



Book Notes

by Bruce I. Kodish



Barrow, John D. *Pi In The Sky: Counting, Thinking, and Being*. New York: Oxford University Press, 1992.

Barrow, an astronomer at the University of Sussex, provides an entertaining and informative account of the foundations and philosophy of mathematics. Do mathematicians invent or discover mathematics? What 'reality' do mathematical entities like pi have? What accounts for what physicist Eugene Wigner has called, in a now-famous paper, "The Unreasonable Effectiveness of Mathematics in the Natural Sciences"? After an interesting account of the history of counting and numbers, Barrow discusses, in succeeding chapters, the philosophies of formalism; inventionism; intuitionism; and platonism, a sophisticated version of which he seems to favor.

Perhaps most mathematical workers follow what Korzybski called "the 'christian science' school of mathematics, which proceeds by faith and disregards entirely any problems of the epistemological foundations of its supposed 'scientific' activities" (*Science and Sanity*, 748). I commend Barrow because he considers these epistemological questions important and writes about them so engagingly. Barrow's discussions of theories and personalities provide useful background for understanding the mathematical foundations of Korzybski's work. As for

Barrow's conclusions, from a Korzybskian view, the appeal of platonism seems understandable as an example of identification, the confusion of orders of abstracting. Barrow doesn't seem to consider that mathematicians may both invent *and* discover mathematics. He seems so taken with the effectiveness of mathematics in the natural sciences that the notion of mathematical entities existing solely as high-order abstractions in human nervous systems seems insufficient to him. As Korzybski pointed out, we live in a world of multi-dimensional, ordered structures or relations. It does not seem unreasonable, then, that we can map this world with an exact language of relations, i.e., mathematics. But as Korzybski also pointed out many times, "the map is not the territory."

Whitehead, Alfred North. *An Introduction to Mathematics*. New York: Oxford University Press, Inc., 1948.

General-semantics is based on science. Having at least a feel for mathematics, the language of science, seems necessary for anyone seeking greater depth in understanding and applying Korzybski's system. This book, first published in 1911, will still serve admirably in giving the reader this necessary feel. Short (less than 200 pages) and clear, it probably can be read quickly and covers some of the basic notions of mathematics as applied to the study of nature. This book, along with *Science and the Modern World*, also provides an accessible approach to a thinker who greatly influenced Korzybski in his work.

Science Update

MEDICINE AND THE WEATHER by Jeffrey A. Mordkowitz

In his *Introduction* to the Second Edition of *Science and Sanity*, Korzybski wrote about the impact the discovery of new structural factors can have on our evaluations. In fact, "It is not generally recognized what havoc the discovery of a single, new, important, structural factor may play with our generalizations....we have to change our equations or generalizations, and so our standards of evaluation [evaluational reactions], if we do not want to build up delusional situations for ourselves."¹

Although many of the factors Korzybski brought to our attention in 1933 and 1941 have by now received wide-spread "acceptance" (Freud's theory of unconscious, Einstein's modification of the Newtonian system, etc.), his introduction via William Peterson's work on the role of weather in medicine² seems not to have caught the public's "eye" or "imagination." Thus my delight this week in reading about the current research of Dr. Robert Jamison and his colleagues in which they deal with this issue head on.³

Dr. Jamison actually takes his research to a higher order of abstracting, as he takes for granted the connection between weather and medicine. He has begun to make the case that the **change** in weather may be more important for people in pain than the "absolute" weather conditions itself. "The real culprit may be a change in barometric pressure, since patients are most likely to report an increase in pain in advance of weather conditions....when the outside pressure falls, body tissues — tendons, ligaments, muscles and bones — may readjust by expanding to various degrees and, in doing so, can trigger the sensitized nerves that send out pain signals."⁴

In terms of general-semantic formulations, this on-going research underscores the importance of our notion of the **organism-as-a-whole-in-an-environment-at-a-date**.

1. Korzybski, A. (1933) *Science and Sanity: An Introduction to Non-Aristotelian Systems and General Semantics*. The Institute of General Semantics, Englewood, NJ: 5th Edition 1994, p. 1vi.
2. Petersen, William F. *The Patient and the Weather*, 4 vol. Edwards Brothers, Ann Arbor, 1938.
3. Brody, Jane E. "For Chronic Pain Sufferers, Change, Not Weather, May Hurt." *The New York Times*, June 7th, 1995, page C12.
4. Jamison, Robert N. as quoted in Brody, Jane E., op. cit.



"We're getting mixed precipitations -- that's for sure!"

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