New Scientist, 21 December 1972, p. 717-8

Biological transmutations

by C. L. Kervran
Crosby Lockwood, pp 134, £2·50

C. Louis Kervran, director of industrial hygiene services, vocational diseases and industrial medicine in Paris, claims, contrary to popular (and academic) notion, that elements can be converted into other elements by the action of certain biological systems. New Scientist readers may remember the report (and subsequent correspondence) in 1970 of Kervran's "discovery" that lobsters can manufacture phosphorus and copper in a closed system (Monitor, vol 46, p7; Letters, vol 47, pp350, 494 and 599).

Kervran says in Biological Transmutations: "Many living processes certainly take place by means of chemical reactions, but it is a fallacy to believe that there are *only* chemical reactions and that every observation can be explained by them." Kervran goes on to state that he is concerned about "a property of matter which pertains neither to chemistry nor nuclear physics in its present state". Biologists, he believes, make the mistake of applying rigidly the laws of chemistry to biological situations, when really they should appreciate that there is something special about life processes. I must admit to having approached this book with some scepticism. On finishing it the scepticism had hardened into disbelief, but not before I had extracted a good deal of amusement and interest from the argument and examples threading through it.

The book, which has an uncanny feel and appearance of the turgid school textbooks that one suffered back in the 1950s, is an English translation summary of Kervran's extensive publications on the subject (his subject) of biological transmutations. Although the topic is unlikely to catch the imagination of the public in the same way as did Kammerer's midwife toad, Kervran's crusade is certain to continue to provoke argument and discussion among scientists—some of whom dismiss the whole notion as rubbish while others hold that there really is something in it.

Is sodium transmuted to potassium in humans under conditions of extreme heat? Can sodium and hydrogen be combined by bacterial action to produce magnesium? How can a chick contain more calcium than was originally present in the egg? Presumably there is a "scientific" explanation for it. Or is Kervran right?

Roger Lewin