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ABSTRACT

This report discusses criticism of academic tenure and examines the literature that supports or refutes these criticisms. The author finds current tenure practices result in a collective faculty that will age over time and that the percentage of tenured faculty will increase markedly. But he also concludes that studies of faculty adaptability and productivity show that these qualities are not impaired by tenure status. Court decisions affecting tenure and faculty collective bargaining are also briefly discussed. (Author/CS)

TENURE

ASPECTS OF JOB SECURITY ON THE CHANGING CAMPUS

ROBERT T. BLACKBURN

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Foreword

The role of the college teacher in today's society is seen in a variety of ways. As a member of his professional association, he is a scholar representing a particular academic discipline. As a participant in university affairs, he identifies institutionally. To members of the state legislative committee on higher education he may be viewed mainly in his responsibility for undergraduate teaching. These are but several of many roles.

Since publication of *The College Campus in 1969: The Faculty*, which reported the deliberations of the 18th SREB Legislative Work Conference, the campus is reacting less to immediate crisis and showing concern for basic issues that will shape the picture of higher education. Definitions of faculty role, meanwhile, are increasingly sensitive to the pressures of the market place.

Professor Robert Blackburn has brought into focus several current concerns about the college teacher in his dual role both as academic and economic man. As higher education changes in scope and the nature of its impact upon society, it continues to function primarily through the day to day contributions of college teachers. It is crucial to the well-being of campuses that conditions of employment respond to the mutual needs both of the faculty and of the institutions which they serve. What is the continuing role of the tenure system? In balance, how does it affect the efficiency of faculty? What are the prospects for faculty unionization and of collective bargaining? Where do we go from here?

WINFRED L. GODWIN, *President*
Southern Regional Education Board

Preface

When society needed highly trained manpower, it supported higher education generously. Now, with a momentary imbalance of unused expertise and a host of other social problems requiring vast sums of money, it is not surprising that society is carefully examining its priorities. After all, economic goods are one thing, consumer goods another. Add to these realities the facts that some student behavior continues to affront many, that some faculty champion unpopular causes, and that some administrators seem to equivocate rather than to lead.

It is no great surprise, then, that higher education is under attack. When our colleges and universities are used as political footballs, unfair criticisms and unconstructive actions result. But when serious questions call for education to be accountable, then improvement results. It is right and proper for society to hold its institutions responsible. Fortunately, the general terrors of today's critique fall in the latter category.

The faculty are the heart of our colleges and universities. Administrations support an environment in which students can learn, new knowledge can be discovered, and service rendered to society. Teaching, research, and service are the faculty obligations. How they are performing these tasks becomes the focus of the attacks on higher education. What are faculty doing well? Where is improvement most needed? What factors nourish faculty output? Which ones inhibit? What are the causes?

The present study examines three factors affecting faculty performance—tenure, the courts, and collective bargaining. These three

aspects are receiving increased attention today. The practice of tenure is most directly under scrutiny; principal attention has been given to this practice in higher education. How legal matters and faculty unionization affect job security are related to tenure. The principal concern, of course, is how employment devices affect faculty performance.

Finally, a word on a matter of rhetoric. Just as graceful sailing sloops always have had the female gender even when all the crew is male, so are colleges and universities always "alma mater," even in those colleges where all her graduates are men. Similarly, the professor has always been academic "man" regardless of sex. I have retained this tradition, not as an affront to women in higher education and certainly not as one insensitive to the discrimination women have been subjected to in colleges and universities. Rather, the prose suffers greatly in the elimination of the personal pronoun. "She/he" and "her or him" likewise disrupt the pace. With these apologies, "academic man" remains "him," in the text.

Many Center colleagues have contributed to the strengths of this document through interchange and critique. Fred Breisch, Tim Gilmour, Paul Lingenfelter, Jim Litwin, Herb Martin, Bob Peterson, John Remington, Mark Schlesinger, and Jack Waggett addressed a related problem and shared their discoveries with me. Norm Harris, Dianne Peters, and Dick Wynn provided extensive editorial assistance, as well as substantive corrections. SREB staff supplied support and the proper perspective. Discussions with Roger Heyns suggested a conceptual setting for the paper. I am indebted particularly to these people and to them I express my gratitude.

ROBERT T. BLACKBURN

University of Michigan
June, 1972

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I. Introduction

Just as tides ebb and flow and nights follow days, so social institutions conform to patterns of rise and fall. Fortunes follow misfortunes and bad luck chases away good; a scientific establishment climbs with a moon shot and falls with a landing. It is no different with higher education. Higher education has fallen from grace. She has tumbled. On that we can all agree.

We can also agree that her tumble was inevitable. Even if there had been no campus demonstrations protesting Vietnam and no attacks on administrators for failing to deal harshly with recalcitrant students, higher education would still have fallen. Unparalleled booms tend to yield unparalleled busts. There was no other way to go from the unprecedented heights of the 1960s but down (Miller, 1971).

Higher education has run the full gamut, from public accolade to public wrath, and that wrath has focus. No longer do citizens aim their weapons at institutions of higher education—nor even at administrators or students within these institutions. Instead, the principal target is now the academic man.

And tenure is the bull's eye.

The critics come from the left as well as from the right, from administrators as well as from legislators, from faculty within the ranks as well as from students. Several take their cue from students and suggest that faculty preoccupation with research and neglect of teaching is a part of the cause of student alienation (Steiger, 1970: 86). "Liberals" cite faculty resistance to internal change as a drag on needed university reform (Furniss, 1970: 64-65).

"Conservatives" accuse faculty of poisoning young minds with leftist propaganda (Mitchell, 1970; Byrd, 1970). As their movement gains support, women still see the university as a closed system (Moog, 1971: 983).

In Michigan, minimum work load standards for faculty were established by the legislature (State of Michigan, 1970); in California faculty were excluded from a salary increase granted to all other state employees; and, according to the *Chronicle of Higher Education,* limitations on academic tenure have been proposed in five states (Scully, 1971: 1-4).

An article in *Time* quotes a university president:

> Almost every campus has them: incompetent professors who cannot be fired, much less shamed into quitting.... [Tenure has become] a device used by the devil to encourage faculty slothfulness.... Many campuses are now afflicted with an oversupply of drones who refuse to make way for younger, more dynamic teachers (1971: 61, 64).

The colorful prose might tempt an observer to discount its attack if similar, albeit less vivid, broadsides were not being made from within the academy. An informal poll at the 1971 convention of the American Association of Higher Education (a mixture of people from higher education, though primarily administrators) showed that only 95 of 585 believed the tenure system to be basically sound and 133 thought it should be abandoned (Hodgkinson, 1971: 8). (In the unpublished 1972 poll, the numbers were larger but the percentages essentially the same.) The American Association of State Colleges and Universities recently withdrew its support of the American Association of University Professors' 1940 policy statement on academic freedom and tenure (AASCU, 1970: 1).[1] Also, the Scranton Commission (1970: 22) and the Newman Commission (1971: 1) recommended limitation on tenure appointments in order to increase diversity among college faculty.

In addition, while not as concentrated but just as intense, the courts are besieged with cases that heretofore seldom left the campus community. Until now typically settled within cloistered hall, more and more academic practice is being established by decisions made in halls of justice. Add to judicial academic policy the entrance of faculty into the collective bargaining arena and the complexities of tenure multiply. Divisions of opinion on legal and unionization losses and benefits fuel the heated debate.

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[1]The Association has recently passed a new and different statement (AASCU, 1971). It continues to endorse academic tenure.

In short, emotions run high. Angry critics sight in not only on the general target of faculty, but also on what they perceive as the center of the target—the bull's eye of tenure. But the first problem is that these critics have chosen a clumsy weapon. By using a shotgun instead of a rifle, in effect they obliterate the entire target instead of making one neat hole in the center of their concern.

If the first problem is an inappropriate weapon, the second problem is that its sights are misaligned. The real center of the target is not tenure but tenure's purported consequences. Inappropriate weapons with faulty sights confound the real issue. Critics assume that tenure bears a direct causal relationship to faculty's inability to change and faculty's lack of productivity, and so they select an artillery piece for destroying the whole instead of choosing arms suitable to accomplishing a limited objective.

The critics have been distorting. They may even be guilty of fraud through exaggeration. Their claims and counterclaims are not just extreme; they are contradictory. The time has come to choose the proper weapon and set the sights correctly.

Frontal attacks call for a direct response. First we examine the facts with respect to aging of faculty and the number on tenure to see if the critics have selected a proper target. Next we inspect the research which deals with faculty adaptability and with faculty productivity. Clarifying these relationships then permits a re-examination of the target and allows a deeper understanding of some problems of higher education.

Some Facts

The statements that need to be established are (1) whether the average age of faculty will now rise after having remained quite constant for a long period of time, and (2) whether the number of faculty under tenure will increase. Then, if these assumptions prove true, is their magnitude appreciable and important? Or is the effect so small so as to be inconsequential and not worth the immense effort now being expended to alter a long-standing practice in higher education? Altering tenure practices may be important to improving higher education. If so, tenure practices should be changed. But, and this is the point, they should not be changed for whimsy's sake; whim, based on false or inconsequential data, gives no cause for action.

To begin with, there is no longer any need to dispute that faculty supply will exceed faculty demand for at least the next

two decades (Cartter and Farrell, 1969; Cartter, 1971; Bock, 1971; Wolfle and Kidd, 1971). Some disagreement lingers with regard to the magnitude of the overproduction of Ph.D.'s and how changing social forces might alter conditions. However, nearly everyone accepts the fact that graduate schools can (and apparently will continue to) turn out a number of Ph.D.'s increasingly in excess of the number needed for academic positions in colleges and universities.

From a reduced demand for Ph.D.'s there follow two obvious and primary consequences: lack of new entrants into the larger system of higher education and reduced faculty mobility, which was never very high to begin with (Blackburn, 1970). Furthermore, Brown (1967: 32, 38, 52) has demonstrated that older faculty move less often than younger faculty. Thus, that the number of new people coming into an institution will diminish and that average age will increase are sound inferences.

In addition, data exist on the percentage of faculty who are on tenure. In accordance with AAUP recommended practices, associate and full professors most often possess tenure; assistant professors and instructors usually do not.

In his study of 31 major universities Dressel (1963: 251) found that 95 percent of the associate and full professors had tenure. By contrast, only 21 percent of the assistant professors and none of the instructors were on tenure. (The range extended from 50 percent to 100 percent at the upper two ranks and from zero to 89 percent at the lower two.) A 1955 study reported by Joughin (1969: 333) found that approximately 53 percent of the full-time faculty members in 68 institutions in California, Illinois, and Pennsylvania had tenure. A 1963 nationwide study by HEW (Dunham, 1966: 28-29) found that 89 percent of professors, 75 percent of associates, 29 percent of assistants, and 10 percent of instructors were on tenure.

Furthermore, tenure is related to age. (See Table 1.) More importantly the proportion of tenured faculty varies considerably from place to place. Berelson (1960: 114) reported that the twelve top rated universities had a higher percentage of faculty at the upper two ranks; the result is that 85 percent of the graduate faculty and 68 percent of the general faculty (graduate plus all others) were on tenure. Universities not members of the Association of Graduate Schools had 73 percent and 43 percent, respectively. Heiss (1970: 144) corroborated Berelson's data with reports from 56 percent to 85 percent tenured faculty in her study of lead-

Faculty Age	Percent on Tenure
<30	6%
30-39	35
40-49	67
50-59	78
60-64	82
65 or over	72

Source: Dunham (1966)

TABLE 1: Age and Tenure

ing universities. Again, these figures are above the national mean.

Considering that the institutions not sampled are more likely to have lower percentages on tenure, the above figures are slightly high. Balancing such considerations leads to an estimated national figure of 50 percent of today's faculty being on tenure. Tenure, then, is an issue involving more than just a handful of faculty. At the same time, the numbers on tenure are not so excessive as to leave no flexibility within the system with regard to both kinds and numbers of personnel.

The important question now is, what happens to the average age of faculty and to the percentage who will be tenured (assuming tenure remains a function of rank) when supply becomes excessive? Mazur (1971: 6-7), calculating from Cartter's figures, predicted that the number of faculty in the 40-65 age bracket will increase 41,000 by 1976. Also, in the period from 1982 to 1990, the total number of faculty is actually expected to decrease by 43,000. At the same time, the number of professors above the age of 40 will increase by 105,600. In each year after 1972 the percentage above 40 will increase, although the percentage of increase will not be uniform each year.[2]

[2] These calculations in current practices were based on computations from four-year institutions in higher education. Hence they exclude a very large segment of higher education, the nation's community and junior colleges. Their omission is almost a necessity in this analysis for two reasons. First, tenure is not the same kind of

From the evidence then, the best inference is that the collective faculty will age; that is, the average age of faculy in institutions of higher education will increase markedly from the current figure of approximately 41 years. Furthermore, the proportion in each higher rank will increase to an appreciable degree.[8] Therefore, assuming no change in current practices, the percentage of tenured faculty will increase markedly.

The critics, then, have taken aim on some substantial matters. If the health and vitality of our colleges and universities are adversely affected by an aging and increasingly highly ranked and tenured faculty, then there is a new issue facing higher education. The target before us is real. It warrants full analysis.

The Issues and Procedures

While tenure remains the yellow circle, other rings receive a full measure of pot shots. For instance, some shots hit the red of accountability, while others penetrate the blue of efficiency. Other whites and blacks are indolence and unproductivity. Complacency and ineffectiveness also encircle the bull's eye. So do strikes and due process. In short, this target has many rings.

Surprisingly, however, academic freedom does not seem to be under direct fire. What is odd, of course, is that tenure was introduced principally to protect academic freedom, the very essence of our colleges and universities. It can hardly be a sanctuary in this battle.

In fact, volleys from such diverse camps indicate that a general rather than a specific object is being shelled. The issue appears to be more than tenure. It seems to be higher education, faculty

phenomenon in these institutions as it is in the four-year and graduate colleges and universities. In community and junior colleges, most frequently continuous employment comes from the same state laws that apply to elementary and secondary teachers. This is different from tenure, in concept if not in effect. For example, Kinker (1968) found in 426 junior colleges that the largest groups either granted no tenure at all or granted it automatically after three years of service. This differs but slightly from what Punke (1954) reported earlier. Farris (1968) found in New York that when a faculty member was hired in one of the city's community colleges he had *de facto* tenure, just like other civil service employees.

Secondly, as has been argued (Blackburn, 1971), it does not appear probable that the two-year institutions will absorb the Ph.D. excess, even though this segment of higher education remains an expansion area. Huther (1972) confirms this analysis. In a selected national survey of junior and community colleges he found only 8.5 percent of the faculty hired for fall 1971 were Ph.D.'s, a figure very close to that reported in several studies on the percentage of faculty with a doctorate in those colleges.

[8] Academic rank is an important variable, independent of age. For while rank obviously is correlated with age, after full professorship is attained in the forties only age increases. The studies cited below will show that rank is a better predictor of behavior than is age.

behavior, and administrative management. What is involved is a group of professional men in the occupation of college teaching. Their careers are under scrutiny.

What happens to a man in this vocation over a span of 40 years? What are his hopes and aspirations? How shall his performance be judged? What is his responsibility—to his students, his colleagues, his deans, his college, and to society—for the growth and development of the organization over an extended period of time? What responsibilities do administrators have in nurturing the talents this professional brings to his job? What can they bring to the work environment to best foster achievement of the multiple goals individuals and universities have?

These are the kinds of questions that are really at issue in the attacks on tenure in particular, on higher education in general.

It is embarrassing that heretofore higher education has not even systematically examined them. It is high time we begin a full inquiry, collect appropriate evidence, draw warranted inferences, indicate research most seriously needed, and make recommendations for future practice.

Unfortunately, many of the accusations are of a kind that elude objective evidence. Academic freedom and proselytizing for radicalism, for example, are issues on which many hold opinions but on which documentation lacks for settling debates. However, there are two fundamental charges open to analysis, even if at times the analysis must be oblique.

As I suggested in the opening paragraphs, one of the crucial factors underlying the rhetoric calling for the elimination of tenure is the lack of faculty adaptability. No one questions that the academic man must be dynamic. He must be sensitive to diversity. He must be receptive to innovations. The unquestioned assumption underlying the critics' argument is that tenure is linked in a causal way to a decrease in the responsiveness of faculty to the important demands made on them, to their adaptability.

The other analyzable factor is the charge of slothfulness. No one questions that academic man must be productive; he must maintain his performance at a high level. Here the unquestioned assumption underlying the critics' argument is that tenure is linked is a causal way to a decrease in productivity.[4]

[4] Supposedly tenure is not the direct cause. Rather it is one step removed. The assumption is that tenure creates a condition whereby faculty can ignore requests, a state of affairs in which they act in a closed manner, an atmosphere which fosters complacency. In this way tenure is the culprit, the root cause.

With these understandings, then, the analysis turns to the relevant studies to see what can be inferred about two dimensions of the issue: (1) faculty adaptability, that is, their openness to change, their responsiveness to legitimate demands, and (2) their productivity, both when their age, rank, and the percentage tenured increases.

II. Studies Related To Adaptability

The research is divided into three major categories. The first deals with inquiries conducted to discover faculty values and practices with respect to faculty receptiveness to new ideas and to reform of current practices both inside and ouside the curriculum. The second group of studies deals with the notion of faculty "keeping relevant." This catch-all phrase takes on a more precise meaning when student attitudes toward the performance of faculty members in the classroom are selected. The final major category of studies falls under a set of values which differentiate faculty. It looks at faculty practice on such matters as voting records and attitudes toward students as they relate to the college or university, the subject the academic man teaches, his personality, and the stage in his career.

Academic Issues

Evans' (1968) inquiry dealt with a faculty's willingness to adopt educational television as a mode of instruction in the municipal university where they were employed. His procedures raise methodological questions. For example, while Evans claims no judgment is to be made about the goodness or badness of those who agree to teach by using television, he nonetheless calls those who do "innovators" and those who do not "laggards." (The majority of studies on faculty willingness to change unquestionably assume that change is good, no matter what the issue, a premise others certainly can debate.)

Evans' findings, too, are uneven and mixed. For example, he discovered faculty in the more marginal disciplines, and in science

and in technical studies, were more willing to teach by television than were those in the classical liberal arts departments. The innovators were supposed to be more "cosmopolitan" whereas the laggards were more "local" (1968: 52). While he identified characteristics of these two groups, he did not relate this to age, although there was some indication that it was the younger faculty who were more receptive to his idea of "innovation." At the same time it was the TV endorsers who were resistant "to the admission of qualified Negroes" (1968: 26) into their university, whereas the so-called conservative, anti-innovator group favored such an action.

Furthermore, when Evans attempted to extend his findings to nine other universities by interviewing administrators and faculty at these institutions, the impression reported by the research team was that it was the less established professors who were more likely to resist innovations. Innovations were introduced by the older, more secure faculty members (Evans: 146). Presumably the former were untenured, the latter tenured.

Evans' qualified findings are not greatly different from those of Caffrey (1969) who found almost complete agreement between board members, administrators, and faculty (more than 95 percent of each group) as to the undesirability of television instruction. At the time, all three constituencies judged revision of undergraduate curriculum highly desirable (95 percent) and highly likely to occur (over 90 percent). These same groups gave nearly equally high ratings to the desirability of colleges and universities allocating resources to solve interracial and other social problems, giving academic credit to student experience in a non-academic community, and permitting more electives and individualized programs. Researchers classified such programs as innovations. While this study talked about faculty in general, and was not related to age, the source of the faculty sample was the AAUP roster and hence was weighted toward the senior end (Lazarsfeld and Thielens, 1958: 245). The data remain opinion, not action. The relationship of opinion to practice remains unknown.

Hefferlin (1969) studied a stratified sample of colleges and universities across the country regarding their adaptability. He concluded the more dynamic institutions were the ones that had the smallest percentage of tenured faculty in a particular department, about one-third. In those institutions that he called static, about half had tenure (Hefferlin, 1969: 127).[5] Hefferlin differentiated

[5] Thus Hefferlin apparently slighted mature universities (cf. Berelson and Heiss data above.) It can also be noted that Heiss' graduate faculty rejected the statement that

dynamic from static institutions by noting changes in course offerings as reported in catalogs and from reports from three telephone interviews. Thus, if an institution happened to be in a rapid state of expansion, with new faculty positions being added, naturally there were more courses added as more specialties were introduced and accommodations were made to the desires of newly added staff. That the new faculty were younger, and hence not tenured, may have had absolutely nothing to do with innovation itself. Hefferlin did not have a direct control for age. He obtained his results by defining the situation in such a way that tenure was in no way the causal agent for supposed change. Yet he inferred causality.

This criticism of Hefferlin is supported by Cross (1969: 2) reporting on some of the studies done principally by Wilson and Gaff. Analyzing responses from over a thousand faculty members from their sample of six institutions, she reported that "only 9% ... thought that students should have an equal vote with faculty in formulating *academic* policies, and younger faculty were no more receptive to the idea than older faculty." Finally, Klapper (1969: 38) in a study of work roles of faculty members in four leading independent coeducational liberal arts colleges found that "the comparative newcomer to college teaching did not, as a group, constitute a new breed."

Two contemporary national surveys revealed that numerous changes in curriculum and instruction took place in the past ten years. Brick and McGrath examined practices prior and subsequent to 1961 in liberal arts colleges. They reported that the percentage of institutions that had freshman seminars increased from 23 percent to 57 percent, those with work-study programs changed from 19 percent to 77 percent, and the number with honors programs decreased from 47 percent to 42 percent (1969): 20). In the instructional domain, the authors found increases from 23 percent to 69 percent in team teaching, from 17 percent to 66 percent in use of teaching machines, from 9 percent to 75 percent in use of programmed instruction. Over the same interval the administration of comprehensive examinations declined from 65 percent to 28 percent (1969: 49). Dressel and DeLisle (1969) uncovered similar changes in their national survey of all kinds of four-year institutions over the decade of the sixties. They also expressed the observation that there may well be more tinkering than innovation.

tenure inhibits innovation by more than two to one (1970: 145-146). This, of course, is respected opinion, but not demonstrated fact. Another portion of her study found large numbers of faculty believing in radical reform, especially in the curricular area of graduate programs. (1970: 77).

Despite judgment as to the qualitative merits and the actual extent of the alterations, the evidence supports the assertion that change has occurred. Unfortunately, neither Brick and McGrath nor Dressel and DeLisle have data to locate either the originators or the resistors to the changes made. The alterations are typically in the faculty domain and ordinarily require wide faculty support, especially from senior influentials. But where did the pressures come from? Who initiated a reform? We don't know these answers. Nevertheless, we do know that there has been change. The institutions have adapted.

When it comes to events within academe that border on matters essentially outside of the classroom, there are appreciable differences beween faculty attitudes of those who are older (and hence more likely tenured) and those who are younger. For example, Gold (1969) found older professors much more disapproving of campus incidents that disrupted classes than were their younger colleagues. Much more frequently the older faculty found the language of the disrupter to contain implied threats; they were much more likely to fear physical harm, and were much more inclined to believe that the police should have been called (1969: 2, 3, 6). Cross (1969: 3), again referring to as yet unpublished data from Wilson and Gaff, stated that faculty under 30 are more permissive than are professors 55 or over in such matters as faculty members participating in nonviolent demonstrations, unmarried male and female students sharing the same apartment, the holding of anti-draft protest meetings by students, and using student government funds to invite social activists to speak on the campus.

Academic issues, then, apparently depend upon the degree to which they touch the heart of a professor's career more than upon his age.

Keeping Relevant

Keeping relevant carries a strong meaning today, even if the expression escapes a precise definition. One dimension of relevance can be found in the classroom, and it is a dimension that stands quite apart from curriculum change. It is the dimension of teaching effectiveness.

Teaching effectiveness is a highly sensitive faculty role for students and faculty alike. Probably in no other area of higher education is the attack on academic men so severe as it is on their performance in the classroom. The halls reverberate from machine gun fire directed at faculty with yellowed notes, professors

insensitive to burning social issues, academics unrelated to the real world. Faculty failure here is indefensible.

Hence the argument for utilizing teaching effectiveness as a measure of relevance is appropriate. Succinctly, it runs as follows: Being "with it" is a function of age. Hence, the younger instructors and those at lower ranks will be rated higher by students than will be those who are older, at the higher (tenured) ranks.

Fortunately there have been a number of investigations which report student ratings of faculty. Furthermore, these have been done over an extended period, beginning in the 1920s. The overall outcomes are not unequivocal. Thus, it is important to discuss several of these so as to judge the appropriateness of the weapon and the accuracy of the sights.

Studies by Remmers and Elliot (1949), McGrath (1962), Remmers (1963), and Stallings and Singdahl (1969) all showed a positive relationship between teaching effectiveness and academic rank. That is, faculty in the higher ranks were judged to be better teachers than were faculty in the lower ranks. Costin, Greenough, and Menges, after their extensive review of the research on this topic, reported "experienced or higher ranking instructors usually receive higher ratings than did their less experienced colleagues (1971: 530)." On the other hand, studies by Guthrie (1949) and Rayder (1968) showed very small negative correlations of teaching effectiveness and rank. In fact, the negative correlations were not statistically significant whereas the positive ones were. Between these opposing findings, Hildebrand and Wilson (1970) found essentially no correlation ($r=.06$ and not significant) between teaching effectiveness and rank.

Riley, Ryan, and Lifshitz provide data on age and teaching effectiveness at Rutgers on ten dimensions. Younger instructors (below 40) scored above the median on all but one factor and the most senior group (50-69 years old) was below the median on all but one factor (1950: 99). The general pattern was decreasing effectiveness with age in matters of speaking ability, organization, tolerance to disagreement, and six other factors.

However, the one factor which was an exception to this pattern was knowledge of the subject. Before dismissing this one abberation as unimportant, recognize that Riley *et al.* also found that students gave this trait the highest rating for their actual and ideal teacher (1950: 93). The proportion of full professors above the median in knowledge of the subject was 85 percent as contrasted to 51 percent of the instructors (1950: 101).

Again, the findings failed to yield univocal outcomes. Faculty lose in attractiveness to students as they move through their career, including the acquiring of and passing beyond tenure. But in student eyes, tenure has not produced deterioration of knowledge, for that continually increases. Full professors are generally judged by students more knowledgeable than associates, the latter more than assistants, and so on down the ranks.

Thus the outcomes do not point overwhelmingly in one direction. Nonetheless, they are contrary to expectations. Although the shibboleths predict a statistically significant negative correlation, such a correlation simply does not exist. The tentative conclusion is that if teaching effectiveness is a measure of keeping relevant, then evidence supporting the claim that older professors are inferior is lacking.

In two ongoing pieces of research, Blackburn has plotted both age and rank against student-rated teaching effectiveness of all faculty in two liberal arts colleges. (See Figure 1 [schematized].) The correlation is almost exactly zero, nonsignificant. What does

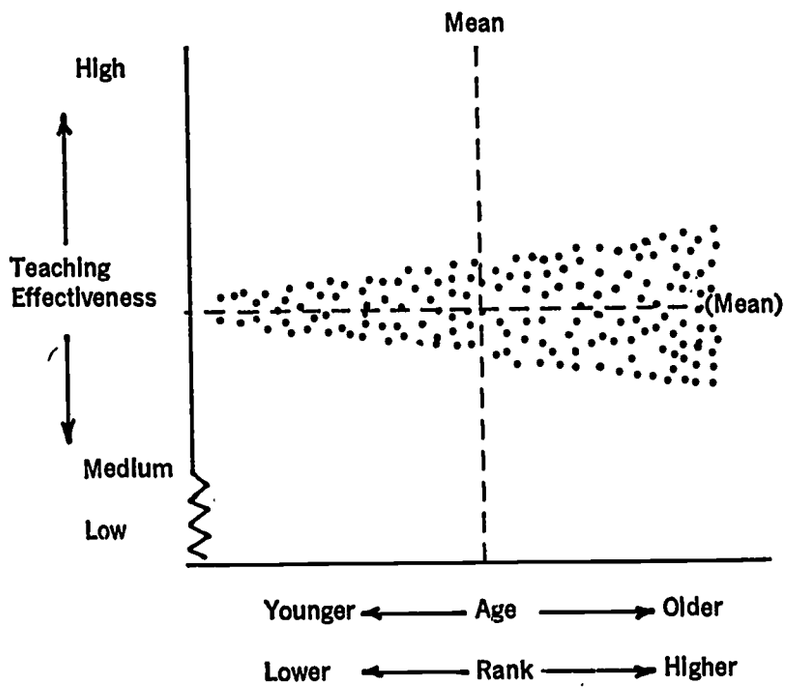

FIGURE 1: Teaching Effectiveness Versus Age and Rank

appear from the data, however, is that the *variation* of performance was much greater among the higher ranked and older faculty than it was among the younger. That is to say, students observed differences between faculty performance at all ages and ranks, but they observed much greater differences at one end of the scale. The very outstanding and the least satisfactory occured among the older and higher ranked faculty. The hypothesis suggested by these data is that there are a few older faculty who are found wanting by students, "wanting" being on the border line of acceptability in the classroom.

However, it is important to point out that even the lowest performer was not inadequate. Redefer (n.d.) obtained similar evidence at New York University. Of 48 faculty rated by students, 65 percent were scored in the highest category of "finest college teacher." The lowest group (three faculty) were rated closest to "sometimes good, sometimes not." No faculty fell in either of the two lowest of the five categories, "consisently below average" and "poor teacher."

Values

In the following analysis faculty behavior is restricted to his role behavior within his college or university. There are a number of variables which affect faculty behavior and make generalizations about all faculty highly suspect, or utterly trivial. The nature of the institution at which the professor works is important. So is the discipline in which he happens to specialize. Personal factors also alter a professor's adaptability. Finally, and perhaps surprisingly, the stage in his career relates in a nonlinear way with his performance and attitudes in a variety of situations.

Place of Work

Lazarsfeld and Thielens (1958) found academic freedom practice to vary appreciably with the reputation of the institution under consideration. Interviewers noticed that deference, personal mannerisms, and acceptance of outsiders varied along the same scale of institution differentiation (Reisman, 1958). Having voted Democratic rather than Republican correlated with place. Faculty at larger universities (more than 9,000 students) were much more likely to have voted Democratic than faculty at very small colleges (less than 700 students)—75 percent vs. 44 percent (Lazarsfeld and Thielens, 1958: 23). These same faculty were also more than twice as likely to be in the group of highly productive persons—65 percent vs. 29 percent. The overall finding is that faculty at the

most prestigious colleges and universities are likely to be much more "liberal" than are those who work at institutions farther down Riesman's snake.

Discipline

Lipset and Ladd studied attitudes of 58,000 faculty from 300 four-year institutions and found sharp divisions between academic fields along a leftist–rightist continuum: social science and humanities faculty occupied the left wing of the spectrum with business, engineering, education, medicine, and agriculture at or near the other extreme (1971: 54). Scully (1970a: 3) reported similar findings from the same data bank on faculty attitudes from different disciplines with respect to war and peace, student activism, and the like. Leatherman (1963) found the different academic disciplines in a major university varying on a scale of realistic versus idealistic philosophical alternatives. In an emerging university, Lewis (1966b: 453-455) uncovered appreciable differences with respect to adherence to and belief in the practice of academic freedom and its defense between faculty in engineering and the medical sciences as contrasted with those in the arts and science departments. Using speech patterns and word usage, Peters (1971) identified distinctions in faculty values between humanities, natural science, and social sciences.

The overall finding is that faculty tend toward a more leftist stance (at least on matters outside academe, and on many within) the more they are related to the social-scientific and humanistic disciplines within the traditional arts and science college, and that they take on a more rightist position in the natural sciences and the professional schools that go to make up a complex university. It should be kept in mind that within each of these subgroups there is great variation. Some professors within the most "conservative" units are as liberal as or even more liberal than a large number of colleagues in a so-called "liberal" discipline.

Personal Factors

Research on faculty with respect to personality variables simply has not been carried out to an exensive degree. Two studies are reported here.

Apprehension—fear of taking a stand on controversial issues—decreases with increasing age. It does so without regard to the man's tenure, professional status, or his possession of an outside income. At the same time his permissiveness decreases with increasing age (Lazarsfeld and Thielens, 1958: 241, 245). The reasons for these

changes are not clear. They are, however, consistent with other data; for example, voting behavior switches toward the Republican party with aging.[6]

In 17 colleges and universities in the eastern United States with a population of over 2,000 professors, Armor *et al.* (1967) found faculty members in general about twice as opposed to the Vietnam war as was the general population. Although the vast majority of faculty were anything but radical in their expressed beliefs, there were appreciable and significant differences within the professoriate. The differences, however, were not on the basis of rank but rather by religious preference. Catholics were much more sympathetic to the war effort than were Protestants. Jews were the most anti-Vietnam war group.

The suspicion is that other personal factors would also have a correlation with faculty values, and that these, too, would be quite independent of either age or rank. As yet, however, such inquiries have not been conducted.

Career Stage

Evidence is now accumulating that faculty values are not a linear function of aging. While in general the results show that younger people are more often to the left of center than are the senior members of colleges and universities, three studies indicate that this is not a straight line movement from the one end of the continuum to the other. For example, Schuman and Lauman (1967) discovered in their investigation of faculty attitudes toward the Vietnam war that the associate professors were much more "conservative" (in this case "hawkish" rather than "dovish") than were either the assistant professors on the one side or the full professors on the other. (Disciplines were controlled.)

Blackburn and Lindquist (1971) found it was the associate professor, not the full professor, who was most reluctant to accord students voting rights on committees which acted on matters heretofore falling exclusively within the faculty domain. In both these studies the pattern was that the assistant professor was the most favorably inclined, the full professor next, and the associate the least.

In a study now in progress of a liberal arts college where faculty self-rated their political attitude on a radical to ultra-right wing

[6] The data cited are not longitudinal. They are strobe-light shots of a faculty of different ages. The assumption is made that today's 40-year-old will 20 years from now be like today's 60-year-old. While the assumption is open to some questions—e.g., were origins similar? times comparable?—much weight can be given to support the assumption.

scale, Blackburn (1972) found in the mean scores by rank that the instructor was farthest to the left, the associate professor farthest to the right, and the assistant and full professor tied with an intermediate value.

What seems to be happening is that a man who eventually attains full professorship goes through a career cycle in which his political beliefs (and by definition here, a dimension of his adaptability) wanes and then waxes again, although never quite returning to its initial state. If waning and waxing is "conservatism," then rank, a variable open to instructional modification, and hence career stage, is what requires attention.

Discussion of how these issues and outcomes relate to tenure is postponed until the studies on faculty productivity have been presented. These are reported next.

III. Studies Related To Productivity

Productivity, like adaptability, is a many sided concept. As with receptiveness to change, productivity is operationally defined by those measures which can be brought to bear on the general notion. Thus productivity, too, will be incompletely defined. Inferences drawn from the partial nature of what is developed restrict unqualified generalizations.

Nonetheless, the urgency of the matter demands proper utilization of existing knowledge. Passion and persuasion must not overrule hard empirical data. The many dimensions of the faculty role make clear that there is no single measure of productivity that can represent the total contribution of academic men.

To begin with, teaching is the professor's principal activity. This productivity is directly measured. For example, credit hours, degrees awarded, hours in the classroom, or other similar measures are available. They are not, however, easily equated. Laboratory instruction vs. lecturing, large class vs. seminar, and dissertation supervision vs. a freshman mathematics class are but a few of the inequities sufficient to trigger protracted faculty debate. Despite the complications in the process, this kind of faculty output can be proportioned for professors at all ages and all ranks. In general, findings demonstrate that tenured full professors and untenured new assistant professors are both likely to have large lower-division lecture classes. Thus a faculty's major productivity is independent of the critical concern, an important fact to keep in mind.

But faculty productivity is more than teaching, even when broadly defined. In fact, faculty productivity is usually associated

with scholarship and research, and articles, monographs, and books are the usual product.[7]

It must be kept in mind, however, that it is only about 10 percent of the faculty who produce 90 percent of this kind of output (Berelson, 1960; Wilson, 1967). The 90 percent who don't produce are nonetheless "intellectually creative," to varying extents and with differing degrees of success, of course. Writing a syllabus, reorganizing existing offerings, inventing new courses, reading and synthesizing others' ideas—many products are more directly connected to teaching than is scholarship in the creative and productive arts. No studies have quantified this faculty work contribution. While academic men informally judge and respect it, they accord it less value than that submitted to the total public of experts for criticism. For the purpose of this inquiry it is assumed that a high correlation exists between this kind of intellectual output and scholarship as generally conceived. Said another way, the 90 percent who produce no published research are assumed to have attributes which correlate with the 10 percent, so that the findings on the latter can be generalized.

Service, the third of the tripartite roles of academic men, unfortunately has not been researched. This does not detract from the role's importance as a component of productivity. Service—administrative contribution to the viability of the institution; counseling; advising; expertise provided the community, state, and nation—are fundamental for the health of the university and for society. Also, since contrary to common belief promotion does not correlate with research (Luthans, 1967; Lasher, 1968), but since research relates to teaching effectiveness, then service is involved in the career fate of academic men. Committee assignments do matter. They are considered to be important for the organization. They are a part of productivity. The only regret here is that we have no direct measure of service and hence of the weight it receives in practice.[8]

[7] "Scholarship"—as contrasted with "research"—is sometimes taken as the more general term of faculty creativity that culminates in publication. Sometimes the distinction is based on the nature of the product, the discipline in which the inquiry is conducted. In these cases, those who work principally with words (literature and history, for example) are said to be engaged in scholarship while those who utilize "hard" data (physics and economics, for example) are said to be conducting research. The terms hold equal value here and will be used interchangeably. However, the word "research" will appear more frequently since the majority of the studies on faculty productivity are in the sciences.

[8] One study does give some insight into service when it utilizes "over-all contribution" to the college as a measure of faculty productivity. This research is discussed below. Another study introduces faculty Ph.D. output as a measure of productivity (Trowbridge, 1971). This measure is neither "service" in the sense just described nor "teaching" by standard definitions.

The studies have been placed in three major categories: those which deal with productivity as dependent upon time (age, rank, and tenure), those which give some insight about productivity as it is affected by environment, and those which relate personal variables to faculty output.[9]

The weapons directed at the professor along these dimensions assume a nonmoving target. Less marksmanship is required to hit a nonmoving object. However, if the academic man is growing and developing, then the selection of weapons from the arsenal may have been inappropriate.

Productivity as a Function of Time

Age

The studies of a professional's productivity as a function of his age are not mutually corroborating. One set concentrated on age of prime contribution. Three others looked at output. One of these uncovered an almost precipitous drop after a peak age. The other discovered a saddle effect, a drop followed by a second rise at an advanced age. Another reported steady and sometimes even increasing output with increasing age.

Davis (1954) studied scholarly productivity at the University of Colorado between 1920 and 1939 and found that it peaked at age 45 and then dropped. Lehman (1953) conducted a definitive study which was corroborated five years later. He determined that the outstanding scientific achievements most often occurred between the ages of 30 and 40. After that, such accomplishments dropped off considerably. However, Lehman measured outstanding achievement, not total productivity. Adams (1946) dispelled the myth of a prime scientific contribution occurring before age 30. Only nine percent of the prime scientific discoveries were made by scientists before their thirtieth birthday; in fact, the median age of scientists at the time of their principal discovery was 43 years. In another study of publication productivity by Ph.D.'s in sociology,

[9] "Productivity" does not maintain a uniform meaning from study to study. This is unfortunate when comparisons between inquiries are desired. However, the variation in definition is not serious for the purposes of this analysis. The measures are intercorrelated. For example, Meltzer (1956) found r=.51 for number of publications and number of times the author is cited by others. Other measures correlate higher. Furthermore, the concern here is wih performance and rank, age, and tenure, not the best measure of productivity. Also, the debate on appropriate yardsticks contributes to and sparks research on the topic, a desired outcome. Articles, books, papers—with different weights for each and with control for publisher—as well as awards, prizes, society memberships, and citation counts all have been used as productivity measures. See Smith and Fiedler (1971) for a good review of productivity measures.

Axelson (1959) found that output rose for the first fifteen years following the receipt of the doctorate and then fell off considerably after that.

Pelz and Andrews (1966: 174-213) found the second pattern—rise, fall, and rise. They provide an excellent and extensive analysis of scientific productivity as it relates to age. While only one of their subgroups consists of a population of university-based research-oriented scientists, their control of important variables and the comparisons they make provide valuable insights.

To begin with, Pelz and Andrews accepted Lehman's (1953; 1958; 1960) excellent work and conclusions—that creative scientific output peaks in the early years (late twenties to early forties) and then declines. (They did observe in a footnote [1966: 182] that Lehman found "a second, lower hump for a scientist in his 50's," a principal finding of Pelz and Andrews.) Pelz and Andrews then moved on to the next question, namely, "why?" They generated five hypotheses for testing: a decline in intellectual potential, a drawing off into administrative work of the more able, a relaxation of achievement potential after success (really the tenure claim of slothfulness), overspecialization, and technical obsolescence. They also looked at performance of kinds other than the fully innovative-creative type, especially at convergent-synthesizing efforts. Journal articles are examples of the first type, books the second.

Pelz and Andrews' findings are not without room for debate. Decline in performance does occur in many settings and for many people. However, their most important general discovery is a saddle shape curve of performance with age—a rise, a fall, but then a second rise when a scholar enters his fifties. Then a second fall occurs. They did find the nature of the contribution changed with age, becoming more integrative in later years (1966: 196). Their data do not support a loss of intellectual powers. Nor is there causal connection between success followed by lethargy.

Pelz and Andrews also found a decline in productivity can occur when motivation falls. However, they learned that for some individuals a high level of productivity can be maintained. The erosion with age is not inevitable. When projects were changed periodically, when self-reliance was high, and when the man's interests were both deep and broad, performance was sustained throughout his career.

Pelz and Andrews' findings were confirmed in a study by Cantrell (1967) in an engineering department in a major university. When productivity was measured by research articles, there was a

general falling off after age 50. (The peaking was much later than in the studies mentioned above). However, the output of books and other kinds of contributions, including the management of projects, increased, so that if these were included in the measure of total productivity, there was no drop off at all but rather a continuous rise. This is the third pattern. Cantrell's findings, then, are not unlike those of Roe (1953, in her studies of outstanding scientists. She found productivity increasing continuously with age. Lazarsfeld and Thielens' (1958: 10, data also showed total production increasing with age. The social scientist's output doubled between ages 41 and 50 from what it was prior to that age. Furthermore, it still increased after age 50, although not in the same proportion. The findings held for both low and high producers.

Career Stage

The issue of professorial slothfulness enters the argument somewhat differently with respect to rank and tenure than it does with age (without regard to career stage). Stated in its extreme, it runs as follows: the faculty member will produce so as to be promoted to associate professor, and hence tenure. Then his output will slacken off, probably to rise briefly once more a half dozen or so years later so as to acquire promotion to full professor. Then his activity ceases for the remaining 20 years of his career.

Three studies have examined the relationship of research output with respect to the variable of promotion, and hence rank. (Age was not held constant and is assumed to be highly correlated with rank, up to the final promotion.) Cantrell (1967), mentioned above, found completely negative results. Faculty productivity was not altered in any way just before or just after promotion through the ranks. Furthermore, as cited above, the total output did not change but kept on increasing. In the same institution, Lasher (1968) examined faculty in three liberal arts departments, one each in the humanities, natural sciences, and social sciences. He found no relation between faculty productivity before and after promotion. Productivity was by no means even for all faculty. However, there was neither a pattern of increase prior to promotion nor of decrease afterwards. Those who were producing kept on producing; those who were turning out little continued much in their same way.

These findings received indirect corroboration from a study by Hoyt (1970) at Kansas State University. No relationship between productivity and merit consideration occurred until the latter half of a professor's career.

A related set of research needs to be considered at this juncture, for its findings bear directly on the issue. Judgment on the worth of a professor ultimately rests with his colleagues. True, students possess considerable influence on the career of a man, much more than they believe they have, especially as evaluators of his teaching. True, it is the administration that has the legal power to promote, award, or withhold tenure. But the counsel of a man's peers cannot be set aside, except on rare occasions.

Thus how they judge his worth becomes critical. Faculty believe creativity in a general sense—productivity more particularly—to be an essential characteristic. Furthermore, they value good teaching equally highly. Moreover, and this is the crucial point, they see the two as inextricably intermeshed. As Heiss (1970: 229) stated: "faculty see an almost perfect correlation between teaching 'effectiveness' and 'eminence in one's field' (the latter, of course, having been acquired by publication)." Her interpretation of faculty responses was fully corroborated by Isaacson *et al.* (1963), Maslow and Zimmerman (1956), and Blackburn and Clark, three empirical studies each of which found correlations of around 0.7 between faculty ratings of their colleagues on the two measures.

The actual relationship between research output and teaching effectiveness has been investigated in a number of studies, and not with uniform outcomes. Guthrie (1949) and Voeks (1962), both at the University of Washington but at different times with different data, found no relationship between teaching effectiveness and faculty output. Nor did Hayes (1971) at Carnegie-Mellon University. A preliminary investigation by Hammond, Meyer, and Miller (1969) at the University of Wisconsin and at Stanford University similarly found no relationship, nor did either Stallings and Singhal (1970) at Indiana University nor McDaniel and Feldhusen (1970) at Purdue University. However, Bresler (1968) at Tufts University, Stallings and Singhal (1969) at the University of Illinois, and Hildebrand and Wilson (1970) at the University of California—Davis did. Correlation coefficients on the order of magnitude of .25 were found.

But faculty decisions are not based on the weight of the small evidence. They are made on the basis of beliefs faculty hold. The haze is partially lifted by examining Figure 2 from data of Clark and Blackburn. Faculty at a liberal arts college rated their colleagues on their overall contribution to their college along a five point scale from outstanding to inadequate. The average score for each faculty member is plotted against his academic rank.

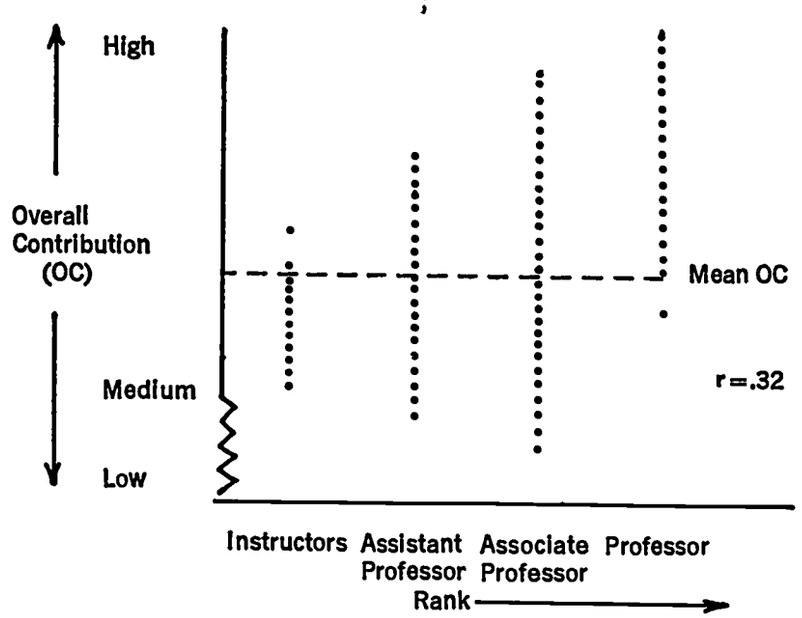

FIGURE 2: Peer Rating of Faculty Colleagues on Overall Contribution to the College as Related to the Professor's Rank (Schema)

First of all, the correlation is positive (r=.32). Second, some associate professors produced the negative variation. Furthermore, the average age of the associate professors above the mean in overall contribution (really a productivity measure for a teaching liberal arts college where actual published research is small) was less than 39, whereas for the associate professors below the mean the average was over 50. Thus a few individuals or an institutional practice confound a pattern.

The overall conclusion of the relationship of productivity with respect to time seems to be that it is not a linear function of age. Nor is it negatively related to career stage. The producers and contributors maintain an output quite independent of rank or age. Hence tenure seems not to be a causal factor.

Productivity as a Function of Environment

Place of Work

Several studies have shown that faculty productivity is a function of location. Pelz and Andrews (1966) established this fact

with respect to academic versus nonacademic locations. Berelson (1960: 127) showed the output of faculty of the twelve leading universities was more than twice that at the next ten. Beyond the third group of universities, output dropped off appreciably. In the case of sociologists, Crane (1965) has shown that place of work is more highly correlated with output than is either former training or reputation. Thus, without identifying those factors in a particular environment that either stimulate or inhibit output, it can be demonstrated that where an academic man is working makes a difference in his total research output.

Size of the Work Group

There is a strong belief, but no documentation, that a critical mass of people is necessary for colleague stimulation if output is to increase. The arguments advanced claim there is an optimum size, "somewhere between too large and too small." If the organization does not have enough men in it, then they cannot stimulate, criticize, and enrich one another. On the other hand, if the group becomes too large, it fractures into specialties. People remove themselves from one another. They no longer know what the other man is doing.

The one study that does shed some light on this idea comes from Wispe (1969) who looked at the productivity of psychology departments as they relate to size. Bigger and better (in terms of productivity) were correlated. Wispe's analysis did not extend to very large institutions where alienation may well occur.

Freedom

Meltzer (1965) found that freedom to direct one's own inquiry without demands from above was essential to high productivity. His study of physiologists contrasted settings in colleges and universities, in government laboratories, and in industry. His findings held without regard to the amount of financial assistance. However, freedom was not sufficient by itself. There had to be some minimal level of support. Thus there is an environmental optimum of freedom and support if productivity is to be maximized.

Leaves of Absence

Boswell (1970) studied the productivity of faculty as related to leaves of absence from a major university. Leaves were of various kinds—assignments off campus, work with the government, sabbaticals, and other arrangements that led to a change of the imme-

diate environment. His findings, while statistically significant in a positive relationship with the independent variable, were not of such a magnitude to indicate that leaves are by themselves sufficient to increasing productivity appreciably.

Communication

Pelz and Andrews (1966: 38) found that awareness of goals through communication with colleagues and administrators was related to productivity. They found that high contact among colleagues was related to high performance. (This finding supports the notion of an optimum size.) Among groups of researchers, productivity varied curvilinearly with the age of the group. Younger groups and older groups produce less than middle aged groups, a reverse saddle effect with a single hump. Pelz and Andrews suggested that this relationship can be explained by the effects of group security and intragroup competition. If older groups remained competitive, the drop in productivity was not as severe.

Faculty rate communication with and stimulation of their colleagues as critical. Gustad (1961) reported that the intellectual stimulation of colleagues was a crucial reward for faculty. Eckert and Stecklein (1961) reported similar findings. Theophilus' (1967: 15, 19, 21) study of Michigan faculty revealed a high score indicating the importance of communication with administrators and the importance of competency and good relationships among colleagues.

Leadership

Theophilus (1967) also revealed that faculty considered clarity of goals as articulated by academic leaders as an important aspect of their work. In five western colleges, Hill (1966: 169-170, 174) found "a significant relationship between the power of the chairman ... [and] the professional output of the faculty in the department." What is surprising is that the relationship was a negative one. The more power imputed to the chairman, the less productive were the faculty. This suggests that professors who are most productive impute less power to their chairmen; this also gives credence to the notion that the more independent a man becomes of his institution, the higher is his actual output. However, the correlation was not strongly negative, even though statistically significant. Hill also found that the power of the chairman was in fact significantly related to the faculty's perceptions of their own productivity, even if not to their actual output. What is important at the juncture is

the demonstration that leadership does matter. The way in which it matters remains unclear.

In summary, then, it can be shown that a number of variables related to the work environment of the academic man do affect productivity. When one examines matters of leadership, size, communication between workers, support, and freedom to pursue one's own ideas, each appears to be independent of age and rank, and hence of tenure. That is, there is no *a priori* reason for believing productivity could not be improved as age and rank increase. The importance of the work environment is something that can be tended to and altered. The claim that tenure decreases productivity remains unsupported. In fact, the independence of the variables supports the notion that the cause of failure, if any, lies elsewhere.

Productivity as a Function of Personal Variables

Not surprisingly, other factors affect faculty output. Raymond (1967) found that length of time to attainment of doctorate and to first production, characteristics perhaps relating to ability and to internal drive, correlate positively with productivity. Babchuk and Bates (1962) found that people in sociology who possessed certain characteristics were much more unlikely to be publishers than those who fell into other categories. For example, those with religious orientation and affiliation published less.

The absence of other data on this variable should not suggest that it is unimportant. There simply have been few psychological data collected on faculty. (Roe's extensive work on an atypical sample of distinguished scientists is of course an exception.) The discontinuous nature of faculty productivity suggests psychological causation. The remainder of this section examines some external factors affecting individual behavior.

Reward System

Marsh and Stafford (1967: 244) have shown that among faculties some "non-monetary professional values become an alternative 'currency' [to money], with a different basis of value but with an exchange rate." Said another way, academically employed professional and technical workers forego monetary returns relative to their nonacademic counterparts. Marsh and Stafford found that academicians were willing to accept professionalism and its benefits as a substitute for money. (It may well be that tenure could be a psychic and an economic "benefit" and that it is directly related to professional and intellectual values.)

Blackburn (1968), following Storrer (1966), has argued that a basic characteristic of academic men is the creative act. The creative act is completed, and then extended to a higher level, if and only if the product created is critiqued by colleagues—that is, published. Anything less is imperfect or aborted. Thus productivity is its own reward and has no monetary equivalent.

Once more, primary faculty rewards are not connected directly with monetary return. Thus increase in rank, and hence in pay, that comes with tenure is not directly related to output.

Security

Security seems to be a relatively low-powered variable in productivity studies. Maslow (1968: 21-59) has suggested that security is a basic need which must be satisfied before other motivating forces become potent. Pelz and Andrews (1966: 241) found that middle levels of "social" security in a work group were related to the highest levels of productivity. Lazarsfeld and Thielens (1958: 192-204) found that faculty who became apprehensive during the Joseph McCarthy era were inhibited from freely expressing their ideas. In most cases such inhibition would indicate a decline in productivity. What is not known is how productivity varies between groups who are secure in their jobs and those whose jobs are threatened, probably because the general level of job security in business and universities has been quite high.

The data on what faculty find satisfying (Eckert and Stecklein, 1961: 28, 38, for example) show that only a small percentage of faculty in the sample talked about job security and prestige as a high value. Four other factors were mentioned more often when they responded to appreciations and reward in their jobs. Security was mentioned less than two percent of the time. (However, today talk about future employment seems to be increasing.)

Satisfaction

There seems to be little relationship between job satisfaction and productivity. Herzbert (1959: 8) claimed a number of small, but consistently positive, correlations in the literature as evidence of a relationship. Lickert (1961: 14) suggested that the relationship increases with the complexity of the tasks involved. Vroom (1964: 181-186), however, who listed the findings of more than 20 studies, reported only small correlations, around +.10. Moreover, no significant differences appeared as tasks became more complex. Vroom did find, however, that less satisfied workers were

more absent and more mobile than satisfied workers (1964: 177-180). However, his data were not in university settings. Blackburn's (1971: 15) review of the literature on faculty revealed no relationships between productivity and satisfaction. Similarly Pelz and Andrews (1966: 112) found no relationships between satisfaction and productivity among scientists in business, universities, and government.

Stress

If stress can be equated in a general way with anxiety that could result from overload, then Vroom (1964: 204) reported that productivity declined as high levels of anxiety were reached. The cause of the anxiety was not known, but certainly insecurity could be one factor. Vroom cited evidence that productivity increases with motivation up to a critical level, and then decreases (1964: 204). When anxiety is high, work tends to be devoted to reducing anxiety instead of being directed to the task itself. Clark has shown that faculty who were less flexible, more anxious, or had lower self-esteem dropped in productivity when overloaded or when they perceived that they were overloaded.

In light of the high work load reported by most faculty (Blackburn, 1971), sharp increases in the demands made on professors could be dysfunctional for productivity.

In all, then, personal factors do matter. Again, however, they seem to be unrelated to age, to rank, and hence to tenure.

IV. Conclusions

The General Findings

As for the charges of faculty lack of adaptiveness to important societal demands or inadequate performance in the classroom or failure to undertake reform, none was negatively correlated with age and rank. Indeed, the relationship tended in the opposite, the positive, direction. Moreover, total productivity continues to increase with age, thereby vitiating the principal charge of sloth.

The critics have leveled two principal charges against tenure. First, they say that it prevents change, that it is an invitation to stagnation. Next, they say that tenure stifles output, that with tenure a man ceases to produce. But the evidence does not support their invective.

The critics are in error. There is no causal relationship between tenure and restricted adaptiveness, and there is no causal relationship between tenure and a cessation of output.

Those initially attracted to tenure can take heart. Analysis supports their predilections. Hopefully for those who at the outset held reservations or found tenure not to their liking, analysis yields new insights, fresh ways of seeing the relationships of the parts to the whole. And skeptics can replace factions with facts.

Those who had their initial judgments supported have only a limited basis for rejoicing, because it is quite clear from the data that life in academe is anything but perfect. Living and working there is accompanied by a high coefficient of friction. Life could and should be much better than it is.

However, before turning to some other very important consid-

erations—research needed and inferences for immediate action to correct flaws and to improve the enterprises for the benefit of all—it is essential to attend to two matters related to the attacks on tenure which have not been considered. One, the positive attributes of aging need to be listed so as to remind the reader that the critics have not selected appropriate weapons. A more accurate account requires examining other instruments in the arsenal. Those weighing the import of the inevitability of increasing age will want to consider all its ramifications.

The other matter, academic freedom, is just too intimately connected to tenure to be slighted. There are some current events with respect to academic freedom that require proper attention to balance the presentation.

Aging

Increase in age—and hence in rank and in the acquisition of tenure—has failed to receive credits with which to offset its negative features. Sound employment practices which consider aging obviously will weigh the positive correlates along the development line of a full career.

For example, increase in managerial talents, socialization of novitiates, leadership, loyalty, stability—yes, even wisdom—correlate positively with increasing age. Recognition, status, the ability to acquire outside resources, prestige—such attributes accompany rank. Influence, confidence, and probably security all relate to tenure.

Taken together, such factors form an impressive set of strengths. To consider only the negative features of aging badly distorts. It also leads to unwise action. Faculty in different stages of their careers tend to complement one another.

Academic Freedom

The historical and philosophical grounds for tenure in this country relate directly to the first principles on which contemporary instiutions of higher education base their existence: academic freedom (Hofstader, 1955; Metzger, 1955; Byse and Joughin, 1959; Van Alstyne, 1971). As Metzger has succinctly expressed the matter:

"Academic freedom is not only relevant to the modern university, but essential to it—the one grace that institution may not lose without losing everything" (Metzger, 1969: 1). In addition, all constituencies—trustees, administrators, faculty, and students—

hold the concern for academic freedom above every other aspect of higher education, be it research, teaching, salary, student rights, or whatever (Gross and Grambsch, 1968). Moreover, such grace is accorded the colleges and universities, not solely—or even primarily—for professors, but so that students can learn truths, and so that society can benefit. As John Locke (1690) expressed the essence long ago:

> The peculiar evil of silencing the expression of an opinion is that it is robbing the human race, posterity as well as the existing generation—those who dissent from the opinion, still more than those who hold it. If the opinion is right, they are deprived of the opportunity of exchanging error for truth; if wrong, they lose, what is almost as great a benefit, the clearer perception and livelier impression of truth produced by its collision with error.

Academic freedom's roots are deep. However, it is a special, not a common, soil which nurtures this fundamental principle of education. Contrary to what some have claimed, academic freedom does not enjoy the full protection of either the Constitution or the courts (Fellman, 1961).

To compound the gravity of the matter, attacks on academic freedom have been rising rapidly.[10] From the peak of academic freedom incidents per faculty member during the McCarthy era of 1951-1955 to a low in 1961-1965, the number of violation cases has increased each of the last five years so that the number in 1969-1970 is more than double what it was in 1965-1966. (AAUP has just reported a 29 percent increase in cases in 1971 over the previous year, a record 1,139 complaints.)

Academic freedom, like a citizen's civil rights, requires constant vigilance against temptations to limit and restrict it in times of stress. Tenure is no philosophical adjunct. It is needed. Tenure is a tool that protects a faculty's academic freedom (Lewis, 1966; Bahr, 1967; AAUP, 1971).[11]

Moreover, administrative concern and protective actions for

[10] The following computations were made by Breisch and Waggett (1971) from data taken from the AAUP *Bulletin*.

[11] In this connection, a myth about tenure seems to flourish. It equates tenure with sinecure. Tenure's critics falsely claim the practice protects incompetents, that an unfit man can never be removed from his job.

The untruth of this charge is another full issue. Van Alystyne (1971) has handled it well. Tenure does not protect incompetence. All tenure does is guard the professor charged from being found guilty simply because someone accuses him.

That a charge is proof smacks of Joe McCarthyism. The accused must prove his innocence. Improper, everyone says. Right. And all tenure does is require the accuser to prove his claim rather than the charged prove his competency. Tenure does not guarantee a position for the unfit.

faculty have not been uniform from institution to institution. For example, Lazarsfeld and Thielens (1958) found academic freedom practices and support by administrators for faculty to be highly related to the academic quality of an institution. But even high quality does not guarantee protection against attacks from outside academe. When studying sociologists at leading eastern institutions, Pfautz (1956) found the faculty about equally divided in their faith that their administrators would support them if attacked on an issue involving academic freedom.

Thus, like assessing the positive as well as the negative attributes of aging, so must the value of academic freedom be considered in a complete discussion of tenure.

Other Important Findings

Although charges of faculty inadaptability and productivity are unsubstantiated, the subsequent analysis revealed a number of questionable practices in human relations in colleges and universities. Now it is time to examine those consequences which reflect on faculty personnel management in higher education. This opportunity to improve current practices is too important to miss.

The Need for Assistant Professors

Major discoveries are made at a relatively early age in the sciences (Lehman, 1953). By definition, breakthroughs defy convention (Kuhn, 1962). If a young man conforms so as to acquire tenure, if he stifles dissent in order to assure acceptance, if he suffers dysfunctional tensions in order to achieve a promotion, then personnel practices require revision. Counterproductive behaviors are not tenure's function or goal. Not only must a man's future be made reasonably certain but also must the bounds of acceptable deviation be understood. How colleagues will judge his acceptability has to be as unambiguous as humanly possible. He deserves a continuous assessment of his performance so he can learn to grow.

At present, tenure practices are not constituted so as to inhibit reforms. They do not preclude bettering poor personnel practices. Young faculty members are essential for colleges and universities. Today there is more selection than at any time in the recent past. It would be a disgrace not to maximize their contribution to students, colleagues, the institutions, and society. Misadministration of tenure is inexcusable.

The Aberrant Behavior of Associate Professors

The saddle in the output curve occurs at about the associate

professor stage of a career. Stouffer (1954) found the associate professor to be the principal complainer about inadequate facilities. Schuman and Lauman (1967) found his political position had moved to the right, as did Blackburn. Blackburn and Lindquist (1971) discovered that not only his colleagues of higher and lower ranks but also other associate professors found him enigmatic. Yet he has received tenure. Later he becomes a full professor and moves from these doldrums.

Perhaps what is involved here is the 40-year-old syndrome, popular in the psychological literature. But perhaps other factors enter. As it appeared to Blackburn and Lindquist, the man has reached a stage of acceptance by colleagues. But other colleges and universities don't seek him yet; he is not quite a proven star. And so his alternatives are restricted. "Success" becomes a promotion at home. To attain full professorship, don't rock the boat.

If this explanation holds any truth, then tenure is a symbol of success, not basic security. Again, serious questions about personnel management arise. The conclusions with respect to the assistant professor apply—for instance, the need for continuous assessment of his performance and his participation in goal setting and evaluation of his work.

Midcareer stage requires special attention. Right now it is being neglected. Tenure is connected, but tenure is not the cause of the aberration. Unsatisfactory personnel practice is.

The Nonlinear Path of Maturation

The cited studies by Lehman (1953), Pelz and Andrews (1969), and others suffice to demonstrate that a man has fertile and barren periods. He is much more likely to be cyclical in his productivity than to tread a single path at a constant speed, year after year. He is likely to make major shifts in his interests, and so move toward his most fruitful contributions. Yet he is more likely to receive the same assignments year after year. The proportion of teaching, research, and service are likely to be held constant for him every year. Sometimes he needs colleagueship, a partner to work with; other times he will do best when left alone. Management errs when his work conditions are held invariable, as they frequently are.

A genuine loss—personal and societal—occurs when an academic man stops growing and developing, developing new hypotheses, exploring new interconnections. Nothing is quite so sad as to return to a campus after a six-year interval to find a former col-

league essentially where he was—still competent but more than a little complacent, no longer chomping at the bit and frustrated by a lack of time to undertake an endless collection of ideas he is generating. Such phenomena need not occur. Better faculty–faculty and faculty–administrative practices could eliminate such human waste.

The Importance of the Work Environment

Without extending the discussion by introducing additional studies, the findings by Meltzer (1956) and by Pelz and Andrews (1966) adequately show the strong relationship between work environment and productivity. Freedom and support were Meltzer's best predictors. The nature of the task, communication among group members and administrators, change and challenge, security and support modified productivity for Pelz and Andrews. Each of these variables is a function of the work setting.

What emerges from the findings above is that tenure is involved only indirectly and, by implication, falsely so. What needs improvement, in some places to an appreciable degree, are the human dimensions of a work situation. These deficiencies constitute soluble problems. Some require additional information. Some can be attacked without delay.

Litigation and Court Decisions

Just as Carr (1959: 6) once described academic freedom as "a stepchild among American civil liberties," so is the legal status of academic tenure somewhat less than fully legitimate. The history of tenure provisions predates the 20th century. It developed in the public elementary and secondary schools before it did in colleges. Shortly after the founding of the American Association of University Professors in 1915, tenure provisions of varying sorts began to appear in public and private colleges and universities.

In general, the courts have upheld the rights of institutions or states to enter into tenure agreements with their employees. At the same time, it has been equally clear that academics possess no inherent right to tenure as a consequence of their position. The same is true of freedom, which the courts have viewed as a procedural right, not a substantive one. That is, removal from a tenured position can be conducted only under the conditions of good and sufficient cause. Consequently, the determination of what constitutes academic freedom essentially has been left to the discretion of the academic community.

However, recent court decisions seem to be giving contours to the meaning of academic freedom, especially now that it relates to freedom of speech and freedom of association. As Brubacher has written, "Increasingly aware of the critical stake that society has in the free pursuit of truth, the courts have recently outdone themselves in hedging it [academic freedom] with Constitutional guarantees" (1971: 57).

Before turning to the specific matter of the legal status of academic tenure and the matter of due process, it is important that an important distinction be made between the private and public sectors of higher education. Generally speaking, most cases involving matters of tenure and academic freedom have been dealt with either under the provisions of the First and Fourteenth Amendments or under established statutes dealing with matters of contract. In public institutions, the constitutional route is most applicable, with the aggrieved faculty member filing as a citizen prerogative writs to restrain allegedly illegal public actions. What happens when the court is out depends upon the statutory provisions. When tenure clauses are present, they are binding. When they are absent, as they sometimes are, the courts have ruled that in the absence of explicit statutory provisions governing tenure, faculty are protected by tenure agreements only so long as the governing board chooses to honor the agreement.

In private institutions, tenure regulations are covered by statutes pertaining to the making and upholding of contracts. "A tenure system creates what is in substance private grievance machinery operating under privately developed standards. Failure to comply with the procedural requirements will subject the institution to an action for damages" (*Harvard Law Review*, 1968: 1102).

Thus governing boards have vast powers in establishing original contracts for defining employer–employee relationships. In the case of a dispute an aggrieved faculty member might bring suit into court for damages thereby seeking substitutive redress rather than specific redress. Consequently, a wide body of case law dealing specifically with private colleges and universities has not been developed. In fact, "a private institution's legal obligation to retain faculty members, even where expressed in some formal document, is neither clear nor universally accepted" (Davis, 1961: 206). Thus, it has been held in the courts that despite an acknowledged existence of an institutional tenure policy, a college may enter into contracts that specifically exclude or contravene the policy.

Once more, United States law does not provide a clear and

comprehensive definition of the rights and obligations of professors or colleges and universities. Furthermore, constitutional provisions rarely deal directly with these questions. Hence, legal standards must be constructed from related constitutional principles, statutory law, and common law. Consequently, precedents have evolved from the courts at different levels of government which have considered widely varying controversies in different periods of time and in different parts of the country. It is not surprising, therefore, that court opinions are by no means unequivocal. Furthermore, as yet the Supreme Court has not considered enough cases to develop an authoritative body of law in this arena. Parties to a controversy can build diametrical arguments from legal precedent. Also, legal scholars disagree in their assessment of the direction the law is taking.

As above, academic freedom is so intimately linked to tenure issues that one confounds the other. For example, based upon his analysis of court opinions and the constitutionally protected rights of speech and assembly, Wilkie concluded that academic freedom is constitutionally protected (1969: 97-99). On the other hand, Van Alstyne was less confident of constitutional bases for academic freedom (1970: 554-555). Earlier Fellman felt that only a few judges had either an understanding of or sympathy with the concept of academic freedom (1961).

Court opinion supporting the concept of academic freedom can be cited. In addition, Fellman's search of legal opinions uncovered few cases of faculty dismissal when academic freedom was mentioned (1961: 380). The courts have tended to concentrate on the employer–employee relationships which exist between an institution and a faculty member. In some, though, the absence of explicit constitutional protection, the tendency of courts to ignore the issue, the problem of private colleges and universities, and the ambivalence the courts have expressed on the issue of loyalty oath all weaken claims which assert that academic freedom is constitutionally protected.

Considering now some decisions regarding tenure, it appears it is somewhat more secure than is academic freedom. Some courts have held that statutory rights of hiring and firing held by the trustees of public institutions cannot be abrogated by institutional bylaws which grant tenure (Fellman, 1961: 280-281; Byse, 1960). In most cases, however, tenure policies in public institutions have held the status of sublegislation. Institutional authorities have not been able to lay them aside at all (Byse and Joughin, 1959: 71-72;

Fellman, 1961: 382-383). The strength of the legal protection of tenure, however, is wholly dependent upon prior agreement on policies established by the institution. As was said above, in the private sector a violation of tenure policies is not subject to judicial review since there is no force of the state law. What is involved is a breach of contract.

With respect to the legal status of due process, institutions are usually required to grant a fair hearing before dismissing tenured professors. Byse suggests that private institutions may be constrained by developing law (Byse and Joughin, 1959: 119). Without a doubt, the most portentous developments in due process requirements involve procedures to be used in dismissing untenured faculty members. Recent cases have found nontenured instructors securing some relief by taking public institutions to court (Crowl, 1970: 1, 4).

For example, a U.S. District Court has ruled in Roth vs. the Board of Regents that the University of Wisconsin—Oshkosh must either grant Roth a hearing or reappoint him. Although a dismissed untenured faculty member must initiate the request, he has a right to written reasons for his dismissal. The burden of proof lies with the dismissed teacher if he wishes to contest the unfairness of the action (Van Alstyne, 1970: 566).

The University of Wisconsin—Oshkosh was joined by several prominent educational associations in an *amicus curiae* brief. They argued that due process requirements in the dismissal of a nontenured professor would "impair the ability of a college not to renew a contract of a less suitable probationary teacher," decrease the quality of education, and grant a kind of "instant tenure" (Crowl, 1971: 4). In response, the court noted that only four of 442 probationary employees in the state university system were terminated and said:

> Where customary practice indicates that continued employment is ordinarily to be expected . . . , the alleged need of the university employer for complete freedom of summary determination will be tested against the reality of the situation rather than the legal form (Van Alstyne, 1970: 567).

Against the thrust of this decision, which has been appealed, is the opinion of the Tenth Circuit Court that nontenured faculty have no rights after their contract expires "even if the reason for their non-reappointment was their exercise of a constitutionally protected right such as free speech" (Crowl, 1971: 1). The First Circuit Court requires that the statement of reason for discharge

be granted to a dismissed faculty member, but does not require a hearing. The Fifth Circuit Court requires a full hearing which follows a court-established procedure, if a teacher charges his dismissal was provoked by his exercise of constitutional right.

The Supreme Court recently granted *certiorari* to an appeal in the case of Robert P. Sindermann, a teacher dismissed from Odessa Junior College in Texas, allegedly for lobbying for institutional change opposed by the trustees. Sindermann lost in the district court, but the decision was reversed in the court of appeals. Since the college has no system of tenure, the forthcoming judgment may do much to clarify what legal protection does exist for academic freedom outside of tenure.

The United States Supreme Court has agreed to hear both the Roth and Sindermann cases. They are enough alike to establish clear precedence. Higher education will be watching. The court's decision has obvious and wide ramifications.

Collective Bargaining and the Unionization of Faculty

The development of faculty unions is a fairly recent phenomenon. The literature on the subject is overweighted in the opinion area. As yet, little empirical research exists to corroborate opinions which vary from utter dismay to ultimate hope. At this time it remains premature to predict with assurance the impact of a faculty union on a college or university. The precedents from business and industry may be very misleading. The professor may well create mechanisms peculiar to his particular situation. Nonetheless, some informed speculation about faculty unionization aids in the examination of tenure. In addition, we are not completely without information (Livingston, 1967; Rehmus, 1968b; Wynn, 1970; McHugh, 1971; Tice, 1972).

There is little controversy about the rapid growth of collective negotiations in higher education. Having begun with the two-year colleges in two states that passed supporting legislation, the AFT, NEA, AAUP, and independent organizations now have negotiated contracts in several states and at many four-year and graduate institutions. Furthermore, faculty strikes have occurred at both two- and four-year colleges and universities.

There is controversy with respect to what collective bargaining does to the image of the professor. Most laymen assign a loss of social status, for professionalism has been abandoned. The layman's conception of a union is strictly an employer–employee relationship, a worker on the job, not a professional man. That actors,

broadcasters, and musicians are unionized seems not to be considered by him. Nor does the fact that faculty in England have been unionized for years and enjoy an even higher social status in that country than they do in the United States. The consequence of the spread of this phenomenon upon the layman's attitude toward higher education remains to be seen.

Some research findings are available (Blackburn and Bylsma, 1972; Bylsma and Blackburn, 1972). Community colleges were studied before and after collective bargaining had been in practice for five years. In these colleges, the principal changes occurred on those topics which most directly relate to faculty welfare—for example, salary, class size, academic calender, continuing contracts, workloads, and time assignments for classes. In every instance, the changes which took place after collective negotiation resulted in the faculty having a greater voice in these matters. When topics in the area of academic affairs were examined (for example, text selection, admissions policies, the objectives of the college and of the department, curriculum and course assignment, degree requirements, faculty and administrative appointments) the changes were appreciably less. Principally, the faculty acquired greater voice in the selection of new faculty and in the appointment of administrators.

Other consequences were revealed in this research—changes in faculty welfare independent of the size of the institution, the affiliation of the bargaining unit, and other organizational characteristics. The research also found that the institution moved toward a more tightly structured bureaucracy after collective bargaining. More specific definitions and rules for both administrators and faculty also occurred after unionization. Increased impersonality in faculty–administrator relations was reported. In addition, increased specialization in decision making groups, less arbitrariness in the dismissal of faculty, and an increase in the administrator to faculty ratio occurred. In general, the institution now has greater faculty participation in decision making than it had before collective negotiations. Recognize, however, that typically community colleges have had a low level of faculty participation.

Turning to some general considerations, it is important to examine four elements involved in the collective bargaining process that relate directly to the issue of continuing employment—that is, to tenure. These include: (1) the composition of the bargaining units, (2) the scope of negotiations, (3) the issue of exclusive representation, and (4) the nature of the bargaining process.

Composition of the Bargaining Unit

The basic issue involved here is whether the division or department chairman is to be included within the bargaining unit. The chairman is in a vital position. He has a crucial voice in promotion and tenure decisions. As yet, no clear precedent has been established for the inclusion or exclusion of the chairman in the bargaining unit (Finkin, 1971: 131-132; McHugh, 1971: 75).

Scope of the Negotiations

This issue is of considerable importance. In conventional bargaining situations, the scope is limited to wages, hours, and "other condition of employment." It is not difficult to argue that academic freedom and tenure are conditions of employment. For example, one CUNY contract negotiated under an AFT affiliate has held tenure negotiable (Finkin, 1971: 133). Furthermore, since academic freedom clauses appear in the vast majority of contracts negotiated in Michigan community colleges, it follows that academic freedom itself is negotiable. (The AAUP, on the other hand, takes the view that academic freedom is nonnegotiable. Obviously, the same argument applies to tenure (Moskow, 1971: 51).

Exclusive Representation

The National Labor Relations Board, ultimate arbiter of collective bargaining, has supported the principle of exclusive representation in an attempt to prevent perpetual jurisdictional squabbling by rival unions. So far as colleges and universities are concerned, the principal effect of this ruling is that institutional organizations—the faculty senate or the local AAUP chapter, for example—will be banned from officially representing the interest of the faculty in the event that they lose the election which determines the faculty representative. The administrative staff can continue to recognize a senate, if they so choose. Legally, however, they need not do so. The representative issue is closely related to individual faculty rights. For example, at Boston State College the union local " 'instructed' members of the faculty as individuals to refrain . . . from giving any information to the college administration that would contribute to decisions on merit salary, promotion, tenure or retention, during the conduct of negotiations" (Finkin, 1971: 135).

So far those negotiated contracts that include an agency shop provision have done so to insure financial support for the union and to acquire service fees from faculty who refuse to join the organization (Moskow, 1971: 47). The agency or union shop is not far

from the closed shop which requires prospective employees to become members of the bargaining agency before they can be employed. Under such conditions, it becomes possible for the bargaining agency to restrict supply artificially by controlling agency membership. Such a practice comes very close to virtual life tenure for members of the guild.

Nature of the Bargaining Process

Perhaps the aspect of collective bargaining that has the greatest potential impact on higher education is the adversary nature of the bargaining process. An essential element of the standard collective bargaining model is the "belief that a fundamental and permanent conflict of interest exists between the managers and the managed" (Rehmus, 1968a: 8-9). A relationship of this sort is in sharp contrast to the conflict-reducing faculty authority models prevalent in many colleges and universities.

Another important aspect of the bargaining process is the way in which final decisions are typically reached. Under an adversary model, decisions are normally made in final packages which have been formed by trading items rather than by settling issues on the basis of their merits. Inevitably the settlement represents a compromise, one which conceivably could result by trading off tenure for more money. It does not follow that such adversary stances necessarily will follow in higher education. Perhaps they will ameliorate with time. It may well be that the outcome will depend very much upon whose hands leadership falls into when unions are formed.

As yet, collective bargaining has not replaced tenure. Nor has tenure been negotiated. Until now the emphasis has been on clarifying situations and detailing mechanisms for a fair dismissal of either an untenured or tenured faculty member. There seems no doubt, however, that the effect of a collective bargaining unit is to place the entire faculty at the defense of a professor who is attacked. The union is on the campus, not in distant Washington. Dismissals by administrators will diminish rapidly with the growth of collective bargaining, whether the protection for faculty through a union is called tenure, solidarity, or something else.

Clearly much research is needed in this domain. We know nothing about the cost of negotiations, either for the institutions or for the faculty. We know nothing about the consumption of energy by the union itself nor who the participators are. Those who contribute time and talent to the union are not giving it somewhere else. What is being sacrificed? What is being gained? By whom?

What is to happen to the important contributions students have made in academic governance? The list of these questions is long.

There seems no doubt that collective negotiations will continue to spread. Unionization will expand in the public sector, particularly in state and/or municipal systems and in multiple-level systems in which inequality is perceived to exist by those on the lower levels (Lester, 1968: 251). Private colleges are receiving their first thrusts. How unionization will affect tenure, and how it will affect faculty adaptability and productivity remain open questions.

Needed Research

The analyses also reveal vast pockets of ignorance with regard to faculty careers. Knowledge in these areas would advance the betterment of human relations in colleges and universities. A few of the more pressing concerns are briefly mentioned here.

1. Research is needed that more often equates teaching effectiveness with student learning rather than disproportionately with satisfaction. Hoyt (1969a; 1969b) has pioneered, but more studies are needed. Permanent learning, that is, retention, will be an even better measure and needs to be studied.

2. How teaching effectiveness and contribution to the college fluctuate with age requires investigation. Figures 2 and 3 displayed an increasing variance with age. Do some professors continuously improve? Do others deteriorate? Do all fluctuate? If there is regression for some, can intervention alter the outcome?

3. How does the professor's performance with respect to committee assignments and to the other service roles he fills for his college change with age, rank, and tenure? They need to change.

4. Only one study focuses on productivity as an overall contribution to the organization, *the* production measure for the vast majority of faculty in the United States (Blackburn and Clark). Their findings require corroboration, extension, and refinement. Productivity patterns are nonexistent in the humanities. Can a comprehensive history be written before a mature age, for example? Do professional schools—art, law, medicine, music—have distinctive patterns quite different from the liberal arts?

5. And research is needed with respect to tenure itself. Higher education needs to know some very fundamental facts about the practices of tenure. For example, does a man's behavior change in important ways with the conferring of tenure? If so, in what ways? Does he now write with more flair? Speak with greater con-

fidence? Produce more exciting research? Teach wih increased zeal? Defend the first principles of academic life with unhesitating vigor? Or are the opposites in some ways involved, as has been charged, though unsupported by the data?

No research exists on this critical point in a man's career. (In fact, no longitudinal research on faculty has ever been conducted.) The effort will not be as simple as it first may sound. One of the cardinal practices in academe is for the academic man to profess anything but concern about his being awarded tenure. In the same way that he never announces that a piece of his work has been accepted for publication, but rather lets his colleagues discover it in print and then professes surprise that he had not remarked about it earlier, so does he follow the protocol with the reception of tenure. He must act as if it were not important, that in no way would it affect his behavior, that it really is of no consequence, that security is not an important value for him. Thus, as the professor suppresses and conceals an elation and satisfaction about the acceptance of a scholarly effort, so too he conceals deep feelings, hides career reassessment or whatever may indeed be personal and very important to his future. In-depth research on this aspect of tenure can uncover important insights about the practices of the academy and the values professors hold.

The list could be extended—unfortunately, too easily and too extensively.

Implications

While research is being launched, there is no cause to delay in initiating the obvious reforms. To begin with, faculty must face their role in management and not duck. For example, faculty have argued and secured *(de facto)* the vital right to select, promote, and award tenure to their colleagues. To hold that privilege they must also assume leadership in acting towards peers who are slipping—to help them up, and to support them, but also to act to remove them when remediation and rehabilitation fail.

Faculty cannot renege from the unpleasant aspects of controlling colleagueship. Some think they do because they shy away from conflict. (See, e.g., McGill, 1971.) Whatever the reason, the right to control their work environment requires dealing with misery as well as with pleasure. Faculty negligence in policing themselves is unacceptable behavior.

On the positive side, faculty need avenues to express their desires and expectations. Administrators can't simply assume a man

is satisfying his desires if they never ask him what they are. The device of a department chairman asking a man to set some goals for a year, helping him be realistic about what can be accomplished in twelve months, and discussing with him the needs of the organization goes a long way, and it is so simple. Each informs the other and sets standards by which both can judge success. Too often, it seems, the man believes he is judged on criteria he thinks secondary, while the boss believes he is assessing on what the man holds dearest (Theophilus, 1967). Both are wrong, merely because they never took the time to ask one another. Absurd, yes; but easily correctable.

Turning to matters more directly on the administrative side of the ledger, three confidential reports from a major university (which both has a high percentage of tenured faculty and has been in a nongrowth stage for several years) pointed out that the feared pending disasters of no new input are greatly exaggerated. Expectations of no flexibility were founded on spurious assumptions. Even as age increases, and the percentage on tenure rises, openings are created by retirement and departures. Furthermore, good men can be persuaded to move into new areas to spark innovations, seed growth, and foster development. And even more refreshing—for those who did not happen to know already—it takes very little new blood to make a great deal happen. Thus, since the market is on the side of the employer, careful selection for those openings that arise can permit—yes, even guarantee—a continuously vital organization, one responsive to legitimate demands, one highly productive for societal needs. This is good news.

The other side of the administrative role is the leadership side, the spokesman's function for higher education. Presidents have been too silent during the assaults on tenure. They need to speak out—to boards, legislators, alumni, students, citizens. They need to explain what tenure is, and what it is not. They know that its elimination would not solve the larger problems, the ones really under attack.[12] For instance, eliminating tenure would not solve discrimination against women, blacks, or other minority groups. Thus Saltzman's (1971) national tenure accreditation board addresses the wrong problems. Early retirement may be a healthy and humane practice for some, for example. Recall, however, the rise in the productivity curve at the end of the career. Furthermore, early retirement will

[12] A good guess would be that even if there were periodic review of tenured faculty by administrators, students, faculty, or whomever, the number of places created would be infinitesimal.

not solve what the critics of tenure have unsupportedly charged. Administrators, as a college's leading spokesmen, must inform higher education's constituencies on these matters.

Administrators also need to initiate the review of their institution's personnel practices. Modifications must be considered, as the Commission to Study Tenure (1971) at the University of Utah did thoroughly. There always will be someone who believes someone else is incompetent—or knows someone who knows someone who is claimed incompetent. Furthermore, that someone will blame tenure for an incompetent's continued presence. In addition, he will probably believe that tenure is a "system," and if, as he has assumed, the system is at fault it must be eradicated. It is not so easy to lay to rest the errors in this man's presumptions. But that does not make it any less the administrator's duty to try to do so—and to work to improve the human conditions within academe. This is no minor task for a president to perform. It is a noble one.

In the final analysis, then, my initial hunch was on target. It's not tenure to be attacked, but something else again. That "something else" concerns personnel practices. Administrative inequities are the target for concern, not tenure. But none of this charge says that tenure is without flaw. The point is that during the interim, while tenure is being improved, personnel practices can also be bettered. Administrators can act to bring about immediate results; improving tenure will take a little longer.

And in the end we add to the grace that higher education deserves. She is not an inert target to relieve personal frustrations. Instead, she is a living, dynamic organism—developing, giving, growing, and responding to a changing environment.

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