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BULLETIN OF THE  
 AMERICAN MATHEMATICAL SOCIETY  
 Volume 84, Number 5, September 1978  
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*Near-rings, the theory and its applications*, by Gunter Pilz, Mathematics Studies, No. 23, North-Holland, Amsterdam, 1977, xiv + 393 pp., \$24.00.

It has been said that the supreme occurrence in the course of an idea is that brief moment between the time it is heresy and the time it is trite. At the start of the 1960s “nonlinear functional analysis” seemed to strike most mathematicians as a contradiction in terms but by the end of that decade, some functional analysts were apologizing for considering “only the linear case.”

During this period many began to realize (or to rediscover from earlier times) that quite a number of pressing scientific problems are nonlinear in nature. At the same time many others began to realize (or again, to rediscover) that many nonlinear problems have a vigorous algebraic life.

It is widely understood that many linear problems have a natural setting in some ring of linear transformations. For two illustrations (out of a vast number of possibilities) consider the following:

(1) A study of the spectrum of a bounded selfadjoint operator  $T$  on a Hilbert space  $H$  leads naturally to a consideration of the smallest closed subring of  $L(H, H)$  which contains  $T$ .

(2) A strongly continuous one-parameter semigroup of bounded linear transformations on a Banach space  $X$  may be considered as a kind of ray in the ring  $L(X, X)$ . By now a substantial start for both nonlinear spectral