

NOTES

¹ In the figure above, I have indicated for each proposition both the abstract representation given to it by the traditional logic and one given to it by modern logic.

² W. V. Quine has already noted the distinction between general and singular existence explained in this part of my paper, and has even noticed that the modern logic involves a tacit presupposition concerning singular existence. But the conclusions he draws from this situation are entirely different from those I propose: He will not alter the modern logic so as to make this presupposition explicit. Instead, he tailors philosophic outlooks to one of consonance with it. See his "Designation and Existence," *Journal of Philosophy*, 36:701-9 (December 21, 1939).

³ Whether we take "E!x" as an undefined primitive or accept D1 affects only the status of the laws listed in this part. Some of them, in the one case, would be postulates which, in the other case, would be theorems.

⁴ The listing of laws here does not represent a deductive order.

The validity of L1 is interesting. It is, however, harmless: In consequence of L3, it is equivalent to the innocuous formula

$$(x) \cdot E!x \supset E!x$$

and would in fact be proven via L3. But in virtue of the abandonment of *10.1 in favor of L7 (see immediately below), the assertion of L1 is not equivalent to the abandoned law (4); nor can the unwanted (4) be proven.

⁵ *Op. cit.*, p. 708.

⁶ It would take us too far afield to explain in detail the proviso included in this rule. Suffice it to say that rules of substitution are often left very vague, with limitations on valid substitution left intuitive. To illustrate what is meant by quantifier-control, consider the valid formula

$$(x) \cdot p \supset \phi x \equiv : p \cdot \supset \cdot (x) \cdot \phi x$$

Here the free variable, "p" occurs once within the scope of the quantifier "(x)." The quantifier thus controls the position at which "p" occurs, but does not control "p." No expression may be substituted for "p" in which there is a free occurrence of "x." To do so would constitute a violation of quantifier-control, would make the quantifier control not only the position, but an expression at the position. Thus, for example, it would be invalid to substitute " ψx " or " $x = x$ " for "p" in the above formula.

CORRECTION

Statement 5 on page 92 of Dr. Bar-Hillel's paper "Mr. Weiss on the Paradox of Necessary Truth" in the December 1955 issue should read: "5. A Necessary Truth could be false." The 'correction' on page 32 of the January 1956 issue should be corrected to this effect.