The question of the degrees and distributions of heredity awaits a proper mode of recognition of the presence of the inherited traits. These are not as obvious as tallness or color in peas; they must in some reasonable way be made distinguishable and recognizable before their evidence can support the principles which they doubtless embody.

Joseph Jastrow

Madison, Wis.,
September 21

QUANTITY AND RANK OF UNIVERSITY ATTENDANCE

Recently published statistics on student attendance at our leading colleges are more notable because of certain necessary conclusions omitted than for inferences plainly intended to be drawn. The figures are overwhelmingly convincing when quantity alone is considered. When we attempt to evaluate university powers for administrating to the advancement of civilization—the primal purpose for which these institutions are established—naked quantity is the one factor of all which we should most wish to forget. Quality is the feature which ought to be most assiduously cultivated. It is not what goes into the mill, but what comes out of it, that counts.

In this last conspectus of attendance, for example, thirty American universities are considered. From institutions having the highest number of students, where the figures reach nearly 10,000, there is graduated precedence down to the thirtieth and last worth mentioning school. This last listed school becomes especially conspicuous because of the fact that its place is last.

The attendance table mentioned might have placed even greater emphasis on the quantity feature. Only the two hundred odd graduate students of this thirtieth and last listed institution might have been taken into account and this thirtieth school would then be made to assume the rôle of the tail-ender among 400 colleges of the land. But it is in this small body of students that lies the very essence of that quality of mental aptitude to which special attention is here directed, and which is entirely overlooked in the comparison.

Now it so happens that we have some very exact figures by which to express the quality of American intellectuality. They are far more reliable than any statistics which relate to mere numbers, because of the fact that they represent the mature and composite opinion of our most eminent scientific minds. It is well known how, by the one hundred authorities in science, there were selected the names of 1,000 men most distinguished in the several branches of knowledge; and how this list was recently published by Prof. J. McKeen Cattell.

Among the thousand American men of science who have become during their generation especially distinguished, who have maintained themselves as leading figures in advanced thought of the nation, and who have acquired something of an international reputation let us briefly trace the spell of the last and thirtieth school—the Johns Hopkins University. In the accompanying table is given the number out of the thousand of "starred" men who belong in each of the twelve principal branches of science. Then follows the number out of each group which has been directly associated with the Johns Hopkins University. In the third column are the percentages of Johns Hopkins men in each department.

Department	No.	J. H. U.	Per Cent.
Pathology	60	18	30
Chemistry	175	35	20
Astronomy	50	5	10
Zoology	150	35	23
Anthropology	20	0	0
Psychology	50	10	20
Mathematics	80	20	25
Geology	100	25	25
Physics	150	47	31
Botany	100	8	8
Physiology	40	22	55
Anatomy	25	15	60
Totals	1,000	240	

During the next generation, in spite of loud prediction to the contrary, these percentages will probably increase rather than diminish. The first generation of Hopkins men is yet in its prime. In a remarkable way it is copiously and creatively productive. Over all American competitors it has the start of 20 years. Whether in the third generation there

may be a falling off is a matter of conjecture. It depends upon several factors. The growth of the graduate school in the larger universities and in the state universities is an essential element, but not a disturbing one so long as college and university are reared side by side, and college spirit submerges and smothers university soul.

Thus is one fourth of all the master minds in American science a direct product of Johns Hopkins influence. So is 25 per cent. of all American scientific thought impelled by the mainspring of Baltimore. It is not quantity of university influx but quality of university output that is telling and worth while.

CHARLES KEYES

THE FUR SEAL INQUIRY, THE CONGRESSIONAL COMMITTEE AND THE SCIENTIST

SOME three years ago the "Committee on Expenditures in the Department of Commerce" of the House of Representatives, headed by Congressman Rothermel of Pennsylvania, undertook the investigation of the work of the Bureau of Fisheries on the administration of the fur seal fisheries, apparently with the definite purpose of discrediting, for political reasons, this branch of the government service. In February, 1909, there had been appointed an advisory board of the fur seal work, consisting of the following well-known zoologists, David Starr Jordan, C. Hart Merriam, Charles H. Townsend, Leonhard Stejneger and Frederic A. Lucas, to serve without pay in advising the government as to the best means of regulating the killing and the protection of the fur seals on the Pribilof Islands.

To discredit the work of the administration of the seal fisheries it was necessary also to discredit these men. The fact that they served without pay was of course open to suspicion to the machine type of politician, who naturally finds it difficult to conceive of any one doing any work for the government with no emolument attached thereto. Accordingly the majority of the committee proceeded to measure them according to their own standard and took up charges which had been filed against all and sundry by one Henry W. Elliott. This man Elliott, it may be mentioned, is a disgruntled ex-employee of the government who was dismissed in 1891 because he had been "found guilty of grave improprieties." For more than twenty years this man had persistently brought charges, not only against all the scientific men who opposed his propositions, but against seven secretaries of departments, besides senators and congressmen. These charges had been repeatedly disproved and their author discredited and officially branded as "a person unworthy of belief."

However, this repeated repudiation of the Elliott charges did not prevent the committee from taking them up again in the attempt to make political capital of them. In the face of all the testimony submitted at the hearings and on the unsupported evidence of the man who preferred the charges, the majority of the committee found in favor of the charges.

To their everlasting credit be it said that a minority of the members of this committee were so incensed at the findings of the majority in direct face of the evidence, that they insisted on presenting a minority report (Report 500, Pt. 2, 63rd Congress, 2d Session, Fur Seal Industry of Alaska, 22 pages, July 27, 1914, signed by Congressmen McGuire and Patton). This report is a scathing arraignment of the methods of procedure and the findings of the majority and of Elliott who brought the charges. A few excerpts may not be amiss here.

> The charges preferred by Elliott are without foundation in fact,—the same charges have been preferred by him with regularity for over 20 years to various committees of Congress and executive departments, and in each case found to have been groundless.
>
> Elliott, the author of these charges and the sole witness in support of them, is a person unworthy of belief and one who has been consistently repudiated in the past.
>
> The committee had no justification for the reopening of these hearings on the same charges.
>
> There is a total absence of evidence of any irregularities on their (the government's representatives) part.