

# THE ROCKEFELLER UNIVERSITY

*pro bono humani generis*

1230 YORK AVENUE - NEW YORK, NEW YORK 10021-6399

*Joshua Lederberg*  
UNIVERSITY PROFESSOR

July 23, 1998

Dr. Roger Krohn  
Department of Sociology  
McGill University  
855 Sherbrooke Street West  
H3A 2T7 Montreal  
Canada

Dear Professor Krohn:

I was extraordinarily stimulated by your book review of Edward Tufte in History and Philosophy of Life Sciences recently. You brought home to me very vividly some of the cultural roots of my obsession with text (see enclosure). My father was an Orthodox rabbi and Talmudic style disputation was very much a part of my family background; doubtless together with rigorous attention to the commandment<sup>me</sup> against graven images. I'm not sure I follow you to Judaic-Christian: when I contrast what I received from Holy Writ in comparison to the mosaics at the Cathedral Monreale(Palermo). I would have thought that that hyphen actually reflected a very sharp division.

Be that as it may, I have all but given up in the face of the tidal wave of pictorial images and even the icons on my computer screen, though I still manage to adhere to Unix as opposed to Windows.

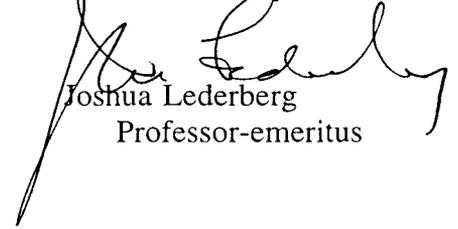
But I would disagree with your depiction of biology as having turned its back on graphic representation. To the contrary, three and even four dimensional rendering is at the bottom of our imagination and modeling of biological systems. It is precisely the complementarity of shape that (since Landsteiner and Pauling, if not Ehrlich) we have understood to be at basis of molecular specificity in biology. And of course, visualization plays a very large role in the abduction of explanatory hypotheses. Where I do go back to text -- verbal or mathematical -- is when I am seeking logical demonstration and proof: I have no formal logistic to do this with my cartoons. If biologists have possibly been behind hand in exploiting the wonderful things that Tufte has to teach, it is that he is primarily occupied with the display of quantitative information and that is often hard to come by in my field. But of course, I make extensive use of rendering statistical data in graphic form in order to make an affective point. Any statistics can be put at the service of a lie but graphical representations lend themselves by their very nature to even readier manipulation.

Well it is too much for me to ask you to read all this stuff but perhaps you will favor me with

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letting me know what else you have written in this vein which I would certainly look forward to.

Yours sincerely,

A handwritten signature in black ink, appearing to read "Joshua Lederberg". The signature is fluid and cursive, with a long, sweeping underline that extends to the left and then loops back under the name.

Joshua Lederberg  
Professor-emeritus

*email: lederberg@mail.rockefeller.edu*

P.S. One of the most delightful of biochemical texts, because it is so profusely illustrated is Stryer's "Biochemistry" which I commend to you very strongly.

Enc: P-273; Judson

Q-119