

dense media and has shown that it gives rise to the 'Brillouin doublet.' ... Leon Brillouin is also known for the B. W. K. method in quantum mechanics, for the 'Brillouin function' in paramagnetism and especially for having introduced the concept of 'Brillouin zones' in crystals.

ANDREW T. YOUNG
San Diego State University
San Diego, California

2/82

High-school text complaint

In all the debate about teaching high-school physics, teacher prestige and qualifications, and university-high-school cooperation, let's not overlook the average high-school textbook. What in heaven's name is the relationship between the calculus my son is taking in his senior year of high school and that abysmal mandated high-school physics text he is also using? He was, in fact, being turned off from physics and engineering, and it was only my giving him a Sears and Zernsky *University Physics* text that kept him from completely turning off and going into history.

When I took high-school physics in 1947, we used a non-calculus college physics text. Somehow that was not beyond the comprehension of either the teacher or the students.

JEROME K. STEPHENS
Warren, Ohio

3/82

Individualism vs. socialism

I've enjoyed reading the articles and letters addressing the topic of nuclear weapons in recent issues. There is, however, one point which has been conveniently ignored by both sides during the debate: the difference between the philosophic bases upon which the Soviet and American governments are based.

Capitalism is rooted in individualism, and is retaliatory in nature, as can be seen in our code of laws. Socialism is altruism applied to government; its collectivist and egalitarian aspects can be traced to that basic premise. All socialist states, whether communofascist or redistributionist, depend on the initiation of force to achieve their goals. This basic difference is generally omitted in the course of "scenario building," and the result is that the conflict is viewed as though both nuclear powers had similar goals.

During the second World War, no American strategist would have considered the extermination of the Jews as a tactic and many were surprised when

Germany's National Socialist government embarked on that very program. Today we tend to think that the Soviet Socialist government would not target civilians because we ourselves see no strategic benefit in such a course. The fact is that we have different goals and different philosophies. The possibility that the Soviet state might regard us as the National Socialist state regarded the Jews cannot be dismissed by any who have compared the original documents on which those systems were built.

It is possible, therefore, that the option of surrender may no more exist for Americans than it did for the Jews during the last war.

Our best option seems to be to follow the advice of Edward Teller and Andrei Sakharov and increase our defenses to the point at which we can sustain a first strike and still defeat the aggressor. Any less of an effort will simply serve to reinforce the tendency to fire on warning and thus increase the possibility of an accidental war.

J. H. PHILLIPS
Austin, Texas

3/82

Refereeing justice

Having published about 80 scientific papers and refereed a few more, I have been following with considerable interest the recent discussion on refereeing. I have received a good number of rejections myself and would like to offer some observations and perhaps suggest several ways in which the system can be improved.

I would first like to propose that referees and editors be made subject to "rules of law." These rules would delineate what they (the editors and referees) can and cannot do to guide them in their respective tasks. As in any legal system, the object here is to make the judgments (and, hence, standards) more uniform. It is, of course, not easy to write a code of wise refereeing and editing law; I imagine this code as evolving (growing) with time and repealable by the society sponsoring a given journal. (I leave the question of what rights the nonmember, nonspecialist, "man-in-the-street" may have in this matter to greater legal minds. I will only add that as a referee I was not always sure whether or not I was contravening freedom of speech.) To make my case more plausible I will note a few problem areas I have encountered with referees and possible ways to improve the existing situation. In the present forum this list can certainly not be exhaustive. Let me concentrate on what have struck me as more obvious and recurring injustices. Some of my suggestions are already common prac-

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