

SUPERVALUATIONS AND TARSKI

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In 'Truth, Belief and Vagueness'¹ Kenton Machina gives the following argument which purports to show that use of supervaluations is inconsistent with Tarski's truth-schema:

(T) $\top(P)$ iff P .

Suppose (under the assumptions of a supervaluational semantics) that P lacks a truth-value, i.e., that

(1) $P = *$

Then it follows that

(2) $\top(P) = \mathbf{F}$

and thus, so Machina claims, that

(3) $P = \mathbf{F}$

which is inconsistent with (1).² Although Machina uses his argument to show the inadequacy of supervaluations only where truth-value gaps occur for reasons of vagueness,³ it is clear that his argument, if valid, could be used when truth-value gaps occur for any reason. And thus, if valid, his argument would demonstrate the need of those who wish to use supervaluations to provide an alternative to Tarski's truth-schema.

However, Machina's argument is not valid. It rests upon an important ambiguity in the formulation of the truth-schema as (T), since no indication is given of how 'iff' is to be interpreted in (T). If allowance is to be made for wffs which are not true or false (either because they lack a value, or

1. *Journal of Philosophical Logic*, vol. 5 (1976), p. 51.

2. A parallel argument, where P takes a third value, is given by Susan Haack, *Deviant Logic* (Cambridge: Cambridge University Press, 1973), p. 68.

3. As in Kit Fine, "Vagueness, Truth and Logic," *Synthese*, vol. 30 (1975), pp. 265-300.