

Creativity in Later Life: The Case of the Academic Career Trajectory

The Sheth Lecture

The Emeritus College, Emory University

April 26, 2011

Robert A. Paul

It is certainly a great honor and privilege to be asked to deliver the annual Sheth lecture, and I want to begin by extending my appreciation to the Sheth family for their manifold generous and far-seeing contributions to the intellectual life of Emory University. Our community is very much in their debt for the efforts they have made over the years. The mandate for the Sheth lecture at the Emeritus College is the broad topic of Creativity in Later Life, and I am inspired by this theme to use the occasion to reflect back on my years as an academic administrator at Emory where I have served in such capacities as a department chair, chair of the College Tenure and Promotion Committee, Dean of the Graduate School, and, from 2001 through 2010, as Dean of the College of Arts and Sciences. The general subject on which I wish to speak is that of the academic career trajectory, and some of the issues that attend both those who choose to live it, and those who, as administrators, manage and oversee it for those who have chosen it. More specifically, on the wise principle of “write what you know”, I will be speaking mainly about the career trajectory of a tenure track professor in the Arts & Sciences.

The life of such a professor at a great research university such as Emory is, I would argue, intrinsically creative. First, insofar as the successful tenure track professor is required to produce

original research, which in turn can be defined as the production of new knowledge, any minimal criterion of creativity is already met. But perhaps equally importantly, teaching is the supremely creative act of contributing to the intellectual, and sometimes the emotional and ethical, formation of a new generation of unique individuals, whose very being in the world is shaped as much by those who teach them in school, college and graduate school as by anyone except their parents and other immediate family members. Finally, a truth I did not quite believe when I first heard it from my friend and colleague Rosemary Magee, one of the ablest administrators I have ever known, but came to realize in my own experience, academic administration and service involve almost nothing other than an endless series of problems, conundrums, and conflicts the resolution of which is, ideally, and almost always necessarily, a creative one.

Of course, it is possible to do each of things in ways that are only minimally creative, or not at all. One can create something that looks like research through the rehashing or recycling of old ideas, one's own or those of ones predecessors; one can be repetitive, boring, and unengaging in ones teaching so that one's positive effect on one's students is minimal; and certainly an administrator can be a bureaucratic hack or a rigid enforcer of shopworn rules and procedures straight from a handbook. I must say, however, that in my experience at Emory, reviewing the files of candidates for promotion and tenure, for example, both as a faculty member on the T & P committee and then as dean, this depressing portrait is very much the exception and not the rule. This is because, as I will elaborate later, both the self-selection of professors as those who by temperament actually enjoy and thrive upon good research and teaching (and sometimes even good administration), as well as the rigorous selection process that winnows the field beginning in graduate school and continues through the competitive demands of being hired, evaluated, and

promoted after a probationary period to a tenured position, ensure that most professors are actually very good at what they do, and strive to keep doing it creatively.

So I have established that the academic career trajectory – and this goes not just for those in the Arts & Sciences, of course – is potentially, ideally, and often enough in fact a creative one. The next question suggested by the theme of the Sheth lectures is, how long can one keep this up? Will promising and eager new assistant professors, excited about their research and energized by their teaching duties, sustain their enthusiasm so that thirty five years later they will still be doing their jobs creatively instead of by dry habit, rote repetition, or lifeless routine? There are opposing views on this score. To some observers of the academic scene, it is the seasoned full professors who, having spent a lifetime with their field of study and their own thoughts, can produce the most powerful and authoritative research and can teach with the broadest scope and deepest comprehension. On the other hand, one can also argue that those seasoned professors, having undergone their training decades earlier in graduate school, are far from the cutting edges of new developments in the field, and are still trying to solve problems that engaged the field when they were graduate students but have long since been transcended by new discoveries, new theories and methods, or by the intellectual fashions and fads of the times. The professor in the classroom reading from dog-eared and dusty yellowed notes scrawled years earlier is a commonly invoked image, if a caricatured one; but, I would ask, does the fact that the pages are dry mean that the professor is as well? She may be repeating herself, but the students hearing the material for the first time may nonetheless experience a revelation. In short, the question on the table is: do professors age like a fine wine, or do they gradually lose steam and exhaust the vitality that imbued their earlier work with the creative spirit?

Perhaps the most interesting contribution to the understanding of the process of creativity in later life that I have encountered is to be found in the book *Old Masters and Young Geniuses*, by the University of Chicago Professor of Economics David Galenson (2007). Galenson focuses on artists to develop his theory, but he also argues that his findings may apply to scientists and other scholars as well; he clearly indicates that it works for economists, though he does not demonstrate this systematically. Briefly, Galenson's argument is that there are two very different styles of creativity, which he calls experimental and conceptual. Experimental artists may spend a lifetime exploring the world as they perceive it, striving for a never fully formulated ideal toward which their actual works of art serve as so many cumulative attempts to capture some truth about the world, worked out in the actual process of creating the art work.

Conceptual artists, by contrast, see the art work as a realization of an idea that is preformed, so that the work of creating the art takes place before the actual execution. Galenson argues that experimental artists generally speaking have a career that involves a gradual evolution, in which the finest works are produced last, when a lifetime of engaging with the medium and the world leads to deep masterworks. Therefore, they tend to be most creative in later life. Conceptual artists, by contrast, would be hampered by long immersion in the problems of the art at any moment in its history, since these are precisely what they seek to overthrow or transcend.

Instead, they brush aside conventions and come at their work with a bold and innovative idea that, at its best, transforms the field. Typically, such artists accomplish their great work at an early stage in life, and often either die young, or, if they live long, never replicate their earliest dramatic conceptual breakthroughs.

Galenson chooses as exemplars of these two styles of creativity Picasso and Cezanne, the former a great conceptual artist, the latter a great experimentalist. What is so novel about Galenson's approach is his method: he uses the tools of an economist to establish the relative "greatness" or "creativity" of different stages of an artist's life, and then correlates these with the ages at which the greatest accomplishments are achieved. By looking at such indicators as the relative prices at auction of paintings the two painters produced when they were different ages; the frequency with which paintings from their different artistic periods are reproduced in textbooks on the history of art; and the paintings chose by museums for retrospective exhibits of the artist's work, Galenson can create a quantitative measure of when the artist's originality was at its peak. Remarkably, each of these measures produces the same result: Picasso was at his greatest at the age of 26, when he broke with existing traditions and, working together with Braque and to some extent Gris, invented Cubism, which reoriented the entire subsequent history of art. Although he lived a long life, nothing he created later in life is rated by the collective judgment of those who buy, sell, write about, and curate art as equal to masterpieces such as *Les Demoiselles d'Avignon* of 1907 when he was 26.

By contrast, Cezanne's greatest work, judged by the same criteria and methods, are those from age 67, when he produced his most well known and characteristic still lifes of apples, views of Mont St. Victoire and so on. Unlike Picasso, Cezanne often did not sign his paintings, had little concern about marketing them, and almost never considered them finished, instead viewing each one as a closer and closer approximation of a way of capturing perceived reality – in other words, as an experiment that emerged under his brush, rather than as a theory or concept about the nature of perception, such as the Cubist idea.

Before applying this theory to the academic career, I want to take a moment further to appreciate the creativity of Galenson's own achievement: his work is a fine example of scholarly innovation at its best: no one before him had ever believed that the relative greatness of art could be turned into a quantitative measure. What was it that allowed him to make this novel discovery? As he himself relates, it was that while writing a thesis on economic history in college, he took an elective course in the history of modern art, and wondered whether there might be a way to evaluate art by looking at its market prices recorded in the ledgers of the great art auction houses. This, in turn, is a fine illustration of the process that Arthur Koestler, in his somewhat neglected but nonetheless masterful book *The Act of Creation*, posits as the essence of creativity in both art and science (as well as in humor): what he calls the bisociation of two hitherto incompatible matrices. When in reverie, dream, fantasy, imagination, or an inspired moment, a prepared mind juxtaposes one "matrix", or organized set of rules and conceptual codes with another, the result can be a genuinely novel entity. Thus, in Galenson's case, the fact that he was studying art history at the same time as he was immersed in the field of economic history, created the favorable situation in which his mind was able to think the two very different fields together in a way that produced a valid scholarly breakthrough.

There can be no stronger argument, I think, of the value of a college liberal arts education, or indeed, of a university that does not merely train students in a technique or an algorithm, but rather exposes them to a range of modes of thought that some of them, at least, will unite in creative and productive ways. A recent sociological study of institutions that had nurtured the largest number of Nobel laureates and other high achievers in science and scholarship discovered

that a key factor at each was the fact that they encouraged people from different disciplines to come into regular contact with each other, underscoring the power of Koestler's key insight about creativity. And, indeed, one could also say that the Emeritus College itself provides a foundation upon which just such an institution could be developed, since it has the potential to bring together in productive juxtaposition scholars who have devoted a lifetime to a field in an environment in which they can be exposed to and stimulated by the thought and experience of their colleagues from other fields of study.

But to return to the question of creativity in the academic career: I believe it could probably be argued that most professors fall into the experimentalist style of creativity, rather than the conceptual one, in Galenson's terms. There are of course exceptions, and certain fields, such as mathematics, theoretical physics, and some others of a more formal nature, are often characterized, perhaps unfairly, as ones in which the best work is done early on. It is an old chestnut in administrative circles that in those fields, it might make sense to begin one's career as a full professor and gradually devolve to being an associate professor and then an assistant professor, instead of the other way round. As an example, one thinks of someone like James Watson, who was 25 when he discovered the double helical structure of DNA, along with his colleague Francis Crick. Although he had a long scientific career, he never again came close to equaling that paradigm-altering achievement. Much the same, indeed, could be said about Einstein or Newton, both of whom made their great conceptual breakthroughs in their twenties, and then spent long careers rife with achievements – like Picasso's – but without ever matching their earliest paradigm-shifting contributions.

By and large, however, it is my impression that most scholars in universities conform to the model of the “old masters”, who mature and deepen in their thinking and are sustained by an engagement with their subject matter that motivates them to keep experimenting and pushing further with problems that intrigue, provoke, or animate them, rather than reorienting the paradigm with a great conceptual coup and then waiting, often in vain, for comparable inspiration to strike again. If that is so, and while of course there is great individual variation, it seems plausible to propose that scholarly creativity, in both teaching and research, and, where relevant, administration, is something that has the capacity to at least maintain itself and at best increase over the course of a scholar’s career.

That answers the question of how long one can keep it up from the point of view of the motivation of individual professors living out a career trajectory devoted to scholarly pursuits; but the answer to the question from a legal, institutional point of view, is far simpler, if also more contentious: it is “as long as they like”. In contemporary American universities, the combination of two factors – academic tenure and the absence of a mandatory retirement age – combine to produce a situation in which professors can remain in the job at full pay at will, and the institution has no power to do anything about it. With increases in longevity, and in the prevalence of healthy life styles, as well as in the extending of health and vigor in optimal cases into later and later ages, and given that the work is of a sort that indeed benefits from a previous lifetime of experience, there is very little incentive for anyone to give it up unless moved to do so either by negative factors, such as physical decline, or positive ones, such as a wish to spend unencumbered time pursuing avocations, enjoying family and friends, or just enjoying life in the

myriad ways in which it is possible to do so.

Opinion is very much divided these days over the question of whether this current institutional arrangement in fact benefits the university, the students, and the wider community, or whether it is in fact a privilege that really only serves the self-interest of the professoriate, which puts forward high-minded claims about the necessity of this system as a smoke-screen to protect a cushy sinecure enjoyed by almost no other sector of society. It is to this thorny question of academic tenure that I now want to turn my attention.

Many of us may take the fact of tenure to be a settled issue, but it is not. In 1995, as many people know, the Regents of the University of Minnesota attempted to put in place new regulations that included weakening the inviolability of tenured appointments, touching off what became known there as the “tenure wars”. Tenure survived in Minnesota, but in the same year, the State Legislature of South Carolina considered a bill to eliminate tenure from all state educational institutions, including the University of South Carolina, on the grounds that it was an inefficient business model. While the bill never made it out of committee, the fact that the suggestion was raised at all, and provoked a ringing rebuttal from the head of the state’s Commission on Higher Education, indicates that the matter is far from settled once and for all. Journal articles debating the merits or lack thereof of the tenure system are legion in educational circles, and I myself have heard fellow administrators opine, sometimes with dismay, sometimes with approbation, that the tenure system will probably be gone within the next few decades. We are all aware, I assume, of the hue and cry that has been raised against tenure for grade school teachers in the current ongoing battles over public employees unions, and there is widespread

resentment and envy of this particular perquisite of the teaching profession in evidence in the media and the blogosphere. Indeed, the change in the popular stereotype of the schoolteacher in some sectors of the media, from the benign, altruistic, underpaid nurturer of our children to overprivileged and underworked union thug whose incompetence is protected by a lifetime guarantee of employment has been swift and dramatic.

I want to focus here on two recent books on the current state of higher education, both of which forthrightly call for the abolition of tenure for all university professors. The authors of these books can by no means be dismissed as marginal cranks, or as apologists for either a corporate business model for universities stressing financial efficiency, or a for a right wing ideology that denounces universities as hotbeds of tenured radicalism. Mark Taylor, author of *Crisis on Campus* (2010), is a distinguished professor of religion and philosophy at Columbia, with 24 books to his credit. The authors of *Higher Education?* (2010) Andrew Hacker and his wife, Claudia Dreifus, are respectively a distinguished professor of Political Science at Queens College-CUNY and an adjunct faculty member at Columbia's School of International and Public Affairs, and a regular contributor to the *New York Times*.

Before addressing the critiques of tenure leveled by these thoughtful observers, it will be useful to briefly sketch why tenure exists at all, and what is its presumed rationale. As Taylor shows, the idea of the modern university was invented by none other than the great philosopher Immanuel Kant, in his 1798 treatise entitled *The Conflict of the Faculties*. In that work, Kant distinguished between the professional faculties, which would train those such as lawyers, statesmen, and businessmen, who would become effective servants of the state, and the "lower

faculty” – today’s college of liberal arts – which would be free of all state interference, would study and teach knowledge solely for its own sake, would be able to sponsor thought critical of existing bureaucratic institutions, and would govern itself by peer review without fear of meddling by outside authorities. That theoretical model was in fact implemented by the great educator Wilhelm von Humboldt, at the University of Berlin; and the German research university went on to become the model for the American research university in the late nineteenth century, first with the establishment of Johns Hopkins explicitly on the German model, followed by the founding or reorganization of such universities as the University of Chicago, Harvard under President Charles Eliot, and so on, and it continues as the model to this day, including here at Emory.

The German university enshrined a principle called *lehrfreiheit*, freedom to teach, that was the forerunner of today’s tenure system in America, imported with the rest of the Kantian-Humboldtian model. It was recognized only informally until the matter came to a head in the case of Edward Ross, an economics professor at Stanford who, in 1900, was fired for publicly espousing such then current but unpopular doctrines as free silver, a ban on immigration from East Asia, municipal ownership of utilities, and the presidential candidacy of William Jennings Bryan. Perhaps his most fatal move was to argue against monopolies and in favor of close public scrutiny of the Southern Pacific Railroad – which was, of course, the source of the enormous wealth of Leland Stanford Senior, who had endowed the university in the first place. Stanford’s widow, Jane Lathrop Stanford, who was the university’s sole trustee at the time, insisted that Ross be dismissed, and the president, David Starr Jordan, complied. This provoked several of Ross’s faculty colleagues to leave Stanford in protest, and many of them went off to themselves

become embroiled in similar disputes elsewhere. One, William Fischer, for example, was fired from Wesleyan in 1913 for supporting relaxation of the Sabbath and stressing the importance of good works over church attendance. That year, another refugee from Stanford, Arthur Lovejoy, then at Johns Hopkins, rallied several colleagues to form a national association of professors to protect the principle of *lehrfreiheit*. Two years later, in 1915, the American Association of University Professors came into existence, and issued the “1915 Declaration of Principles”, identifying three distinct elements within the overall rubric of “academic freedom”. These were “freedom of inquiry and research; freedom of teaching within the college or university; and freedom of extra-mural utterance and action.” In 1940, after the American Association of Colleges had weakened some aspect of the 1915 Declaration, an agreement was reached which established the principle of the probationary pre-tenure employment period, and made all dismissals “for cause” and subject to a trial procedure in which faculty peers would be the deciding voices. The 1940 Declaration is the basis of almost all academic tenure practices in American universities today.

As Gregory Dickenson, in his excellent brief history of the tenure system, upon which I have drawn here, points out, the effectiveness of the declaration came about in part because it was seen as part of a much larger unionization movement during the early years of the twentieth century that sought to erect all sorts of protections of employees of all kinds against exploitation and peremptory dismissal by employers. In other words, it was, in effect, the formation of a teacher’s union. Although the Supreme Court decided in 1980, in the *NLRB v. Yeshiva* decision, that college faculty members were management, not workers, and therefore could not form unions, the moral force of the AAUP, together with the fact that any university that on its own

chose to do away with tenure would not only receive heavy criticism but would lose market position in the perpetual chase after the best and brightest professors, have served to maintain the real teeth in the guarantees of job security afforded by the tenure system.

In the 1940 Declaration, two different rationales for tenure are enunciated. One is that without tenure, the academic profession will not be able to attract men and women of the best quality and thus optimally serve its students and society. This was a key argument made, for instance, by David Loope, the head of South Carolina Commission on Education, in opposing the 1995 bill to abolish tenure there: South Carolina would lose competitive advantage in attracting strong scholars, and the result would be a decline in research income for the state (Loope 1995). This argument for tenure, along with the self-protection dimension embodied in the union-like positions defending job security, may be thought of as the less high-minded, if also perfectly reasonable, defenses of tenure. There is also, however, the more noble and idealistic rationale for tenure, stated in the 1940 Declaration in those key words: “Freedom of teaching and research and of extramural activities”. According to this rationale, tenure protects not only the professors themselves, and the competitiveness of the institution, but also society.

From what, then, does tenure for professors protect society? This is where the critics of the tenure system, such as Taylor and Hacker & Dreifus, are at their most cutting. Taylor, for example, in addition to arguing that tenure is simply a perk unfairly enjoyed by only this one sector of the employed population, and that it is economically inefficient, since it requires universities to spend large amounts on the high salaries of senior professors when they could be hiring less expensive junior professors, takes on the “academic freedom” argument in these blunt

words: “The traditional defense of tenure is academic freedom. In the absence of tenure, the argument goes, professors would not be free to express controversial idea, new ideas that question conventional wisdom, without fear of dismissal. But on the basis of my experience, this argument is completely without merit – in forty years of teaching, I cannot think of a single person who was more willing to express his or her views after tenure than before.” (p. 205)

Other critics have gone further, and argued that in the pre-tenure period, junior faculty members must actually get into the habit of not crossing their tenured colleagues by stating unconventional ideas, so those senior colleagues will support them during the tenure review. Thus, it is claimed, tenure actually discourages, rather than encourages, real originality. And it is often further argued that the granting of tenure decreases productivity and quality by removing any incentive to maintain high standards of work – something that it is said periodic evaluation for continuation would accomplish.

Hacker and Dreifus, for their part, write that such claims as that tenure exists, as a New Jersey superior court ruling put it, “out of concern for the general welfare by providing the benefits of uninhibited scholarship and its free dissemination”, though they have a plausible ring, do not themselves show why this desirable result can be ensured only by the protection of employment for the professoriate. Like Taylor, they write that we have “scoured all the sources we could find, including the ACLU and the AAUP, yet could not find any academic research whose findings led to terminating the jobs of faculty members. We’re referring to the research that chemistry professors do in chemistry, geologists do in geology, and English professors do in literature. (135)” By this last caveat, which is central to their argument, they are ruling out cases in which professors are dismissed for expressing unpopular opinions not related to their field of

inquiry. And they go on to list three cases of tenured faculty who got in trouble for “extramural” speech: a professor at an Alabama college who blamed the president of the college for falling enrollment and poor morale in a local newspaper column; a professor at a Baptist university in Ohio for failing “to maintain consistent, biblically appropriate spiritual interest and effective Christian relations within the university family”; and an engineering professor in Idaho who sought a no-confidence vote in his president”.(136) These authors then conclude that three features of these cases stand out: first, that they all lost their jobs; two, that tenure didn’t actually protect them; and three, the acts of speech that got them in trouble did not involve their actual teaching or research in their academic specialties. Since anyone in any profession might get into trouble for criticizing a superior, or failing to abide by principles espoused by the employing institution, Hacker and Dreifus argue that “it is quite a stretch to say that because that [being a professor] is their occupation, everything they do must become an exercise of academic freedom. Criticism of a supervisor doesn’t take on a special academic status because it is leveled at the head of a college rather than, say, an insurance company....We would only add that there are another three hundred million residents of this country who would like to express themselves without hindrance or penalties. We hope it won’t be argued that professors need broader and more vigorous protections for speech in and out of their workplace than accountants or dentists.” (137) Like Taylor, they suggest that professors can and should defend their right to free speech on the basis of the First Amendment, like everyone else, not on the basis of some special dispensation granted to no one else (except federal judges).

Both Taylor and Hacker & Dreifus argue that to deal with 21st century challenges, including globalization, the ongoing revolution in communications technology, the apparent non-viability

of most university business models in the current and foreseeable financial climate, the mobility of the work force, new patterns of life and work for younger people, and others, the university must be nimble, and that tenure creates a kind of sclerosis that prevents the infusion of new blood and the quick response to new ideas and methods. Since, they argue, the arguments for tenure are either bogus, in the case of the argument about freedom of academic teaching and inquiry, or merely self-serving, and unfair to the millions who do not enjoy tenure protections, there is therefore no reason, other than stodginess and self-interest, both at the level of the individual and of the university, to retain the tenure system. According to them, it should be replaced with contract appointments leading to periodic review, which would both ensure a higher level of post tenure performance and/or weed out those who were no longer performing up to standards.

These arguments deserve serious consideration, and they sound plausible and reasonable, but in my view they are profoundly wrong, for a number of reasons. The first group of these are internal to their arguments; the second group is of graver concern, and have to do with what I perceive as the public good that tenured faculties at research universities provide, and the sustained threat that it is under in the contemporary political arena. To begin with Taylor's assertion that in his forty years he has never encountered anyone who was more outspoken after tenure than before, I can do no better than to cite Taylor's colleague, Jonathan Cole, the long time provost of Columbia. He writes: "I don't know where Mark was hanging out...over those 40 years, but he surely was not considering the repression that has periodically taken place in our great universities." These episodes include the McCarthy era, when only tenure prevented many professors from being fired, and many untenured professors were let go; the civil rights era,

when faculty members in some parts of the country risked dismissal for favoring integration; or the anti-Vietnam War era, when administrators such as even the redoubtable Henry Rosofsky, as he admits in his memoir (1990), were sorely tempted to try to fire professors who aided and abetted student protesters. In any event Taylor's personal opinion about his colleagues' attitudes hardly constitutes a real argument.

The arguments of Hacker and Dreifus are more numerous but easier to refute, being rather like the arguments put forth in Freud's famous anecdote of the person who returned a borrowed pot in damaged condition, arguing that a.) it was already damaged when I borrowed it, b.) if was in fine condition when I returned it, and c.) I never borrowed it. H & D argue that in all their travels they never met anyone who was dismissed for unpopular views; that they encountered several people who *were* dismissed for their unpopular views, so tenure is not so great after all; that no one with tenure is ever dismissed; and that at places like Evergreen College and others where there is no tenure, no one is ever dismissed anyway. But of course they didn't come across anyone who was fired because such people were not fired precisely because tenure was in place; if it hadn't been, quite a few of them surely would have been fired. Their argument that being fired for problematic speech outside ones field of study doesn't count is inconsistent with the 1915 and 1940 Declaration, according to which extra-mural speech and activity is as protected as is speech or activity in the classroom or in research publication. And, like Taylor, they are altogether too sanguine, in any event, about what is at stake in the debate over tenure and academic freedom.

The public good that research universities provide for society is the discovery and dissemination

of statements about the world, in the most general sense, that have been arrived by methods, and in a spirit, untainted by any sort of external interest, bias, or pressure – in short, the creation of disinterested knowledge. Protected by the often derided ivy covered walls of the campus from the direct impact of the forces of the market, the work conducted in universities, especially by researchers, is guided by a prestige economy as opposed to a monetary one, and in this respect stands apart from most other contemporary institutions. Professors are motivated not by the hope of financial reward alone – if they were they would never have gone to graduate school – but by a commitment to research that meets the canons of their discipline and is recognized and rewarded for its originality and validity. Society desperately needs access to unbiased and disinterested facts upon which to make key decisions about all sorts of policy at every level: Is the weather's climate warming for manmade reasons, or not? Is Social Security going to go broke in a few years or decades, or not? If facts are reduced to manipulable items in a larger game of economic interest or political power, then any basis for rational decision making is rendered hopeless.

Yet the forces imperiling such unfettered inquiry today are many and relentless. Donors, funding agencies, outside interest groups of all kinds, all have agendas to which they attempt to tie their support, or lack of it, for universities. It does not matter what the agendas are, but rather that it is rarer and rarer for example for a philanthropist to give a large sum of money to a university and say “you are the best judges of what to do with it” (and here let me acknowledge with deep gratitude such a gift to Emory College recently made in the bequest of an alumnus, the late James Varner.) More and more, those with the wherewithal to keep universities in business seek a say in the kind of knowledge produced there.

These forces have always been there, though are growing steadily. What is of greater concern, however, is the fact that powerful interest groups are targeting the very idea of disinterested knowledge altogether. We thus have the spectacle, for example, of a large number of members of congress asserting that the science indicating man-made global warming is false or not proven. I am not asserting, by the way, that I know the answer to whether global warming is occurring and is caused by human activity; but I am asserting that these congress people can't possibly know that either, but nonetheless are attacking the hitherto rock-solid legitimacy of the scientific enterprise and community itself in what is very obviously the self-interest of well funded corporations and individuals who profit from the production of fuels that emit greenhouse gases.

We also see the establishment and growth of legitimacy in the public eye of privately funded "think tanks" that produce research not guided by the principles that guide university research, but by the economic or political agendas of their funders, and we see these sometimes treated in the media as if the ideas emanating from them were of equal worth as those produced in research universities. We see the growth of for-profit educational institutions, whose only interest is in the bottom line. We see a U.S. senator, rather like Proxmire before him, grabbing headlines by investigating the use of federal research dollars by university researchers. And most chillingly, to me, we see a very troubling new development, namely, the realization on the part of some politicians that professors at state universities are, in fact, state employees, and can therefore be placed under threatening scrutiny of their strict adherence to rules guiding the conduct of such employees, in everything from the integrity of their research, to their taking of partisan positions,

to their using their computers to let their spouses know they will be home late for dinner rather than for some scholarly purpose. Consider the case of the Attorney General of the Virginia investigating possible research fraud by a climate scientist at UVA; or the state senate in Wisconsin demanding the email files of a very distinguished US historian who had the temerity to write a historically true account of the positive role of earlier generations of Wisconsin Republicans in labor disputes in the past. I doubt whether these professors will lose their jobs; but actually that is not the point. The University of Chicago's great president Robert Hutchins, who unlike the presidents of many other universities in the McCarthy era refused to be badgered into turning on his faculty, pointed out the obvious: "The question is not how many professors are fired for their beliefs, but how many think they might be. The entire teaching profession is intimidated." If researchers in universities begin to pull their punches out of fear or political reprisal, all of society suffers a devastating loss, the loss of the true compass of disinterested knowledge.

I therefore believe universities must vigorously recommit to support the principles of tenure as the strongest guarantor of research integrity – the highest value we as scholars hold. I believe this not in spite of the strong and often persuasive criticisms leveled at the tenure system, but precisely because they are on the surface so reasonable and appealing. As Hacker and Dreifus admit, "We realize that to question tenure puts us in strange company. Most who oppose it are executives who abhor employment guarantees of any kind, or conservatives who view it as the enabler of left-wing correctness on campuses" (135). They are quite right. The past several decades have witnessed a concerted attempt by moneyed interests and outsized corporations to weaken or eliminate any institution that stand ins in the way of unregulated, unopposed, and

unfettered profit-driven business activity. I'm all for the strong business enterprise necessary for production, consumption and employment in a vibrant economy. But like many I have been taken aback at both the vehemence and the relative political success of efforts to undermine, delegitimize, or destroy institutions that do not simply support the economic interests of business at the expense of employee -- not to mention the environment, and, as I have said, the principle of the search for knowledge based on disinterested research free of external interference.

Those institutions, as Chris Hedges argues, include labor unions, independent media, mainstream churches and religious institutions, the Democratic Party, and universities – a list to which we might also now add the Federal Government itself. We are witnessing in today's headlines the climax of the decades long effort to destroy unions. We know that the vast majority of media outlets are in no position to question or critique corporate power since they themselves are owned by it and are thus agents of it; we have seen public religious discourse usurped by a particular sectarian ideology that subjects the traditional religious concerns in mainstream denominations of altruism, service, concern for the less fortunate, and anything that can be labeled “social justice” to mockery and contempt; we have watched the feckless pandering of the Democratic Party and its inability to articulate a clear vision in opposition to the blatant Ayn Randian doctrine of selfishness and greed spouted in growing circles of our political life; and we may well be on the verge of witnessing a destructive deadlock in the Federal government over the budget that will literally bring it to a grinding halt. The last one standing, in short, is the University, and calls for the abolition of tenure, no matter how sensible they may sound, or no matter whom they issue from, are, in these circumstances, intentional or unintentional stalking horses for a less high-minded assault that would de-legitimize, for the blatantly self-interested

purposes of a small but disproportionately well funded and highly motivated minority of the public, the research integrity and the spirit of open critique in the last bastion in which they are still reasonably well protected.

So, to conclude: scholarly creativity in later life can be, and usually is, the rich culmination of a lifetime of experiment and experience on the part of individuals who, whatever their faults – and they have many, it is true, like everyone else – are driven by the pursuit of knowledge that stands the test of the judgment of scholarly community. It should be supported for that reason alone. But the safeguards that protect such scholars from being intimidated and or made to pull their punches or hold their fire – these too need to be reaffirmed strongly in our time by the scholarly community and by the society that benefits from having genuine truth-tellers in its midst whose creativity is immune from censorship or intimidation.

References

Cole, Jonathan (2010). Why Academic Tenure is Essential for Great Universities. Huffington Post online, November 5, 2010.

Dickenson, Gregory (2008). Academic Tenure and the Divide Between Legal Academia and Legal Practice. *The Dartmouth Law Review* 6:318-350.

Galenson, David (2006). *Old Masters and Young Geniuses: The two cycles of artistic creativity*. Princeton: Princeton University Press.

Hacker, Andrew & Claudia Dreifus (2010). *Higher Education? How colleges are wasting our Money and failing our kids – and what we can do about it*. New York: Times Books.

Hedges, Cris (2010). *The Death of the Liberal Class*. New York: Nation Books.

Koestler, Arthur (1964). *The Act of Creation*. London: Hutchinson Books.

Loope, David R. (1995) Academic Tenure: Its origins, administration, and importance. South Carolina Commission on Higher Education Staff Position Paper.

Rosofsky, Henry (1990). *The University: An owner's manual*. New York, London: W.W. Norton.

Taylor, Mark C. (2010). *Crisis on Campus: A bold plan for reforming our colleges and Universities*. New York: Alfred A. Knopf.

Creativity can really alter the way students approach a problem and it can be impressively optimistic once they go through creative teaching sessions. Creative problem solving can be encouraged in classrooms that help students to think out of the box and be more imaginative and innovative. With this way, the problems or opportunities are redefined by the students and the solutions or responses would be more innovative. 7. Improves Focus and Attention. Research Tools: Questionnaire of creativity and academic achievement of the students' average scores were used. The reliability of the measurement device. Cronbach's Alpha test was used to determine reliability. In the educational setting, creativity is important because it can serve daily life skills (McLellan & Nicholl, 2013) and affects the academic performance in schools (Nami, Marsooli, & Ashouri, 2014). Unfortunately, the evidence shows that creativity has not developed well in Indonesia. Intelligence and Creativity: An Investigation of Threshold Theory and Its Implications. Implications of the results for research in creativity and education are discussed. View. Show abstract. , Ph.D. Electrical Engineering, Purdue University (2021). Answered April 19, 2018. Check out AROGYASWAMI PAULRAJ. He is now a godly figure who started his academic career after retirement. Fun Fact: He is my great grand academic advisor and also just recently won the Marconi prize. 513 views . View 2 Upvoters. Sponsored by Power Life. Celebrity trainer: I feel better at 60 thanks to these 4 foods. Tony Horton reveals the revolutionary at home trick that saved his life. Watch More. Related Questions. What are the four things that scientists do?