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Incorporating Science News Letter

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COVER: Computer diagrams a likely three-dimensional structure for a small portion of the DNA molecule after it has been attacked by a cancer-causing chemical. The newly added rings (orange) force one of the normal groups (white) to rotate out of position. Researchers are determining the exact interactions of these chemicals to better understand why a cell turns cancerous and also to predict which of the many chemicals in the environment will cause cancer. See p. 362. (Diagram: Chemistry/ACS)

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### Creativity and testing

For the past four years I have subscribed to your publication and have found something of interest in every issue. The article, "The Genius of Everyman (1)" (SN: 4/23/77, p. 268) was most interesting, especially the paragraph reporting on research which found that students scoring in the top 20 percent of a creativity test did not score in the top 20 percent of the IQ tests. Does this not only prove the relative inability of IQ tests to determine a person's potential but also suggest a reevaluation of any test which does not allow a person to demonstrate his creative ability as well as his knowledge?

> James J. Zarbock North Olmstead, Ohio

Seventeen years ago I performed a multiple regression analysis for the registrar at Washington University to seek correlations between College Board scores and student performance. None were found. Three years ago I listened as the Dean of the Law School of the University of New Mexico told a group of prospective entrants that he had played a part in changing the name of the Law School Aptitude Test to the Law School Admissions Test, since he could find no connection between test scores and student performance.

Billions of dollars have been spent on tests such as these to produce measures that may have no more value in an objective selection process than a series of flipped coins. Numbers on a scale with undefined units have no meaning. Discarding meaningless (albeit convenient) criteria might prove to be an incentive toward development of criteria of demonstrable social and scientific value.

Robert G. Roosen Albuquerque, N.M.

John H. Douglas has written a valuable article on creativity but he almost ruins it all with his claim that "if IQ research eventually shows that millions of children have simply been labeled incurably 'dumb' instead of being taught how to think, society itself will have a heavy burden of guilt to bear." Why? Can anyone, let alone society, be guilty of not acting in terms of knowledge that is unavailable? Can anyone be guilty of going by the best available understanding?

Then again, some people may have the potential for creativity without choosing to exercise it. Douglas is wrong to suggest that the discovery of equal potentiality for creativity—suspected, incidentally, by Socrates and Aristotle-implies that all persons will be equally creative if only permitted by our educational institutions. Only a mechanistic conception of human action implies this. If people can choose to think, to exercise their creative potential, then some may still refrain from creative endeavors and problems of a certain sort (albeit better understood) will remain with us.

Finally, an interesting philosophical treatment of this entire issue has recently been offered by Professor David L. Norton in his book Personal Destinies (Princeton, 1976). Norton's very first line, in the preface, recalls Thomas Edison's reply to those asking him about his genius: "Ninety-nine percent perspirational and one percent inspiration,' as well as Isaac Newton's answer to how he was able to discover the mechanical principles of the universe: "Nocte dieque incubando-'By thinking about it day and night.'

Tibor R. Machan Associate Professor Dept. of Philosophy State University College Fredonia, N.Y.

The article on learning creativity (SN: 4/30/77, p. 284) seemed valuable but I wonder if another next-to-last paragraph might not be more effective. Why should Americans feel guilty or inferior that information that was not sure or widespread was not applied in the past? "Guilt" will raise the mental blocks to which the article referred, and hence, be counterproductive. The paragraph seems not to have fully received the benefits of the article.

W. S. Church Chicago, Ill.

# Mars albums

Your series of Mars albums is just the chronology I've been looking for. Most other magazines and newsletters have only a feature article here and there, but nothing on a continuous basis like the Science News series. I really like the detail you go into in the sixth album on the wind patterns; excellent charting.

> Kevin Block Baraboo, Wis.

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