

GÖDEL, PENROSE, AND SELF-REFERENCE
(Some comments on circularity)

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Abstract: The aim of this paper is to give an account of the way the idea of circularity (as self-reference or as diagonalization) is implied in Penrose’s argument, by showing: 1 the mathematical part of this argument by using Kleene’s T-predicate, 2 the Gödel/Turing form of the argument, 3 why the argument is unsound, 4 where, more generally, are to be found the troubles and 5 the help of modal logic in unraveling the thorn of self-reference.