

Letters

New York, New York

EDITOR:

The article in the February issue of *E&S* paying tribute to the late Professor Paul Epstein could not cover some of the more humanistic aspects of this great man, in particular his relationship to his students and his sense of humor. I believe the following deserves to be mentioned to honor his wit.

Frankly I must admit that this story is secondhand, but it was circulated among the EE PhD candidates, prior to their orals, in the early '40's. The candidates were warned that one of Professor Epstein's favorite questions was the following:

"You are at a dinner party, and your dinner partner at the left is a good-looking blonde. You are engaged in fascinating conversation with her, it is your turn to talk and, therefore, you cannot watch too closely the coffee that has just been poured. A small portion of cream was served with the coffee.

"Assuming you want the coffee to be as cool as possible when you drink it, and you know that it will be several minutes before the conversation takes such a turn that the blonde will begin to talk and you will have a chance to drink the coffee, when should you pour the cream into the coffee? When you start to talk, or when the blonde starts to talk? Support your opinion quantitatively."

Note the catholicity of the question. It covers Social Relations, the War Between the Sexes, and Thermodynamics.

Since some people may disagree with Mr. Boris N. Sammer '26, whose letter appears on page 6 of the same issue, and may want to project the image of Caltech as a "fun college," I believe I should not give the answer to the problem. The first undergraduate who supplies the correct answer should be given a reward, such as a date with the best-looking blonde at PCC, etc. I leave the details with the good offices of Dr. Clark.

VICTOR WOUK, MS '40, PHD '42

Pasadena, California

EDITOR:

Though I have many pleasant memories of Professor Paul Epstein, those most vivid to me will always remain those of his lectures. In my most impressionable years he set an example of good organization, orderly presenta-

tion, and careful scientific procedure which ever since has determined my own personal standards—even though I have seldom measured up to them.

I first saw him near the beginning of the academic year 1923-1924. Dr. R. A. Millikan was giving a series of lectures on the newer developments in physics; they were open to visitors, and I came from Los Angeles regularly to attend. I found that Epstein was lecturing on atomic theory just before the Millikan lectures, and I began to come an hour earlier. Unfortunately for me, at that time Dr. Epstein spoke English with some inaccuracies and with a heavy accent. Since I was also insufficiently prepared for his mathematical treatment, I soon gave up.

At the beginning of the academic year 1924-1925, I registered as a graduate student in physics and, as a matter of course, attended lectures by Epstein. His English delivery had improved enormously, and I had no difficulty understanding him. He had worked hard on his English lecturing. It was later rumored that he even took to crossword puzzles extensively with the idea of broadening his vocabulary, but eventually he discovered that this added vocabulary had certain peculiarities, and he abandoned the project.

His lectures were perfectly organized; any set of them could have been issued in book form. This was later done with his course in thermodynamics. His delivery was careful and deliberate so that it was possible to take very complete notes. My first notebooks were carefully edited. They are still useful for reference and are a pleasure to read. In some later years I amused myself by recording the lectures precisely as they were given, with all the minor slips, mannerisms, and residual oddities in English. This, perhaps, was hardly fair, but other students to whom I lent my notes read them with affectionate enjoyment. To us who knew him it was like the tuning up of an orchestra to have him enter and begin with his usual, "Gentlemen, we have seen in the last hour . . ."

These first lectures were in a room on the third floor of Bridge, used for classes but designed for future use as a laboratory. A conduit beneath the floor was protected by a metal cover. Epstein was a pacing lecturer. On his round he almost invariably came down with one foot on the metal so that his lecturing was regularly punctuated by crashes.

Most students were too much affected by awe and respect to disturb Epstein's lectures with questions or comments. I recall one exception—a gifted and eager student. One day when Epstein was writing an expression which stretched the whole length

of the blackboard, there was one of the now usual interruptions:

"Professor Epstein, there is a factor left off at the beginning."

"Ah!" replied Epstein, "but I can put it on the end."

And he did so, with all the triumphant and crushing dignity of an elephant sitting down.

I had the great privilege of writing my doctoral thesis under Epstein's supervision. He was very kind and treated me with great understanding and patience—more, indeed, than I deserved.

Many years later I took an opportunity again to attend his course in quantum mechanics and bring myself a little better up to date. I found him, as always, a perfect lecturer. His personality will live forever in the work of his students and their students' students.

CHARLES F. RICHTER, PhD '28

Palo Alto, California

EDITOR:

In response to the letter of B.N. Sammer in the February issue of *E&S*, might I suggest that he consider IBM rather than CIT for the development of a product which is not concerned with social skills or emotional maturity?

STUART LINN '62

Pasadena, California

EDITOR:

You can't be serious! Or can you? Please confirm or deny and end my uncertainty. Did Max Delbrück of Caltech *really* refuse to shake hands with King Frederik of Denmark? (*E&S*, January 1966, p. 27.) Or was Mogens Westergaard's account a joke?

JOE HELLER '62

Dr. Westergaard is a joker. But, to set the record straight, he has submitted new pictorial evidence (below) of Dr. Delbrück's pro-royalist sentiments.



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