

Problem of why there is something instead of nothing

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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 is row-major and horizontal.

LET \sim Not; $\&$ And; $>$ Imply, greater than; $=$ Equivalent; $@$ Not Equivalent;
necessity, for all; % possibility, for one or some;
($p=p$) thing, tautology; ($p@p$) nothing, contradiction; $\%(p=p)$ some thing.

From: en.wikipedia.org/wiki/List_of_unsolved_problems_in_philosophy
en.wikipedia.org/wiki/Problem_of_why_there_is_anything_at_all

"Why there is something rather than nothing." (1.0)

We rewrite Eq. 1.0 as a logical expression of "Nothing implies something." (1.1)

$(p@p)>\%(p=p)$; TTTT TTTT TTTT TTTT (1.2)

"Why there is anything rather than nothing." (2.0)

We rewrite Eq. 2.0 as a logical expression of "Nothing implies anything". (2.1)

The difference from Eq. 1.1 is in the modal or quantified operator in the consequent going from possibility to necessity or from one/some to all.

$(p@p)>\#(p=p)$; TTTT TTTT TTTT TTTT (2.2)

Eqs. 1.2 and 2.2 as rendered are tautologous, meaning anything comes from nothing.

The problem is resolved in that nothing can come from anything.

Remark: By contrast in classical logic, the negation of Eq. 1.1 as Not(Eq. 1.1) is "nothing can not come from something". In other words, "something cannot imply nothing". This is because contradiction on the implication connective is where truth implies false, disallowed as a proof.