TRANSACTIONS OF THE
AMERICAN MATHEMATICAL SOCIETY
Volume 295, Number 1, May 1986

ERRATUM TO "GENERIC ALGEBRAS"

JOHN ISBELL

The proof of Theorem 4 of my paper, Transactions **275** (1983), 497–510, is invalid. At least part of the theorem is true; the first paragraph of the proof proves what it claims, and the second paragraph, with the following lemma, proves that these rings R cannot be right artinian.

By definition, the *Zariski topology* of a module has for a closed subbasis the flats (translates of submodules). The *finite topology* of a product of modules M_α has for a closed subbasis the translates of submodules containing the kernels of projections upon finite partial products.

LEMMA. *A product of artinian modules is compact in the finite topology.*

PROOF. By Alexander's Lemma, it suffices to show that a family Σ of subbasic closed sets with f.i.p. has a common point; by Zorn's Lemma, we may assume Σ is maximal. In the product module ΠM_α, the αth coordinate projections of members of Σ form a filter base of nonempty flats, which must have a least element B_α since M_α is artinian. (A descending sequence of flats, translated to contain 0, would still be descending.) For any point b_α of B_α, "$x_\alpha = b_\alpha$" defines a subbasic closed set meeting every element of Σ. By maximality it is in Σ. Then all the (finitely defined) elements of Σ contain the point (b_α).

REMARK. The product is the inverse limit of the finite partial products and the projection maps are closed, but this is not enough; to see that, blow up a nonisolated point of a compact Hausdorff space to an inverse mapping system of surjections of nonempty sets, taken as closed discrete, with empty limit.

The paper also contains four typographical errors: page 507, line 2 from bottom, R^ω should be the coproduct ωR (twice); page 508, line 21 from bottom, $\beta(\alpha^1)$ should be $\beta(x^1)$; page 509, line 8, insert $=$ after r_n.

DEPARTMENT OF MATHEMATICS, STATE UNIVERSITY OF NEW YORK, BUFFALO, NEW YORK 14214

Received by the editors October 1, 1985.