

Letters

Second Thoughts on Shapiro's Defection

The letters on "Shapiro's defection" (27 Mar.) deserve some comments. The first by Fresco *et al.* is composed of many unrelated elements . . . and it is difficult to see the purpose of the letter altogether. Why, for instance, challenge the significance and priority of the scientific accomplishment which is at the origin of the political discussion? This is appropriate in a scientific paper but should not be used for detracting validity from a moral point. One should be allowed to express his moral concerns, related to his own scientific accomplishments, without being accused of immodesty or of inability to recognize the limits of his own discoveries. What I object to is the implicit personal attack which degrades everybody, the attacked and the attacking, as well as the moral issue itself.

It is undeniable that in the excitement of the arguments exchanged in the press, some exaggerations and distortions have occurred. This is inevitable. For instance, the suggestions of Shapiro's personal sacrifice, presumably an interpretation of the journalists, are psychologically wrong. No freely chosen decision is a sacrifice. Also, in an earlier comment by Beckwith and Shapiro [*Nature* **224**, 1337 (1969)], contemporary events, the interpretation of which cannot be dispassionate because they lack sufficient historical perspective, were cited as examples of genocide. Personally I do not share their opinion about Biafran and Palestinian genocide, and I hope they also regret the fact that their more emotional statements have served to detract from the primary issue which they raised. However, these mistakes should not deter us from perceiving the central points in the debate. First, to cast some doubt about the priority of science over other human activities is a moral attitude and cannot be labeled anti-intellectual. Which one of these activities should have priority at the present time depends on the urgency for satisfying the needs of humanity at large and not only those of Western civilization.

Second, it is important to stress (as Beckwith and Shapiro did) that the only way to prevent misuse of our scientific discoveries is by introducing morality and social responsibility into our governments. Therefore, it is not only advisable, but imperative, for a scholar to be politically active. Finally, there is a common tendency, clearly visible in the Fresco letter, to consider the community of scientists as a leading social elite. It seems obvious that scientists should share experiences and responsibilities from a position of equality with all other sectors of the society if efforts to bring peace and justice in a more livable world are to be successful.

The second letter of Kallfelz does not deserve any additional comment except that it is even more personally directed. In my opinion it was inappropriate for *Science* to have published such insinuations aimed at the sincerity of Shapiro's motivation. If I may add my personal views on Shapiro's "proverbial wealth," I hope that it will be saved for political action in securing people's rights and not wasted in giving to charity which is bodily alleviating but spiritually degrading.

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Frustrations of Mislabeling

We believe a useful purpose will be served by adding to the report of Goldman (Letters, 16 Jan.) concerning the reliability of labels on radioactive biochemical products. Within the last 8 months the following costly incidents occurred in our laboratory.

1) A compound labeled [C^{14}]thymidine contained no detectable [C^{14}]thymidine but probably contained [C^{14}]uridine.

2) Two vials of [H^3]thymidine from the same company were labeled with approximately the same specific activities (within 10 percent). The specific activity of one was in fact five times the specific activity of the other.

3) Two vials of [H^3]uridine from the same company were labeled with approximately the same specific activities. The specific activities were different by threefold.

4) A bottle labeled [C^{14}]acetic acid contained [C^{14}]acetate.

5) Wipes taken on several vials of [P^{32}]PO₄ have shown the presence of radioactive contamination. With one vial of labeled PO₄ half of the contents (1 mc) had leaked out during shipment.

These incidents have cost us between \$2000 and \$3000 in lost man-hours and materials, not to mention delays and frustrations with research and the possible health hazard with the labeled PO₄ vials. Possibly other researchers have had difficulties with experiments due to defective isotopic compounds without realizing the source of trouble. We have notified in detail the two companies that caused our problems, and we would be willing to give further details to any individual who considers the information pertinent to his work.

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Inflexible Page Charges

Banks suggests (Letters, 10 Apr.) a method of publishing scientific articles different from that currently in use. Instead of printing and mailing complete journals to all subscribers, he suggests putting each article on microfilm and providing "hard copies" only on request. This and similar schemes have, of course, been proposed before (1); there is some merit in them, and they are currently being explored on an experimental basis in at least two disciplines [see, for example, a description of the Mathematical Offprint Service (2)]. I do not propose to enter into the arguments for and against the schemes, but I would like to correct one misapprehension on Banks' part which may be shared by other publishing scientists. He claims that "if publication were carried out on this basis . . . publication charges to authors' institutions could be reduced about 50 percent." This is not true.

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