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## Letters

### An arbitrary assumption?

Your article "Childhood Autism Linked to Brain Allergy" is the next one in a line, where various mental disorders are explained out by mechanistic reasoning, i.e. as being caused by various chemical substances or enzymes or proteins.

As a matter of fact, such explanations are based on ad hoc causal reasoning—the chemical stuff is labeled cause, the disorder result. However, this is a completely arbitrary assumption. For we have presently too limited knowledge to judge what is cause and what is result in such complex systems.

It looks like Life Sciences have started regressing to a scholastic medieval pattern of thinking when any psychological change was explained out by an increase or decrease of some "stuffs" in the body—phlegm and so forth.

The drive of psychiatry to look like "hard" science and to distinguish over "arbitrary" psychology may wind up in too rigid mechanistic materialism which is precarious to any intellectual enterprise.

Valentin D. Fikovsky  
Oakland, Calif.

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Cover: Max Perutz, a founder of the Medical Research Council Laboratory of Molecular Biology in Cambridge, England, has attracted talented scientists who have helped establish the field of molecular biology and who receive continuing acclaim, including the most recent Nobel prize in chemistry. (Photo: Jeffrey L. Fox)

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### Trying to stay ahead

In the course of several years' research for a book on women inventors and innovators (*Mothers of Invention*, Scarecrow Press, Metuchen, N.J., 1983), I have encountered several articles on the general theme of your "Nipponese Know-How" piece (SN: 11/6/82, p. 296). Though otherwise as various as the voices of the prophets who express them, these laments uniformly fail to mention what seems to me the most obvious thing the United States could do to stay ahead: start developing the other half of its top brains—the female 50-51 percent.

Although the 1970s saw some breakthroughs, brilliant and creative women are still being discouraged from entering scientific and technological fields—and discriminated against if they do enter. These women could be called our most neglected resource. Technology planners should note that it was a woman, Lady Ada Lovelace, who suggested binary storage for computers; that one Mme. LeFebvre received the world's first patent for fixing nitrogen from the air (1859); that Lise Meitner was first to realize nuclear fission had taken place in her joint experiments with Otto Hahn; that Annie C-Y. Chang of Stanford collaborated with Stanley Cohen in the original gene-splicing work—the list could go on, impressively.

The United States can no longer afford to force its Rosalyn Yalows to start out (or end up) as secretaries!

Autumn Stanley  
Portola Valley, Calif.

**All I can say** is that if American business leaders are "running scared" we have not seen it in terms of their interest in new products. I have been involved in a number of development projects where we are able to show that things could be done better at lower cost and find a ready market. In every case, the companies that you would expect to be most interested simply decided to go along with their existing technology in the hopes of staying alive a few years longer.

I think the Detroit Syndrome of technological obsolescence will extend through a whole host of companies until new management comes in or the United States becomes a kind of Third World nation where we mine the coal, limestone and iron ore, sell it to Japan at low prices, and buy it back in the form of finished articles at high prices. I have been wondering if it might be possible to find a Japanese company to work with; certainly it does not seem very hopeful in the United States.

Stuart A. Hoenig  
Tucson, Ariz.

