scientist or engineer is not truly complete without this awareness.

What I am saying is that the humanities deserved just as much devotion to study as my science courses did. Just telling myself that even though I did all the tests in the sciences and humanities honestly (except maybe taking a little longer on some tests than allowed) doesn't justify in my mind that I wasn't guilty of breaking the honor system.

Many reasons could be given, I guess, to say that I had just cause to bend the rules a little for a necessary end. But the end doesn't justify the means, for if I believed otherwise I wouldn't be writing this letter.

A personal evaluation might be that the entering of Caltech and the temporary modification of my beliefs and ethics was a manifestation of Peter's Principle—namely, rising to the level of my incompetency. I entered Caltech from a

junior college (where I was doing very well) and in due course became almost emotionally "poleaxed" from the extreme work load and separation from home. In time this "percussive sublimation" seemed to erode away my feelings of personal achievement and identification brought in from the other school. But I'm sure my story is not unique, particularly in view of the statistic that one out of four fail or drop out before reaching the end of the fourth year.

This letter is not written with the hint to ease the Caltech workload, but to keep it tough. My personality problems at that time are no reason that the school curriculum should be changed. Either you survive or you don't. I look back and see that the experience made me mature very fast, but not without the aforementioned growing pains.

You may think that this letter is very strange to send after so many years out

of school. Possibly so, but it means a great deal to me, for if I didn't believe that the previous mentioned change in my beliefs and ethics was temporary I couldn't write this letter. The fact that I have written it tells me that I still can admit an error in judgment and behavior.

My basic reason for writing is to admit a past wrong against the Caltech honor system. Furthermore, I want to reaffirm the Caltech policy of heavy humanities. For I can look back at my time at Caltech and see that those courses have done much to shape my thinking. I wish that I had taken the humanities more seriously then instead of viewing them as a "necessary evil."

I will finish by saying that if you have ever asked the question, "Am I getting through to those science-oriented students?," take it from me that you did get to this one.

NAME WITHHELD

Books

ALFRED NOBEL,
THE LONELIEST MILLIONAIRE

By Michael Evlanoff and Marjorie Fluor The Ward Ritchie Press......\$10.00

Reviewed by Dr. Judith Goodstein, Institute Archivist.

This book about Alfred Nobel and prizes that bear his name adds little to our fund of understanding about science or its impact on society. Authors Evlanoff and Fluor explore briefly Nobel's career as an inventor of explosives, including dynamite and blasting gelatin; there are also chapters dealing with Nobel's family-tree; thumbnail sketches of several prize winners; and Evlanoff's reminiscences of life in the Caucasus, working for Alfred Nobel's nephew, Emmanuel. Scant attention is paid to the development of his scientific thinking, his changing ideas about peace movements and disarmament conferences, or how he came to the idea of setting up annual awards to honor those making the "greatest services to mankind" in the fields of physics,

chemistry, physiology and medicine, literature, and the cause of peace.

DISCOVERY, INVENTION, RESEARCH THROUGH THE MORPHOLOGICAL APPROACH

By Fritz Zwicky
The Macmillan Company\$6.95

Solutions to our scientific, technical, and social problems can be found in the study of the structural interrelationships that exist among all ideas, objects, concepts, and phenomena, according to this book on the advantages of morphological research and planning. The problems of designing a telescope, an automobile, a power plant, and a possible model of the universe, are among the suggested instances in which integrated engineering, collaboration between the sciences and the humanities, and an evaluation of available human resources might yield the most objective and efficient methods of problem-solving. Zwicky, professor of astrophysics emeritus at Caltech, hopes, in time, to subject all types of problems to such analyses "in order to find the most reliable ways to successfully plan and construct a unified and organically sound world."

A HISTORY OF EAST AND CENTRAL AFRICA TO THE LATE NINETEENTH CENTURY

By Basil Davidson
Anchor Books.....\$1.95

Beginning with the early African Stone Age this history follows the growth and expansion of the indigenous East and Central African civilizations through periods of migration, settlement, European colonization, and the final emergence at the close of the last century of some modern nation-states. Basing his writing on the most recent archaeological findings and an extensive background knowledge, the author presents a fresh approach to understanding the current political, economic, and cultural circumstances of the central and eastern regions through a cohesive and penetrating examination of the African past.

Basil Davidson, visiting lecturer in African studies at Caltech, gave the November 24 Beckman Lecture, "The African Heritage of the American Black Man." Among his other books on related subjects are: The African Genius: An Introduction to African Cultural History, and A History of West Africa.