Errata to the paper "Models of second order arithmetic with definable Skolem functions", Fundamenta Mathematicae 75 (1972), pp. 223–234

by

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The proof of the main theorem formulated on p. 223 of this paper does not establish its claim. The reason is that the formula given in Lemma 1 on p. 223 is not provable in A_2 contrary to what is stated in the lemma.

The formula in question becomes provable if one adds to the axioms of A_2 the following scheme of dependent choices:

$$(x)_S(Ey)_S A (x, y) \rightarrow (w)_S(Ez)_S[(z^{(0)} = w) \;\&\; (n)_N A (z^{(n)}, z^{(n+1)}_{()})] \;.$$

Thus the results of the paper apply to a system A^* of second order arithmetic based on the axioms of A_2 and the scheme of dependent choices and the paper can be (formally) corrected by replacing everywhere the system A_2 by A^*.

(In the first draft of my paper I called A_2 the system here denoted by A^*; this confusion of symbolism eventually led to the mistake).

I wish to thank Mr Stephen G. Simpson for pointing out the mistake to me; Mr Simpson and several other colleagues drew also my attention to a close similarity between the proof given in my paper and the proof due to U. Felgner to establish a similar result in set theory; see U. Felgner, *Comparison of the axioms of local and global choice*, Fundamenta Mathematicae 71 (1971), pp. 43–62.