

Resolution of Moore's paradox as a theorem

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Abstract: We evaluate Moore's paradox, as touted by Wittgenstein, with Hintikka's omissive or commissive logical forms as "P and NOT(belief in P)" or "P and belief in NOT-P". The former as antecedent (contradictory) and the latter as consequent (neither contradictory nor tautologous) imply tautology, a theorem.

We assume the method and apparatus of Meth8/VL4 with Tautology as the designated *proof* value, **F** as contradiction, N as truthity (non-contingency), and C as falsity (contingency). The 16-valued truth table is row-major and horizontal. The 16-valued truth table is row-major and horizontal, or repeating fragments of 128-tables, sometimes with table counts, for more variables. (See ersatz-systems.com.)

LET: ~ Not, ¬; + Or, ∨, ∪; - Not Or; & And, ∧, ∩; \ Not And;
 > Imply, greater than, →; < Not Imply, less than, ∈
 = Equivalent, ≡; @ Not Equivalent, ≠;
 % possibility, for one or some, ∃, ∂; # necessity, for every or all, ∀, □;
 ~(y < x) (x ≤ y), (x ∈ y); (p=p) Tautology.

From: en.wikipedia.org/wiki/Moore's_paradox

LET p, q: P, belief.

Remark 0: We reject the personal "I believe" in lieu of the variable "belief in", as one trusting in the unseen.

[The standard is] to present Moore's paradox by explaining why it is absurd to assert sentences that have the logical form:

Omissive: "P and NOT(belief in P)" or (1.1)

$p \& \sim (q > p)$; **FFFF FFFF FFFF FFFF** (1.2)

Commissive: "P and belief in NOT-P." (2.1)

$p \& (q > \sim p)$; **FTEF FTEF FTEF FTEF** (2.2)

Omissive implies Commissive: (3.1)

$(p \& \sim (q > p)) > (p \& (q > \sim p))$; **TTTT TTTT TTTT TTTT** (3.2)

While Eq. 1.2 omissive is a contradiction and Eq. 2.2 commissive is not a contraction and not a tautology, omissive implies commissive as a tautology. This uses the implication forms of **F>F=T** and **F>T=T**, to mean that Moore's paradox is not a contradiction but a theorem. Because the sentences of Eqs. 1 and 2 as rendered do differ, the logical absurdity is in omissive as a contradiction, but not in commissive as not a contradiction and not a tautology.