a degree.

The for-profit college also turns faculty into a commodity similar to Marx's concept of labour-power (Marx 1967: 166–98). All of the ideas in a course are contained in the courseware, and the 'teacher' responds by email to student questions and grades exams and assignments, to the extent they are not structured to be graded by the technology. In offering classroom courses for-profit colleges rely on part-time faculty paid on a per-course basis, making them fee-based. If a faculty member wants to earn more money, he or she must guide students through more courses in a given time period. This type of a piecework approach has a long history in capitalism. It was often abandoned due to the difficulty in controlling how and whether the work was done. With the for-profit college, technology monitors how effective the faculty member is in guiding students through an online course. Student evaluations, a measure of customer satisfaction, assess how well a faculty member has performed in a classroom course.

Traditional faculty who oppose the development of for-profit colleges have a legitimate concern, in terms of the impact this new approach will have on their working conditions. When they express concern that the privatization of public universities or reliance on the tuition-driven model by private universities will lead them to be run like a business they have, as this small outline of how a business model applies to academia makes clear, confused Aristotle's natural acquisition with sophism. Natural acquisition does not necessarily have to alter the mission of education, and the tuition-driven model of public higher education will likely stay within the boundary of natural acquisition, that is, securing the funds needed to sustain a mission of virtue mingled with the practicality of sophism. Sophism as pursued by for-profit colleges may alter the mission of education, however, and I will end this book by speculating on how it might.

THE ROAD TO SOPHISM?

The final point to be made by this study is that academia has been able to accommodate itself to capitalism, but not become a part of it, at least not yet. But that may change over the next century, if the for-profit model continues to expand. Unlike traditional colleges and universities, for-profit institutions are capitalist businesses. As such, they aim at increasing their share of the higher education market by offering a quality product at an affordable price in a convenient location, including the student's computer in the case of on-line courses.

Economists have identified an industry pattern referred to as the product life-cycle. The first phase in this cycle takes place when an innovator introduces a new product or service. Unless the innovator is protected by a patent, competitors will copy the new product or service, flooding the market in the second, competitive phase of the cycle, as the sophists long ago recognized. Not all firms will survive the competitive phase, and the industry will enter into a third phase of consolidation, where weak firms fail and stronger firms will buy or merge with weaker firms. At the end of the period of consolidation, a few larger firms will control most of the market for the product or service and the industry will enter the final stage of maturity, in which growth will be slow and the industry firms will be stable unless another innovation revitalizes it. For-profit colleges are still in an early phase of the product life-cycle where competition among new entrants will spur all competitors in the marketplace they are serving to improve their courses and keep prices low.

In the US, the largest for-profit university, the University of Phoenix, has grown to over a quarter of a million students in its classes. Its parent, the Apollo Group, spent nearly $400 million on marketing in 2004, and has been

accused of 'boiler room' tactics in its recruitment of students. While these tactics got the company into trouble with the US Department of Education, enrolments have climbed dramatically and, as they level off, the company has plans to expand overseas (*Business Week* 2005: 50).

The competition among for-profit colleges and traditional universities has led to increased enrolment in on-line courses. An estimated 1.9 million students took an on-line course in fall 2003, a 19 percent increase from the previous year (Carlson 2004: A30) and about 10 percent of the total number of students is higher education. By 2005, the figures had increased to 2.4 million (18 percent) (Green 2006: 11). To be sure, students in these programs at for-profit colleges may take a mix of face-to-face and on-line courses. Still, this one bit of information indicates that for-profit colleges are growing, as does the profitability that some of them have reached.

Thus far for-profit colleges have not made inroads into the market segment served by traditional colleges and universities, the 18- to 22-year-old student who wants the total experience of going to college including all the social amenities. Students have three interests in college studies. A small group actually is seeking knowledge or virtue. A larger percentage of students is anxious to obtain the degree necessary for a job and makes up the main portion of buyers of for-profit educations. They do not think they really need to learn anything but they need a degree if they are to get the promotion, the job or whatever else they are seeking. The remaining students are looking for entertainment. They are not going to go to for-profit schools because they want campus life, football, basketball, social contacts and so on. Veblen would suggest that their parents lay out huge sums to send them to a social university because it shows they have the financial wherewithal to toss money away on entertainment for their kids; that is, it is conspicuous consumption.

These items of conspicuous consumption are a factor in the escalation of tuition at the traditional components of academia, however. The escalation of tuition has also turned a college education into a big-ticket item, with a result that students and parents are acting more like consumers in terms of how they shop around for the right school. If the trend in adding amenities continues with the result that tuition increases continue, the traditional colleges and universities may find that the tuition differential between them and for-profit colleges is widening.

At some point if the tuition differential gets large enough for students and parents to decide that social amenities are not worth the price, traditional academia may find that for-profit colleges are taking part of their market share. Moreover, when for-profit colleges find that their growth rates in their current market of non-traditional students has slowed, they may use their marketing expertise to develop programs that appeal to traditional-aged students. It took nearly a century for the large public university to expand its size and increase

its market share from 20 to 80 percent, in the process reducing the market share of the small liberal arts college to its current less significant size of less than 5 percent. Few persons in 1860 would have predicted that students would someday be willing to have an educational experience in the midst of 30 000 to 40 000 other students.

For the for-profit college to do the same to the large public and private universities of today as those institutions did to the small college, they must solve two related problems. First, they must find or train qualified faculty members to teach their courses. Right now, many faculty at for-profit colleges are trained at non-profit colleges and universities. The for-profit college must begin to either train its own faculty through expanded graduate programs or have non-profits continue to do it, in which case non-profit colleges may come to specialize in graduate programs alone. Alternatively, the for-profit college can use very advanced technology to obviate the need for highly trained professors. If the technology of on-line courses becomes as engaging as video games currently are, for-profit colleges may attract more of the students who want to be entertained.

John Stuart Mill proposed that public universities would offer competition to private ones and encourage them to change (and improve). He did not think that for-profit universities run on free-market principles would be effective, because students and parents were not discriminating enough to evaluate the information they needed to make wise decisions about which school to attend. The Internet and the numerous guides to colleges, however, now provide them with all the information they need to make that decision. In addition a higher percentage of parents in the US are college educated than previously, which makes them more knowledgeable about programs being presented to their offspring. Whether that information and knowledge will push them toward selection of for-profit colleges remains to be seen.

If for-profit colleges do succeed in attracting traditional-aged students, they may well alter the nature of academia and what it means to be an educated person. In the nineteenth century, the curriculum of academia revolved around Christianity. The rise of public universities contributed to a secularization of academia but not without a cost. During the secular education of the twentieth century, many academic disciplines have tried to secure for themselves the privileged position of virtue Christianity held in the nineteenth century, but none have succeeded. The only secular discipline that could claim a privileged position in academia due to its having a privileged position in society comparable to nineteenth century Christianity is business, as Veblen knew and deplored, writing, ‘the place in men’s esteem once held by the church and state is now held by pecuniary traffic, business enterprise’ (Veblen 1919: 48). For now academia has prevented business from taking that privileged position in its canon.

The rise of the for-profit model in higher education, however, may serve to advance the study of business as a core of academia. Students attending those schools seek to get an education to further their careers, and in the process learn to be well-adjusted to business and its values. The leaders of for-profit universities are well-versed in business and its values. To the extent that for-profit schools begin to compete successfully with traditional academia and attract a greater share of the traditional student population, they may place business in the privileged place religion once held in academia. For-profit colleges have an accommodating attitude toward business that counters the highbrow attitude, dating back to Plato and Aristotle, that business is beneath study. In the twenty-first century, for-profit colleges may well bring about the return of Plato's and Aristotle's feared vision of sophism in higher education, but in ways neither Plato and Aristotle nor even the sophists themselves ever imagined.

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