Notre Dame Journal of Formal Logic
Volume XVI, Number 2, April 1975
NDJFAM

CORRECTIONS FOR MY PAPER: A MODEL FOR LEŚNIEWSKI'S MEREOLOGY IN FUNCTIONS

ROBERT E. CLAY

In my paper, [1], an error was made. The analog for the category of names, denoted by $\mathcal{N}\langle\sigma\rangle$, is too restrictive. It fails to have an analog for Λ, the empty name. To correct this error, the following changes must be made.

DN1 $[\sigma] :: \mathcal{N}\langle\sigma\rangle . \equiv .\therefore [a] : !(a) . \equiv . [\exists A] . A \varepsilon \sigma(a) \therefore [Aa] \therefore A \varepsilon \sigma(a) . \supset$
$: A = 0 . \vee . A = 1 \therefore [ABa] : A \varepsilon \sigma(a) . B \varepsilon \sigma(a) . \supset . A = B$

DN2 $[\Sigma] \therefore \mathcal{I}\langle\Sigma\rangle . \equiv : \mathcal{N}\langle\Sigma\rangle : [\exists a] . 1 \varepsilon \Sigma(a) : [ab] : 1 \varepsilon \Sigma(a) . 1 \varepsilon \Sigma(b) . \supset . a \circ b$

N4

2) $\mathcal{I}\langle\Sigma\rangle$. [*DN3*, 1]

3) [*DN2*, 1]

Note: This indicates that step 3) is unchanged, but the reason is changed.

N18

2) }
3) } [*DN2*, 1]

METATHEOREM:

*3

Eliminate step 3)

4) [*DN2*, 2]

*4

4) }
5) } [*DN3*, 2]

6) [*DN2*, 4]

N31

3) [*DN2*, 1]

N37

4) [*DN2*, 3]

Eliminate *N40* and replace by

Received May 6, 1974

N39a $[\Phi a]: \sim(\Phi \eta \Phi) \,.\, !(a) \,.\supset.\, 0 \,\varepsilon\, \mathbf{el}\langle\Phi\rangle\,(a)$ [*DN5*, *N0*]

N40 $[\Phi a]: !(a) \,.\equiv.\, [\exists A] \,.\, A \,\varepsilon\, \mathbf{el}\langle\Phi\rangle(a)$ [*N37*, *N39a*, *DN5*]

N41 $[\Phi] \,.\, \mathcal{N}\langle \mathbf{el}\langle\Phi\rangle\rangle$ [*DN1*, *N40*, *N38*, *N39*]

N42 [*N33*, *N41*]

Eliminate *N50*.

N51 [*DN1*, *N46*, *N47*, *N48*, *N49*]

N54

6) $\mathcal{I}\langle\Phi\rangle$. [*N1*, 5]

N56

3) $\mathcal{I}\langle\Sigma\rangle$. [*N1*, 1]

N59

5) $\mathcal{I}\langle\Sigma\rangle$. [*N1*, 1]

6) [*DN2*, 5]

N62 Replace steps 2) and 3) by

2) $\mathcal{I}\langle\Sigma\rangle$: }
3) $[a]: 1 \,\varepsilon\, \Sigma(a) \,.\supset.\, 1 \,\varepsilon\, \sigma(a)$: } [*DN3*, 1]
$[\exists a]$:

3a) $1 \,\varepsilon\, \Sigma(a)$. [*DN2*, 2]

3b) $1 \,\varepsilon\, \sigma(a)$ [3, 3*a*]

REFERENCE

[1] Clay, R. E., "A model for Leśniewski's mereology in functions," *Notre Dame Journal of Formal Logic*, vol. XII (1971), pp. 467-478.

University of Notre Dame
Notre Dame, Indiana