

# Letters

## Caltech's Perfect Student—Helmar Scieite

DEAR EDITOR:

Last summer (August 6) *Time* ran a story on Helga Sue Gromowitz, an imaginary high school student dreamed up by kids to confuse the faculty and administration. I thoroughly expected to see a follow-up in their "Letters to the Editor" from somebody at Caltech, because I well remember the composite Caltech student of legend, created by a group of the faculty to confound another faculty member who swore no one could get an A in his course. It's been a long time since I have read of one of Caltech's pranks and this one would be fun to see again.

(Ms.) LEE JONES  
Assistant to the Chancellor  
Johnston College  
University of Redlands

**Memo to Kay Walker  
From Ed Hutchings**

As I recall, this was a joke played on Fritz Zwicky (now professor of astrophysics, emeritus) sometime in the '30s. See what you can dig up. You might start by asking some faculty members who *were* here then and *are* here now—Bill Smythe, John Pierce, Tommy Lauritsen, Willy Fowler.

**Memo to EH  
From KW**

The facts seem to be classically simple.

The joke was played in the '30s on Fritz Zwicky, who taught an extremely difficult course in analytical mechanics at that time. An ingenious group of plotters submitted an admit card for a fictitious student, had him enrolled in the class, turned in exams for him, and earned an "A" at the end of the term.

Simple. But why was it done? Why Zwicky? Who did it? When? How could

the deception last a whole term? How did "they" get an "A"?

Here are a few answers:

1. Dr. Smythe, who was already teaching here then, says the pranksters were grad students, and they probably included Tommy Lauritsen and Willy Fowler. He gave me the outline of the story I've given you—plus a few details such as that the fictitious student went in Zwicky's class book because Zwicky never learned his students' names. When exams came along, two or three of the grads worked on different sections of the test and turned in—in one handwriting—almost perfect papers, and got "A's" on all of them.

2. Dr. Lauritsen was not one of the perpetrators; it was before his time. But he had a name for me: Hjalmar Sciate. Lauritsen always thought that the plotters were professors, probably led by Smythe himself.

3. Willy Fowler, who got a "B" from Zwicky, has thought all these years that the faculty was responsible for the



L. Sprague de Camp, 1929

This story was on the press when Fritz Zwicky died of a heart attack on February 8 at the age of 75. We print it now because we think he would have liked it. We regret that he had no chance to reply to it because, as always, his reply would have been colorful and resounding. A tribute to Dr. Zwicky will appear in our next issue.

fictitious student, whose name Fowler spells as Hjalmar Sciatti.

4. John Pierce's version of the student's name is Hjalmar Sciete, and he wasn't in on the hoax. He suggested that Carl F. J. Overhage, MIT professor of engineering, might have been one of the students who took the tests.

I am writing to Dr. Overhage.

**Memo to EH  
From KW**

Carl Overhage says his recollections of the Hjalmar Sciete caper are rather dim and that John Pierce gave him too much credit—he had a hard enough time taking Zwicky's exams on his own.

He also says, "I have a persistent hunch that the roots of this joke go back to some undergraduates. If you really want to leave no stone unturned, write to L. Sprague de Camp and John B. Hatcher."

I'm doing so.

**Memo to EH  
From KW**

L. Sprague de Camp says he wasn't in on the Hjalmar Scieite hoax, but thinks

Letters . . . continued

Jack Hatcher was one of the perpetrators, or at least knew some of them.

I'm waiting to hear from Dr. Hatcher.

Memo to EH  
From KW

Aha!

Please peruse the following—

Letter from  
John B. Hatcher

DEAR MRS. (not Ms.?) WALKER:  
Are you really serious, and willing to work on this? You are probably in for a difficult time, since there are the most extraordinary versions—memories dim, people elaborate, things get quoted wrong, and I even remember once hearing of someone I never heard of who was taking credit for the whole affair. But if you do your homework, you can probably make an important contribution toward getting the record straight.

Let me put down what I remember, and point you to some source data and people who can confirm a few things; I'll try to be meticulous and indicate my own haziness as best I can. . . .

First of all, you've got the name all wrong—and that was the basic, original point of the whole thing that started it all !!! The name is

HELMAR SCIEITE

and don't you *dare* let *any misspelling* by a single iota, quark, or whatever get perpetuated.

The time was ca. '29-31. You can confirm the exact time by old records, as follows: You dig into old transcripts, and find out *when* Carl Thiele took Zwicky's Advanced Analytical Mechanics—it happened then.

It all began when some of us were sitting around with the usual undergraduate gripes, and there was talk of

Zwicky. He seemed to take an intense, almost sadistic pleasure in picking on a hapless student, and regardless of said student's protestations of lack of preparation, ignorance, etc., get him up at the blackboard and make him do a tough problem. In today's phrasing Z would let him turn slowly, slowly, in the wind, aided by caustic comments as to his mental deficiencies and how easy the problem was.

It was mutually agreed that something should be done, but in those days we didn't revolt—we tried to match the punishment to the crime. Zwicky was reputed to have an intense pride in being correct, but it had been noted that he had difficulty in pronouncing Carl Thiele's name. (He varied from Theel to Tilly, with versions in between, but typically he just mumbled it.) So we decided to give him something more to think about, and the name was born—Helmar Scieite. We figured Z'd never get that *iei* combination right (incidentally do *you* know how to pronounce it? We did!) The "Helmar" was derived from Delmar Larsen, who was our resident linguist, and responsible for the assertion that there has never been an *iei* in *any* language. And the substitution of Sc for Th, and the t for the l would, we thought, render a difficult task for Z plain impossible.



Carl Thiele, 1932

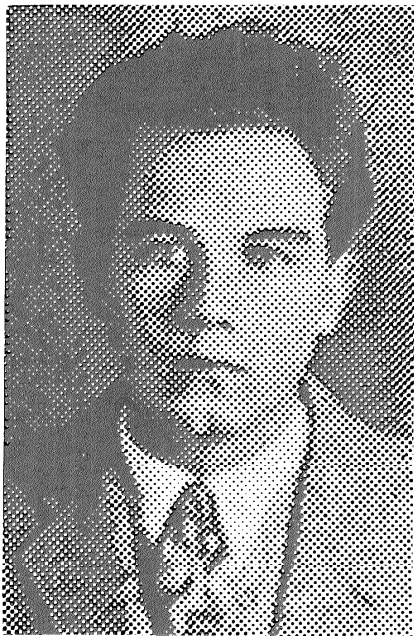


J. B. Hatcher, 1929

Who was "we"? Well, I was there; almost certainly Delmar Larsen; most probably Carl Thiele; and maybe Jackson Gregory. We all lived in Blacker House, and along the 2nd floor corridor going south from Harvey Eagleson's room, and we called it Hell's Kitchen. Bill Shockley was in that corridor, but I'm pretty sure he wasn't at the creation of Helmar—he was usually a little above such antics. Perhaps Glen Miller was there; it could have been a poker session, and he usually came around for them. My memory says 3-5 people; there could have been more, and I just don't remember. The main point is that it was a group (inter-disciplinary!) effort.

Anyway a class registration card was procured (was theft necessary? I don't remember how hard it was to get them) and filled out, registering Helmar Scieite in Zwicky's course, and it was turned in the next semester with all the rest. So there was Z running through the cards calling the roll the first day. I was told he fumbled a bit on the Thiele again, but he out-foxed us on Helmar—he just passed the card by, and after finishing all the rest stood there with that one card left and simply asked if there was anyone else present whose name he hadn't called! He did this a couple of times—never even tried to pronounce it.

The final was the finale, and a real tour de force. With the honor system (does it still work?) it was standard for the professor to walk in, write exam questions on the board, and then go away, to return at the appointed end and collect papers. This time the idea was simple: Delmar went into the exam room and copied off the questions, and then doled them out, one to each of some five or so graduate students who had previously been recruited. And then each did a bang-up job on his single question, getting it perfect. And then Delmar copied them all off in his nice round hand, switching languages between questions, with interpolated insulting remarks like “This is a very stupid and trivial question—why waste examination time on such tripe?” or “This problem is all worked out in . . . (cited reference) . . . Can’t you think of anything new?” etc., and this was turned in under Helmar Scieite’s name.



Delmar Larson, 1932

Now I never did learn, to my own satisfaction, whether Zwicky tried to turn in a grade for Helmar. Since he wasn’t really on the books, the registrar’s office would have queried such a grade; or did Z go ask them about such a person earlier?

I tried to immortalize Helmar Scieite shortly thereafter, by making him the

hero of a mystery story I wrote. *The Hell’s Kitchen Murders* never got published, but circulated around the campus for some years—Harvey Eagleson had a copy, and I was told he used to read it to later generations.

I do know that Helmar was still alive and wrote a long letter to the editor of the *California Tech* dated 1 May 1969, suggesting a novel and sound approach to teaching some of the things the student candidates were worrying about in their statements running for office in the Feb. 6 issue.

Well, maybe all this will help. Lotsa luck,

J. B. HATCHER  
(BS ’37, MS ’38, PhD ’52)

**Memo to EH**  
**From KW**

Carl Thiele says it’s all true. He took Ph 103c, Analytical Mechanics, the third quarter of the 1931-1932 school year, and he reports that Zwicky gave everyone in the class epsilons except Helmar.

Here is the course description from the 1931-1932 catalog:

PH 103 a,b,c. Analytical Mechanics. 12 units (4-0-8) first, second, and third terms. Prerequisites: Ph 5 a,b,c; Ma 9 a,b,c; or 10 a,b,c; reading knowledge of French. A study of the fundamental principles of theoretical mechanics; force and the laws of motion; statics of systems of particles; the principle of virtual work, potential energy, stable and unstable equilibrium; motion of particles, systems of particles and rigid bodies; generalized coordinates, Hamilton’s principle and the principle of least action; elementary hydrodynamics and elasticity.

Texts: Painlevé Cours de Mécanique. Vols. I and II.

Instructor: Zwicky.

Do you suppose Zwicky *really* used a French textbook?

**Letter from Delmar Larsen**  
**to Ed Hutchings**

I can confirm that Jack Hatcher’s letter is as accurate as it is charming.

I have only one revision to make, respecting the alleged statement by me that the vowel sequence *iei* is unknown in any language. I do not remember



Fritz Zwicky, 1932

making such a statement, and indeed numerous exceptions would have come readily to mind such as the German adverb *beieinander*, the Portuguese substantive *fieira*, and the Greek substantive *δειδωσ*, with its English derivative “deidism,” not to mention, of course, more recondite examples. The particular sequence of letters was designed to introduce maximum ambiguity into the pronunciation of the name.

**Memo to EH**  
**From KW**

It’s really been fun to watch this story unfold, but for now I guess we’ve done all we can.

## E&S Shares Some Mail with *The President’s Report*

Houston

EDITOR:

In the Caltech *President’s Report* for 1972-73, Robert B. Leighton described some research highlights in physics and astronomy at Caltech. In his story of man’s attempt to probe the depths of matter, Dr. Leighton mentioned “the notion that matter, in all its infinite variety as we perceive it, is composed of but a small number of irreducible parts which combine in different ways.”

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**Letters . . . continued**

He traced these fundamental building blocks from the Air, Earth, Fire, and Water of the ancient Greeks to the 92 chemical elements of the chemists' periodic table. He continued, mentioning the proton and electron thought to be the basic constituents by the early nuclear physicists, and the whole succession of particles still called "elementary" later on. He mentioned that today these particles themselves constitute families called baryons, mesons, leptons, and photons. Dr. Leighton continued to mention the recent work in which families of baryons and mesons are described in terms of "quarks."

In reading his report further we find that some scientists have abstracted a model to account for the fact that "quarks" are never observed. In this model the "quarks" are stuck together by neutral particles called "gluons." Using the notion of "color," both the "quarks" and "gluons" are "color non-singlets and are therefore unobservable as separate particles." Further reading reveals terms such as "hadron," "parton models," and "bootstrap pictures."

After some reflection on this fascinating description of man's attempt to probe the depths of matter, it now seems to me that this elusive irreducible component of all nature should be aptly called the "puton."

NEIL R. SHEELEY JR. '60  
ATM Experimenters Office

**Rank Injustice**

London

EDITOR:

A copy of the November/December issue of your review, which contains an article by James and Ingelore Bonner, headed "Notes on a Trip to the Soviet Union," has been passed to me.

In this interesting article, reference was made to the fact that, during the Bonners' visit to Moscow, they were informed that a Xerox copier in one office was not working because the Xerox engineer had not called. The inference drawn from this is obvious, and your readers could get a very wrong impression of the way in which we look after our equipment in the Soviet Union. May I now give you the facts of the situation.

By Soviet law, Xerox—through Rank Xerox in England—have to sell their Xerox copiers outright in the Soviet Union. Under this arrangement, the Soviet authorities are then entirely responsible for the maintenance of the equipment. Nevertheless, Rank Xerox have gone to considerable trouble and expense in training local Russian engineers to maintain this equipment. The Soviet servicing organisation is still in its infancy and is battling with difficult odds. This is the first time the Soviet Union has had an organisation of this type. It has been very difficult for them to recruit the right staff, and, again under Soviet law, these engineers have to be trained in Moscow—not with quite the same facilities we could give them in a Xerox training school.

I would be most distressed if I thought that your readers gathered from the implication in the article that we were neglecting our equipment in any country. This is far from being the case. We have two resident Rank Xerox engineers in Moscow, whose permanent job is the training and organisation of local service engineers—but we do have many thousands of machines in the Soviet Union, and their task is a difficult one.

I have, however, immediately despatched the information contained in this article to our Moscow office, and have asked them to look into the matter of this particular machine. So some good has come out of this, in that the matter has been brought to our attention and action taken.

G. S. PLANNER  
General Manager - EEO