

Refutation of the new riddle of induction © Copyright 2018 by Colin James III All rights reserved.

We assume the method and apparatus of Meth8/VL4 with \top as the designated *proof* value, \bot as contradiction, \top as truthity (non-contingency), and \bot as falsity (contingency). The 16-valued truth table fragment) is row-major and horizontal.

LET p q r s : blue, green, fiducial point in time, object;
 \sim Not; $\&$ And; $+$ Or; $=$ Equivalent; $>$ Imply, greater than; $<$ Not Imply, less than;
 $(p>q)$ bleen; $(q>p)$ grue.

From: en.wikipedia.org/wiki/New_riddle_of_induction

An object is grue if and only if it is observed before t and is green,
 or else is not so observed and is blue. (1.1)

$((s<r)\&(s=q))>(s=(q>p)))+(\sim(s<r)>(s=p)) ;$ TTTT TTTT TTTT TTTT (1.2)

An object is bleen if and only if it is observed before t and is blue,
 or else is not so observed and is green. (2.1)

$((s<r)\&(s=p))>(s=(p>q)))+(\sim(s<r)>(s=q)) ;$ TTTT TTTT TTTT TTTT (2.2)

Eqs. 1.2 and 2.2 as rendered are tautologous, *not* contradictory, and theorems. Therefore the new riddle of induction is refuted as a riddle or paradox.