

ERRATA

N. Cocchiarella: 'On the Logic of Nominalized Predicates and Its Philosophical Interpretations', *Erkenntnis* 13 (1978), 339–369.

Corrigendum to Section 7: Professor Edmund Gettier has pointed out to the author that since predication in ST^* corresponds to a relation and since being impredicable with respect to this relation is specifiable by a stratified wff, Russell's paradox can be reconstructed in (dyadic) ST^* after all.

It should be noted in this regard that the relative consistency proof in [7] is not for the full relational ST^* system but for *monadic* ST^* . The author's gloss in this matter was in his implicit assumption that by means of the Wiener-Kuratowski ordered pair construction we can prove the consistency of the full relational ST^* system relative to that of monadic ST^* .

Nevertheless, although the Wiener-Kuratowski construction fails for ST^* it does suffice to prove the consistency of the system HST^* corresponding to *homogeneous* simple type theory. HST^* is exactly like ST^* except for replacing (SCP*), the stratified comprehension principle, by the *homogeneously* stratified comprehension principle (HSCP*) which is itself exactly like (SCP*) described above except for the additional restriction that the entire biconditional

$$[F(a_0, \dots, a_{n-1}) \leftrightarrow \varphi]$$

must be homogeneously stratified. (A wff ψ is homogeneously stratified if there exists an assignment s of natural numbers to the variables occurring in ψ such that for each atomic subwff $G(b_0, \dots, b_{k-1})$ of ψ , (1) $s(b_i) = s(b_j)$, for all $i, j < k$, and (2) $s(G) = 1 + s(b_0)$.)

We observe that a monadic wff is stratified iff it is homogeneously stratified, and that consequently monadic ST^* is one and the same system as monadic HST^* . Moreover, although predication is specifiable by a stratified wff it does not represent a relation in HST^* since the biconditional:

$$\exists R \forall F \forall x [R(F, x) \leftrightarrow F(x)]$$

is not homogeneously stratified. Moreover, by Russell's argument, in HST* it is provable that there can be no relation corresponding to predication. Finally, other than the fact that predication is not a relation in HST*, all of the remaining claims made above regarding ST* carry over to HST*.

REFERENCE

[7] Cocchiarella, Nino, 'The Theory of Simple Types as a Second Order Logic', forthcoming in *Notre Dame Journal of Formal Logic*.