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Incorporating Science News Letter

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COVER: The undersea habitat Hydro-Lab, submerged in 60 feet of water off Freeport, Bahama Islands, has accumulated more bottom time than any other habitat in the world. During April, the Hydro-Lab saw a new flurry of activity during a month-long project called SCORE, funded by the National Oceanic and Atmospheric Administration and aimed at exploring the deep reef environment nearby. See p. 307. (Photo: NOAA)

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LETTERS

Bauman and NSF

Your article concerning the Bauman Amendment to the National Science Foundation authorization (SN: 4/19/75, p. 253) was balanced and impartial and represented a fair treatment of both sides of the issue.

The one major weakness in the article was taking at face value the floor statements by Rep. Mosher and Rep. Symington about the auspices under which various grants were conducted. Often during floor debate Members do not have all the material they need at their fingertips, and inaccuracies slip in. Thus Rep. Bauman mentioned some grants which were not NSF grants, and Rep. Mosher inaccurately contended that *none* of the grants he mentioned had been NSF grants.

All of the grants Rep. Bauman mentioned during his discussion of apparent overlapping and duplication among different government agencies were indeed NSF grants.

Rep. Symington's remarks about the perspiration of Australian aborigines are more interesting. According to a GAO report last June, the National Institutes of Health spent \$70,000 on this subject, one of 16 subprojects concerning "zoophysiology in Alaska," comparing adaptations of man to climate in stress situations. This grant, which has received a fair amount of publicity, was the one to which Rep. Bauman referred.

Rep. Symington referred on the floor (and went into more detail in a later "Dear Colleague" letter to House members) to a \$46,141 study by the Department of the Army. If anything, his reference reinforces the point that Rep. Bauman was trying to make, that there is a serious problem of overlapping and duplication in the Government grant-making process.

Rep. Bauman has not been in the business of issuing press releases or grabbing publicity over so-called "silly" grants. However, he was aware that there have been problems at NSF, and is concerned about the general issue of Congressional oversight and accountability to the people who elect Congressmen and whose tax money pays for all the activities of the Federal Government, whether wise or foolish. Thus he tried to devise a procedure which would improve the accountability of both NSF and Congress to the people.

Alan W. Bock

Press Aide to U.S. Rep. Robert E. Bauman
Washington, D.C.

Determinism and relativity

Dietrick E. Thomsen is to be commended for his excellent article "General Relativity's Catch 22" (SN: 4/19/75, p. 262). The dilemma concerning determinism expounded by the article is in many ways reminiscent of the difficulties which confronted classical science with regard to absolute motion, the unvarying speed of light, etc. With the introduction of four-dimensional space-time, however, all of these prerelativity difficulties were accounted for. Space-time provided a new "frame of reference" from which to contemplate the apparently paradoxical problems.

It could very well be that in dealing with determinism we are employing concepts which are too narrow. After all, could a classical physicist analyze the determinism issue in Sach's fashion employing the old concepts of three-dimensional space? Perhaps the apparent paradoxes which Sach's analysis unfold are an indication that it is time for an extension of the fundamental four-dimensional space-time continuum. The overall significance of such an extension is hinted at in Kaluza's tentative unification of gravity and electromagnetism by the addition of a fifth dimension.

José J. Valdés
Boston, Mass.

Fishing, economics and food

I read your report entitled "Harvesting the Wild" (SN: 4/19/75, p. 259) with interest and was especially taken with Colin W. Clark's explanation of the economic pressure on fishermen. What he did not mention, or perhaps your article failed to point out, is the reason for the economic pressure on the fishermen. Fishermen, like other primary producers of food, receive ridiculously low prices for their product. In order to survive they must produce to the maximum capability of their resource. In this case they are producing beyond that point. The people guilty of the extermination of the various species of fish and other animals are therefore not the fishermen but the consumers. In order to maintain a standard of living that includes full-size automobiles and color TV's, they often pay less for their food than it costs to produce.

Gilles Stockton
Grass Range, Mont.

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