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Faculty Distribution

The faculty of any university is distributed in various patterns. Some of these, although significant in principle, are of little present import—for example, those determined by race, sex, language, and religion. The number of Orientals and of Negroes on the staff is negligible. The same statement may be made concerning women, except in the areas of auxiliary medicine, nursing, and social work.¹

Time was when the faculty was divided between those who taught in English and those who used German, but this unusual bilingualism was of brief duration. As for religion, the University makes no formal distinctions; and it is beyond the present purpose to inquire into distribution in terms of this criterion.

There are some divisions within the faculties, moreover, which parallel others in a manner that renders separate discussions unnecessary. Thus, distribution along the lines of tenure and non-tenure status, or in terms of graduate and undergraduate teaching activities, roughly corresponds to the distribution of ranks. Again, the division between full and part-time personnel corresponds largely to ranks in the case of the "assistant" category, or it reflects the particular needs of certain professional schools.

¹ The Arts College faculty, e.g., includes five women; the Wharton School five; the School of Education five; and the Engineering Schools and Fine Arts one each. The College for Women staff reflects, in this respect, that of the Arts College which it uses. The School of Dentistry includes seven; and about five percent of the School of Medicine staff are women.

The extent to which full-time teachers are employed in clinical medicine, for example, has long been a serious issue in medical education. But the problems involved are those peculiar to medical teaching and research—or to other advanced professional interests—and their discussion would therefore seem most appropriate to reports on the professional schools.²

Most obvious of demarcations among faculties are those between fields of learning. The relative numbers assigned to various professional schools and undergraduate colleges reflect, over the long run, the importance which society attributes to the work of each of these institutions. Thus, the relative expansion of faculties in commerce and in engineering has been a product of general social trends. But it also reflects technical progress in these areas and resulting public demands.

Technical advances may lead to the creation of new fields and faculties even in the absence of public interest, as in Indo-European philology seventy-five years ago, or in linguistics during recent decades. In such cases, the intra-University sense of values is the determining factor. Again, any decision by administrators and faculty that a given field should be "required" in particular colleges will usually increase the staff in that field. Or *vice versa*.

Hence, while the relative number of staff in certain colleges or departments may remain almost stationary for years, that in others may be rising or declining. Members are politely (but busily) engaged in "empire building" or in rear-guard action, as the case may be. In the first instance, individuals desire more courses and staff, or even new

² Full-time, in this connection, relates to the giving of all professional time without receiving any income from private practice. It is not to be confused with so-called "geographical full-time."

departments. In the second instance, they are seeking to preserve inherited assets.

All these processes seem inevitable, perhaps even desirable, in the University environment. But they cannot be simply ignored in terms of some simple formula like "the survival of the fittest." The "fittest," in a particular situation, may be only the most aggressive, and the least fit only the non-aggressive. Expansion in the number of courses, however justified by new content, may not be in the interest of the college as a whole. The duplication of courses is questionable, and most so within the same college.

We are not concerned, however, with curricula as such. The point is simply that expansion (or contraction) of offerings and of staffs often go hand in hand, and that the outcomes should not be just left to the operation of power politics within or between colleges. Someone must think things through as a matter of principle rather than of expediency. Faculties have a responsibility here, but they are also involved in personal relations with colleagues on a "live and let live" basis. If, in consequence, they are inclined to opportunism, administrative officers or committees have a role to play. The latter, in terms of their own philosophy, may oppose or encourage staff increases as circumstances warrant.

Most pertinent, for the University as a whole, is the distribution of the faculty in terms of rank and of age. That for the first of these categories usually parallels the second—a college maintaining a high percentage of full professors will ordinarily exhibit a correspondingly high average age among its staff. The degree of such correspondence is determined, however, by appointment, promotion, and retirement policies. In a word, rank and age distribution are independent variables, even though they are apt to be closely correlated.

The full-time faculties of certain undergraduate colleges at Pennsylvania seem over-weighted in the senior ranks.³ This conclusion is based both on national averages and on a consideration of the issues involved. National distributions are reported in an N.E.A. survey of 1956, and these contrast with those at Pennsylvania as indicated below:⁴

Percentages in Ranks				
National Averages		Arts Col.	Wharton	Engineering
Profs.	26.8	39 } 60	32.3 } 50.0	24.6 } 53.8
Asso. P.	21.8			
Asst. P.	30.4	26 } 40	25.0 } 50.0	23.1 } 46.2
Instr.	21.0			

One notes that the percentage for the two senior ranks, combined, in the Wharton School is close to the national average; that this figure for the Engineering Schools is more out of line; and that the greatest disparity exists in the Arts College. This disparity is largely due, moreover, to the high percentage of full professors in the College, since that of associate professors is very close to the national average.⁵

³ The situation varies in the professional schools according to special needs. In the Law School, e.g., most staff are of senior rank; but in the School of Medicine the ratio is reversed—in both clinical and pre-clinical departments. Medicine, e.g., has 26 in senior rank and about 200 in the junior! In anatomy, the corresponding figures are 8 and 10; in biochemistry, 5 and 21, and so on.

⁴ National averages were reported in the *Jour. of Higher Ed.*, vol. 28 (1956), 69 ff; for the Arts College figures were compiled by Dr. Hayward Keniston; for the Engineering Schools by Dr. Reid Warren; for the Wharton School by Dr. C. M. James (Wharton School Survey, Rept. F 1, 1957, 2.)

⁵ The weighting with full professors may have been even heavier in the past, though this has not been looked into. The writer recalls that he had the distinction, as an Instructor in History in 1924-25, of being one of two members of a department of eight who were not full professors.

Some justification for the high proportion of professors in the Arts faculty may be found in their responsibilities for graduate teaching. One assumes that such teaching requires a greater percentage of senior staff than does undergraduate instruction. It may also be held that it is this staff, more than the junior ranks, which lends prestige to graduate programs and so attracts advanced students. Ergo, there should be a high proportion of senior men in departments which offer work on the graduate level.⁶

Granting this in principle, the question remains: What price is a university prepared to pay for such a distribution of staff? Obviously, a high proportion of senior ranks involves greater costs than would less ambitious arrangements. Here, again, one observes a complication arising from the institutional straddling of the graduate and undergraduate levels. If the Arts College had its own faculty, distinct from that of the Graduate School, there would be no need to weight it heavily with senior ranks. In other words, the use of graduate school staffs is a relatively expensive way of providing undergraduate instruction.

Further difficulties may lurk within the interrelations of rank distribution and age factors. If 60 percent of personnel are in the senior ranks and if their ages are not well scattered, long intervals will occur during which few vacancies will open up. At such times, it will be impossible to advance a desirable percentage⁷ of assistant professors to associate professorships. This situation makes it difficult to attract or hold able young men, so that when a senior vacancy does occur, a department—seeing no promising juniors on hand—replaces a professor with another professor from the outside.

⁶ Actually, in the U.S.A., most graduate students seem to be more attracted by the standing of a department—or even of the graduate school as a whole—than they are by the reputation of individual professors.

⁷ At least 40 percent.

Graduate work will not suffer and prestige will be preserved, but the departmental budget will remain unnecessarily high. And the department will have done nothing to recruit the profession from below.

Meantime, a college or particular departments therein may be handicapped by a lack of "young blood." This situation is the more likely to develop if the retirement age is as high as seventy. At Pennsylvania, the age ratio varies with the different colleges. In the Engineering Schools, for example, it seems fairly well balanced. The mean age of seventeen professors is fifty; of eighteen associate professors forty-two; and of thirteen assistant professors thirty-nine.⁸

This implies that only about 20 percent of the full-time staff are over fifty, and about 55 percent over age forty-five. The latter ratio is somewhat higher than the national average for 1955 (about 45 percent above forty-five),⁹ but the national survey included many institutions with retirement ages below seventy.

In the Arts College, on the other hand, faculty composition is more heavily weighted by the upper-age group. Dr. Keniston found that the median age of all professors in humanistic fields was as high as fifty-eight and that of associate professors, forty-eight. The implication is that at least half of the full-time humanities staff is over fifty years of age. The actual age composition may be even more extreme, to the extent that some assistant professors with *de facto* tenure are still on hand in their fifties and sixties. One need not subscribe to "the cult of youth" in order to realize that such a situation is questionable.

A final complication of over-weighting in the upper-age

⁸ Data provided by S. Reid Warren, Ass't. Vice President. There are few instructors in all but one School.

⁹ Based on 61,000 full-time "college teachers"; *N.E.A. Research Bull.*, XXXIII, No. 4 (Dec., 1955), 141.

group is the well-known danger that several members of a department will approach retirement at about the same time. If replacements are then sought from outside, difficulties in a declining market may be compounded by the number of persons involved; and in any case, desirable continuity in personnel will be lost.

These various disadvantages add up to the view that something should be done to lower the present percentage of senior ranks within the Arts College faculty at Pennsylvania. It would be difficult to measure the exact contribution which these staffs make to graduate programs and just how far that contribution may justify an excess of senior staff. But the cost of maintaining this excess, as well as the other difficulties mentioned, would seem to justify the course proposed—especially in a University which is by no means wealthy. The outcome would be, in effect, a compromise in which graduate work need not suffer seriously if really promising younger personnel are moved into the current of regular advancement.

A reduction in age levels could be attained, first, by reducing the retirement age and so moving men out, say, at sixty-five. In our opinion, for reasons which will be discussed later, such a policy should be applied only to those whose limitations have become apparent. If this is granted, earlier retirement will not do much to redress the balance in ages and ranks.

More promising will be the adoption of more systematic policies of appointment and promotion. It has already been suggested that an "up or out" policy be applied to assistant professors after six years' service to the University. In addition, as vacancies in full professorships occur, most of these slots should be filled by assistant professors or by advancement of the latter to associate professorships.

Whether to replace one professor with another or with a man of lower rank will depend on various circumstances relating to the field, to prestige, to instructional needs, and so on. But a primary consideration should be the rank-and-age status of the department and of the college involved. If this is already over-weighted at the upper levels, lower-level appointments will be indicated in most cases. Conversely, there may occasionally be a department which needs an increase in the upper ranks. The goal would be to stabilize most departments on approximately a fifty-fifty balance of senior and junior ranks.

If, meantime, junior men are "up or out" after six years' service, a desirable balance in ages will begin to be established. Assuming that such men have been first appointed at about age thirty-two, the successful ones will become associate professors at least by the time they are thirty-eight.¹⁰ They will then have tenure and could reasonably be retained at this rank for six or seven years, attaining full rank at approximately age forty-five.

With such age-rank correlations in mind, tables can be constructed which will show what adjustments are needed in order to provide for an upward flow in ranks which is consistent with the principles noted. These had best be related to a college as a whole, since departmental units are too small to provide an overall balance.

Such tables need not be as systematic as those which are used, for example, at Harvard, and the needs of a particular department at a given time should not be ignored. There may be cases in which a brilliant young man should be ad-

¹⁰ This is assuming that they were first appointed as instructors or assistant professors at the University and have, by about thirty-eight, given it six years' service. But if first appointed as assistant professors from the outside, where all years served need not be credited toward tenure, promotion may be delayed two or three years.

vanced to tenure status before age thirty-eight; or conversely, in which an associate professor had best *not* be promoted even after reaching forty-five.

Instances of the latter sort will normally be rare, however, since no one should be made an associate professor who is not expected to qualify subsequently for full rank. A permanent associate professor is in a situation similar to that of a permanent "associate," albeit on a higher level. In the rare case when an associate professor does not fulfill earlier promise, nevertheless, further promotion should be postponed and he should be retired at the earliest possible age. One or two years before this takes place, he can be finally advanced. This gesture may help his morale at the end, and can be viewed as a price paid by the University for the original error in granting tenure.

The same logic may be applied to any men who have lingered on into their sixties as assistant professors. They should be advanced at least to the next rank shortly before retirement, unless other status-giving posts have meanwhile been found for them.

So much for the distribution of what may be termed the regular academic ranks. That of the several types of young assistants varies with the teaching or research needs of particular departments, and one would have to examine each unit in turn in order to decide whether such personnel were too numerous or too few. Matters are complicated by the fact that men are assigned to assistantships for two purposes—to aid the regular staff and to secure in-service training as teachers or investigators. If emphasis is placed upon the teacher-training function, it might even be desirable to have more assistants appointed than the regular staff needed in connection with their own work.

A special situation arises, however, if graduate students are

used as the sole teachers of particular student groups. The system is usually employed in large, general courses which are broken down into many separate classes or sections. The arrangement provides low-cost instruction and may have both pedagogic and teacher-training values—provided there is real supervision by senior staff. But if the assistants actually do a large part of a department's teaching, questions can be raised about the over-all quality of such instruction. The significant thing here is not the distribution of assistants in comparison with that of the regular staff,¹¹ but is rather the percentage of total teaching hours which is in assistants' hands.

A final distribution pattern of considerable significance is that which relates to the academic origins of staff members. These could be analyzed in various ways—for example, *re* the relative numbers who received their undergraduate and/or graduate education in (1) private or state institutions, (2) secular or church schools,¹² or (3) American or foreign universities. But the most meaningful distinction of this sort at the present time¹³ is that between staff members who were trained in the institution in which they have done all or nearly all their teaching, and those who were trained or have had substantial experience elsewhere. The first of these groups is said to be inbred, and it is the possible danger of such inbreeding which arouses some concern.

Both undergraduate and advanced professional schools at Pennsylvania exhibit considerable inbreeding, though the

¹¹ In the Arts College, e.g., the sheer number of assistants is almost as great as is that of the regular staff (about 200 and 210, respectively).

¹² In general, few members of secular university faculties in this country have received their graduate or professional training in strictly denominational institutions.

¹³ Fifty years ago in the U.S.A., the distribution of foreign- (and particularly German-) trained faculty members would have been quite significant.

degree varies with the colleges and even with departments within the same college. In certain areas, this seems inevitable; for example, in the case of the part-time clinical staff of the School of Medicine. Again, if a given department was a pioneer in its field and few others existed elsewhere, such a department would be—for a time—almost forced to appoint its own products. But in most instances, the situation has arisen from habit or from deliberate choice.

An extreme example of inbreeding is afforded in the case of the Wharton School. About 70 percent of its faculty who hold doctor's degrees received them from the University of Pennsylvania.¹⁴ (Some of this group have had significant experience elsewhere, but their number would not be large enough to change the general picture.) It also happens that about a third of the total Wharton staff received their baccalaureates at Pennsylvania, but this ratio does not seem as meaningful as that for graduate training.¹⁵

A similar though less extreme picture is observable in the Arts College. Of faculty members who are over fifty—practically all of whom hold doctorates—about 55 percent received them from Pennsylvania. The ratio falls to 47 percent for the entire full-time staff,¹⁶ and this indicates that inbreeding is a little less marked among the younger men. This contrast confirms the statements of several chairmen that the process has been deliberately checked in recent years.

The fact remains that almost half the Arts College faculty—and more than half of the relatively influential senior members—teach within the same institution that gave them professional training. And although a few of these men have

¹⁴ About half the faculty hold the Ph.D. There is a large group of instructors who do not have this degree, but the partial graduate training already received by them came in most cases from Pennsylvania.

¹⁵ C. M. James, *op. cit.*, 2.

¹⁶ H. Keniston, Ed. Survey Rpt. on the Humanities, 1957, 28.

had substantial experience elsewhere, many others have spent practically their whole professional lives within the "Penn" environment. Such a situation, in this or in any other college faculty, is disturbing.

"Inbreeding," it is true, is a loaded word. In academic life, as in the biologic world, the process may have desirable outcomes if it starts with good stock. If a department is strong and turns out able young doctors, why should it not appoint most of its new members from among these men whom it knows so well? A number of the faculty defended inbreeding on this ground. Only one man stated explicitly that it was desirable in order to "preserve traditions," but there is indirect evidence that such a view was also in the minds of a few other staff members.

No one, of course, objects to the appointment of *some* local products to a department's staff. But the term "inbreeding" is used, in practice, to apply only to excessive appointments of this sort—on the scales, for example, exhibited by the Arts College and by the Wharton School. It is difficult to lay down a rule here, since strong departments can doubtless follow the practice with more impunity than can weak ones. (Unfortunately, some departments may not be as strong as they assume.) Generally speaking, however, we would think it undesirable for most departments—and for an undergraduate college as a whole—to harbor more than about 40 percent of its own doctorates on its full-time staff.¹⁷

The reasons for this are fairly obvious. To begin with, inbreeding is unfair to the young men themselves. It is only natural that many of them *want* to stay with the department in which they were trained, but they should be shoved out of the nest for their own good. The fact that certain home-grown individuals are among the ablest members of a given

¹⁷ Exclusive of those with substantial experience elsewhere.

department proves nothing, one way or the other. (They might have been even better for experience elsewhere.) Real familiarity with attitudes and procedures in other institutions gives a faculty member broader perspectives on what goes on within the institution where he is teaching. And such outside experience may also be intellectually stimulating.

There is much to be said, on the other hand, for bringing a promising man back to the University after he has taught outside. This procedure combines a thorough knowledge of the candidate—which is the merit of inbreeding—with the advantages of diverse experience. A scholar who takes his degree at Pennsylvania can teach elsewhere as instructor or assistant professor for two or three years and then be appointed assistant professor in his original department. He could, under existing regulations, serve at the latter rank for three years more before a decision had to be made about tenure status. Occasionally, of course, "Penn men" also could be brought back at higher levels.

Warnings against excessive inbreeding are especially timely now in view of the looming shortage of academic personnel. A university department which finds it difficult to replace staff will be apt to hold on to its own M.A.'s or Ph.D's for teaching purposes. If this is actually unavoidable, nothing more can be said. Certainly, it were better to appoint a good home product than to bring in a mediocre outsider. The point is that such an alternative should be faced, if the percentage of locally-trained men is already 40 percent or more, only as a last resort.