## A Purported Theorem of Epistemic Logic\*

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In *The Range of Epistemic Logic*<sup>1</sup>, George Schlesinger asserts as his first theorem of epistemic logic:

$$(\mathbf{d}_1)$$
  $[(p \rightarrow q) \& Ksp] \rightarrow J B*sq$ 

'J B\*sq' means "objectively speaking, it is rational to accept...[q]... on the basis of information in s's possession..." That is, if p entails q and s knows that p then it is rational to accept q on the basis of the information in s's possession. Nothing is said about s believing q, or s being justified in believing q. For s may be blind to the relevance of it all to q.

Schlesinger's avowed purpose is to reassure the reader through this principle that there is an epistemic logic with genuine epistemic truths. And not simply definitional truths such as: 'Ksp $\rightarrow$ p'.

The principle is then applied to a reconstruction of Descartes' Dream Argument to the effect that since I don't know that I'm not dreaming and if I'm dreaming I do not know that I'm standing up, that I do not know that I'm standing up<sup>2</sup>.

I question Schlesinger's contention that  $(\mathbf{d}_1)$  is a genuine epistemic principle. I should like to claim that  $(\mathbf{d}_1)$  is either not true or the occurrences of 'K' and 'B' are but window dressing and do not function as genuine epistemic operators.

Suppose Sid knows p, and let q be a first-order consequence of p. Since there can be no decision procedure for the relation of first-order consequence Sid might never establish that q is a consequence of p, and in that case it might not be rational for him to accept q.

In order to save  $(\mathbf{d}_1)$  'J B\*sq' would have to be read as *something* like 's (or for that matter, anyone) would be wise to believe q'. But then the principle is trivialized to:

(\*) 
$$p \rightarrow J B*sp$$

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I.e., if p then it is wise for s to believe it. Surely this theorem and others like it no more justify epistemic logic than the definitional 'Ksp $\rightarrow$ p'.

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## Notes

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<sup>1</sup> Schlesinger, p. 4. Schlesinger prefers the formulation:

 $(\mathbf{d}_2)$   $[(p \rightarrow q) \& \sim J B * sq] \rightarrow \sim Ksp.$ 

<sup>2</sup> In Steiner, the Cartesian argument is reconstructed. Schlesinger (pp. 4-9) faults it and shows how by using his principle a simple reconstruction of the Cartesian argument is forthcoming.

## REFERENCES

Schlesinger, G. (1985), *The Range of Epistemic Logic*, Aberdeen University Press. Steiner, M. (1979), "Cartesian Scepticism and Epistemic Logic", *Analysis*, vol. 39, pp. 38-41.