



Readers by now recognize the name of Jeff Mordkowitz, author of the Science Update column which has become a regular feature of this Newsletter.

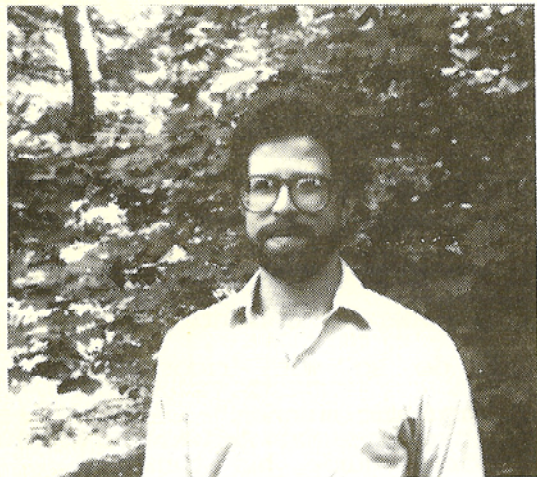
Jeff is a Phi Beta Kappa graduate of SUNY at Stony Brook with a B.S. in computer science. He work as a research programmer/coordinator for the Hospital for Joint Diseases Orthopaedic Institute, NYC. There his duties include translating and interpreting the needs of investigators working on immunogenetics and molecular biology into a language the computer can understand, and vice versa.

Jeff 'discovered' general semantics in 1977, his junior year at college. His interest 'gestated' for the next two years while he "read Science and Sanity two or three times."

Jeff attended his first Summer Seminar in 1979 and has attended everyone since, first as a participant, then as a staff-participant. In addition to his Science Update column, Jeff has recently been appointed an Associate Editor of the Bulletin.

Jeff is presently involved in a long-term project of creating a listener's guide to Korzybski's 1948-49 Winter Holiday Intensive Seminar. [See special announcement in this Newsletter.]

Jeff plans to marry Martha Santer of NYC in September. He hopes to "actively continue working for the growth of the Institute for the next fifty to sixty years."



SCIENCE UPDATE: NEW MECHANISMS OF MEMORY,
by Jeff Mordkowitz.

In a paper published in 1941 Korzybski forewarned his readers of "formidable difficulties in this work" attributable to "the well-known difficulty of recanalizing our nervous systems." He also asserted that "the application [of the extensional devices] may seem simple when explained, yet it [the extensional reorientation] is laborious and difficult to acquire as it leads to a profound neurological recanalization." Forty-three years later this 'canalization' which so concerned Korzybski still captures the attention of neuroscientists, though they now speak in terms of 'synaptic plasticity'. Two scientists in particular, G. Lynch and M. Baudy, have described a new cellular mechanism which they propose underlies particular forms of memory and learning in mammals.²

Their findings show that a significant increase in intra-cellular calcium (following brief periods of high-frequency stimulation) results in a long-lasting increase in cell-surface glutamate receptors which should modify the functional properties of neuronal circuits. In their own words, "This process provides a means through which physiological activity could produce long lasting changes in synaptic chemistry and ultrastructure." Also of note is the high degree of linguistic sophistication they exhibit: "Problems with hypothesis testing arise from the fact that memory, in both a physiological and behavioral sense, must be assumed to be a higher order phenomenon. "Comparable advances in other areas of neuroscientific research will be covered in future articles."

¹Korzybski, A. (1941) "General Semantics, Psychiatry, Psychotherapy and Prevention." American Journal of Psychiatry, 98: 203-214.

²Lynch, G. and Baudry, M. (1984) "The Biochemistry of Memory: A New and Specific Hypothesis." Science, 224: 1057-1063.

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